LOS ANGELES
DEPARTMENT OF CITY
PLANNING
221 North Figueroa St., Suite 1350
Los Angeles, CA 90012

DRAFT
ENVIRONMENTAL IMPACT REPORT

Arts District Center Project

Environmental Case: ENV-2016-4476-EIR
State Clearinghouse No.: 2017041012

Project Location: 1129 and 1101 E. 5th Street, 445-457 S. Colyton Street, 450-456 S. Seaton Street, Los Angeles, California, 90013

Community Plan Area: Central City North

Council District: 14 - Huizar

Project Description: The Project Site is located on the north side of 5th Street, between Seaton Street and Colyton Street. The 45,721-square-foot (1.05 acres) Project Site is currently developed with an approximately 91,200-square-foot, two-story brick building that contains approximately 45,600 square feet of light industrial/arts production space and live/work space, which consists of 10 units. The Project Site is immediately surrounded by a mix of industrial uses, a gas station, residential uses, restaurants, and commercial uses contained in low-rise and mid-rise buildings of widely varying age.

The Project includes demolition and removal of all existing uses on the Project Site and development of the site with a new mixed-use building, including 129 live/work condominium units (200,021 square feet), a 113-room hotel (97,850 square feet), and 72,469 square feet of commercial space to be used for art galleries, retail, restaurant, and artist collaborative space. Of the 129 live/work units, 15 units (i.e., 11 percent) would be Very Low Income units. The proposed building would be 12 stories (148 feet) in height. The Project includes 513 automobile parking spaces provided in four of five subterranean levels. The additional subterranean level would include 168 long-term and 52 short-term bicycle parking spaces and storage space.

PREPARED FOR:
The City of Los Angeles
Department of City Planning

PREPARED BY:
CAJA Environmental Services, LLC

APPLICANT:
Arts District Development, LLC

DOCUMENT FILED
City Clerk's Office
EIR-19-004-PL
No:
Certified by
Date: 2-22-19

FEBRUARY 2019

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I. Executive Summary

1. Introduction to the Draft EIR

The subject of this Draft Environmental Impact Report (Draft EIR) is the proposed Arts District Center Project (Project). A summary of the Project is provided below, with a more detailed description included in **Section II, Project Description**, of the Draft EIR.

Because the Project will require approval of certain discretionary actions by the City of Los Angeles (City), the Project is subject to the California Environmental Quality Act (CEQA), for which the City is the designated Lead Agency. The City's Department of City Planning administers the process by which environmental documents for projects are prepared and reviewed. On the basis of these procedures, it was determined that the Project may have a significant effect on the environment, and an EIR should be prepared.

As described in Sections 15121 and 15362 of the CEQA Guidelines, an EIR is an informational document that will inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to a project. The purpose of this Draft EIR, therefore, is to focus the discussion on those potential effects on the environment of the Project that the Lead Agency has determined could be significant. In addition, feasible mitigation measures are required, when applicable, that could reduce or avoid significant impacts of the Project.

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

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

a) Environmental Review Process

(1) Notice of Preparation/Scoping Meeting

In accordance with Section 15128 of the CEQA Guidelines, an EIR shall contain a brief statement indicating reasons that various possible significant effects of a project were determined not to be significant and not discussed in detail in the Draft EIR. In compliance with Section 15082 of the CEQA Guidelines, a Notice of Preparation (NOP) was prepared by the Department of City Planning and distributed to the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties on March 31, 2017.

The NOP for the Draft EIR was circulated for 30 days until May 1, 2017. In addition, a public scoping meeting was held on April 20, 2017 at the Project Site to obtain the public's initial views about environmental issues that should be evaluated in the Draft EIR in connection with the Project. **Appendix A** of the Draft EIR contains a copy of the NOP and public comments received by the City in response to the NOP and scoping meeting.

The following agencies, organizations, and individuals provided written comments during the NOP comment period or at the scoping meeting:

Agencies and Organizations

- California Department of Transportation (Caltrans)
- South Coast Air Quality Management District
- California Native American Heritage Commission
- City of Los Angeles, LA Sanitation, Wastewater Engineering Services Division
- City of Los Angeles Fire Department
- Los Angeles Conservancy

Individuals

- Stefanie Anderson
- Fernando Diaz
- Marc Gasway
- James Greco

- Brian Han
- Lan Wu Huang
- Nancy & Claude Kent
- Christopher Kwok
- Jenn Lloyd
- Eric Lynxwiler
- M. Manzoori
- Glendon Palmer
- Michael Parker
- Michelle Rodriguez
- Jack Shashoua
- Eve & Christopher Sheedy
- Sharon Tomlin
- Chun Wu Wang

(2) Environmental Issues to be Analyzed in the Draft EIR

In conjunction with the NOP, an Initial Study was prepared for the Project and is also included in **Appendix A** of the Draft EIR. The purposes of the Initial Study, as set forth in Section 15063(c)(3) of the CEQA Guidelines, are to assist the preparation of an environmental impact report by:

(A) focusing the environmental impact report on the effects determined to be significant;

(B) identifying the effects determined not to be significant;

(C) explaining the reasons for determining that potentially significant effects would not be significant; and

(D) identifying whether a program environmental impact report, tiering, or another appropriate process can be used for analysis of the project's environmental effects.[1]

The Initial Study provides a detailed discussion of the potential environmental impact areas and the reasons that each environmental area is or is not analyzed further in this Draft EIR. The City determined through the Initial Study that there is no substantial evidence that the Project could cause significant environmental effects in the following areas:

- Agricultural Resources
- Air Quality
    - Objectionable Odors
- Biological Resources
- Cultural Resources
    - Archaeological Resources
    - Paleontological Resources
    - Human Remains
- Geology and Soils
    - Landslides
    - Soil Erosion/Loss of Topsoil
    - Wastewater Disposal
- Hazards and Hazardous Materials
    - Airport Safety Hazards
    - Private Airstrip Hazards
    - Wildland Fires
- Hydrology and Water Quality

[1] *In the case of this Project, the appropriate process for analyzing the project's environmental effects is the preparation of a "Project EIR," the most common type of EIR prepared for specific development projects. This Draft EIR constitutes a "Project EIR" under Section 15161 of the CEQA Guidelines.*

- Land Use and Planning
    - Physical Community Division
    - Habitat/Natural Community Conservation Plan Conflicts
- Mineral Resources
- Noise
    - Airport Noise
    - Private Airstrip Noise
- Population, Housing, and Employment
    - Displacement of Housing
    - Displacement of People
- Transportation/Traffic
    - Air Traffic Patterns
- Utilities and Service Systems
    - Stormwater Drainage
    - Compliance with Solid Waste Regulations

Based on a review of environmental issues by the City, the Initial Study (see **Appendix A** of the Draft EIR), the responses to the NOP, and input received at the scoping meeting, the Draft EIR includes analyses of the following environmental issues:

- Aesthetics
- Air Quality
- Cultural Resources
    - Historical Resources
    - Archaeological Resources
    - Paleontological Resource
- Geology and Soils

- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Land Use and Planning
- Noise
- Population, Housing, and Employment
- Public Services
    - Fire
    - Police
    - Schools
    - Parks and Recreation
    - Libraries
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities
    - Water
    - Wastewater
    - Solid Waste
    - Energy Conservation

(3) Draft and Final EIR Process

The Draft EIR will be circulated for review and comment by the public and other interested parties, agencies, and organizations for a period of 45 days. After completion of the 45-day review period, a Final EIR will be prepared that responds to comments on the Draft EIR submitted during the review period and modifies the Draft EIR as required. Public hearings on the Project will be held after completion of the Final EIR. The City will make the Final EIR available to agencies and the public prior to considering certification of the Final EIR. Notice of the time and location will be published prior to the public hearing date. All comments or questions about the Draft EIR should be addressed to the following:

William Lamborn
Department of City Planning, Major Projects Section
221 N. Figueroa St., Room 1350, Los Angeles, California 90012
Phone: (213) 847-3637
Email: william.lamborn@lacity.org
Case Number: ENV-2016-4476-EIR

b) Organization of the Draft EIR

The Draft EIR is organized into the following sections:

Section I (Introduction and Summary): This section provides an introduction to the Draft EIR and a description of the environmental review process and organization of the Draft EIR. This section also includes a summary of the Project description; lists the environmental issues that are addressed in the Draft EIR; a summary of the alternatives to the Project; lists the areas of known controversy based on issues raised in responses received during the NOP process; lists the issues to be resolved; and a summary the environmental impacts and mitigation measures.

Section II (Project Description): A complete description of the Project, including Project Site location, Project characteristics, Project objectives, and requested discretionary actions is presented in this section.

Section III (Environmental Setting): This section includes an overview of the existing environmental conditions as they relate to the Project site and Project. A list of related projects is provided in this section.

Section IV (Environmental Impact Analysis): The Environmental Impact Analysis section is the primary focus of this Draft EIR. Separate discussions are provided to address the potential environmental effects of the Project. Each environmental issue contains a discussion of existing conditions, an assessment and discussion of the significance of impacts associated with the Project, mitigation measures (where applicable), cumulative impacts, and level of impact significance after mitigation.

Section V (General Impact Categories): This section provides a summary of significant and unavoidable impacts of the Project, a discussion of potential growth inducing effects, and an explanation of the significant irreversible environmental changes.

Section VI (Alternatives to the Project): This section includes an analysis of a range of reasonable alternatives to the Project. The range of alternatives selected is based on their ability to feasibly attain most of the basic objectives of the Project and alternatives that would avoid or substantially lessen any of the significant effects of the Project.

Section VII (Preparers of the Draft EIR and Persons Consulted): This section presents a list of City and other agencies and consultant team members that contributed to the preparation of the Draft EIR.

Section VIII (Acronyms and Abbreviations): This section provides definitions for all of the acronyms and abbreviations used in this Draft EIR.

Section IX (References): This section lists all of the sources of information used in preparation of the Draft EIR.

2. Summary of the Project

a) Project Site Description

The Project Site is located on the north side of 5th Street between Seaton Street and Colyton Street. The Project Site is currently developed with an approximately 91,200-square-foot, two-story brick building that contains approximately 45,600 square feet of light industrial/arts production space and approximately 45,600 square feet of live/work space, which consists of 10 units. The Project Site is immediately surrounded by a mix of industrial uses, a gas station, residential uses, restaurants, and commercial uses contained in low-rise and mid-rise buildings of widely varying age. Arts District Park is also located within a block to the southeast of the Project Site. The Project Site is zoned M3-1-RIO. The Project Site is located in the Central City North Community Plan (Community Plan) Area and has a Heavy Industrial land use designation. The Project Site is also located within the East Los Angeles State Enterprise Zone, the Arts District Business Improvement District, and the Central City Parking District. Additionally, the Project Site is located within a Transit Priority Area (TPA), as defined in Public Resources Code (PRC) Section 21099 and as clarified by the City's Zoning Information File No. 2452. (A detailed description of the existing Project Site conditions is included in **Section III, Environmental Setting**, of the Draft EIR.)

b) Project Overview

The Project includes demolition and removal of all existing uses on the Project Site and development of the site with a new mixed-use building, including 129 live/work condominium units (200,021 square feet), a 113-room hotel (97,850 square feet), and 72,469 square feet of commercial space to be used for art galleries, retail, restaurant, and artist collaborative (Artist CoLab) uses. Of the 129 live/work units, 15 units (i.e., 11 percent) would be Very Low Income units. The proposed building would be 12 stories (148 feet) in height. The Project includes 513 automobile parking spaces provided in four of five subterranean levels. The additional subterranean level would include 168 long-term and 52 short-term bicycle parking spaces and storage space. The Project

would have an 8.1:1 floor area ratio (FAR). (A detailed description of the Project is included in **Section II, Project Description**, of the Draft EIR.)

As part of the Project, the Applicant is requesting approval of the following actions from the City:

1. Pursuant to Los Angeles Municipal Code (LAMC) Section 11.5.6 and Charter Section 555, a General Plan Amendment (GPA) to change the Central City North Community Plan land use designation of the Project Site from Heavy Industrial to Regional Center Commercial;

2. Pursuant to LAMC Section 12.32-Q, a Vesting Zone Change and Height District Change to change the zoning of the Project Site from M3-1-RIO to C2-2-RIO (permitting a maximum FAR of 8.1:1 and a maximum building height of 148 feet to the top of the parapet);

3. Pursuant to LAMC Section 17.01 et seq., a Vesting Tentative Tract Map No. 74703 for a 12-lot subdivision for merger and re-subdivision with a request for haul route approval;

4. Pursuant to LAMC Section 16.05, Site Plan Review;

5. Pursuant to LAMC Section 12.22-A,25(g)(2), Density Bonus Compliance Review for the provision of 11 percent Very-Low Income housing units with two on-menu incentives (a 35-percent increase in FAR and a reduced side yard setback of 12 feet in lieu of 14 feet). No density bonus units are requested;

6. Pursuant to LAMC Section 12.24-W,1, Master Conditional Use Permit for on-site and off-site sales and consumption of alcohol;

7. Pursuant to LAMC Section 12.24-W,18, Conditional Use Permit for live entertainment and dancing; and

8. Any other entitlements and permits necessary to construct the Project.

3. Areas of Controversy

Potential areas of controversy and issues to be resolved by the City's decision-makers may include whether or how to mitigate potentially significant environmental impacts from the Project, and whether one of the alternatives should be approved rather than the Project. There were also several comments and concerns raised in letters submitted to the City in response to the NOP and at the scoping meeting, including the following:

- Building height, design, and scale (including visual and shadow impacts)

- Traffic
- Parking
- Potential historic resource impacts
- Public service impacts
- Soil suitability for subterranean parking levels
- Vibration
- Sidewalks and pedestrian walkability
- Air quality and dust
- Sewer line capacities and related infrastructure upgrades
- Cumulative impacts and general plan update
- Building setbacks
- Seismic ground shaking impacts
- Access to neighboring properties
- Tribal/cultural resources and notification

4. Alternatives to the Project

In order to provide informed decision-making in accordance with Section 15126.6 of the CEQA Guidelines, this Draft EIR considers a range of alternatives to the Project. **Section VI, Alternatives to the Project**, of the Draft EIR provides the analysis of each alternative. The Draft EIR analyzes the following alternatives:

Alternative 1: No Project

Alternative 1 (No Project Alternative) assumes that the Project would not be approved, no new permanent development would occur within the Project Site, and the existing environment would be maintained. Thus, the physical conditions of the Project Site would remain as they are at the time of preparation of the Draft EIR. Under Alternative 1, the Project Site would continue to be used as a light industrial/arts production commercial space with 10 live/work units. No changes would be made to the Project Site. Future on-site activities would be limited to the continued operation and maintenance of the existing land uses.

Alternative 2: Existing Zoning

Alternative 2 (Existing Zoning Alternative) includes redevelopment of the Project Site in a manner that is consistent with the existing M3-1-RIO zoning, a zoning classification that permits commercial and industrial land uses but does not allow residential units or guest rooms, as well as the existing General Plan land use designation (Heavy Industrial). Alternative 2 includes removal of the existing on-site structure and redevelopment of the Project Site with a 65,550-square-foot building that would be comprised of 26,979 square feet of retail space and 38,571 square feet of creative office space. The proposed building would consist of three levels above street level and two levels below grade for parking and storage. The retail development would consist of nine partitioned spaces on the ground floor accessible from the street. Creative office would be provided on the second and third floors. Alternative 2 would reduce the overall Project square footage by 82 percent. As compared to the Project, Alternative 2 would eliminate the hotel, live/work, restaurant, art gallery, and Artist CoLab uses, would include the same amount of retail space, and would add two levels of creative office space. The proposed building height would be 46 feet above street grade level.

Alternative 3: Reduced Density

Alternative 3 (Reduced Density Alternative) includes redevelopment of the Project Site in a manner that is similar to the Project but would reduce the overall density by approximately 27 percent. Alternative 3 includes development of a total of 98 live/work units (including 11 percent designated as affordable [Very Low Income]), 73 hotel rooms, 19,120 square feet of retail space, 20,590 square feet of restaurant space, and 15,905 square feet of art gallery/Artist CoLab/creative office space. The resulting building would be 10 stories above grade (including the rooftop), which would be two levels less than the Project, with three levels below grade for mechanical parking and storage, which would be two less than the Project.

As compared to the Project, Alternative 3 would reduce the overall building size by approximately 30 percent. The individual live/work, hotel, restaurant, and retail uses would be reduced by between 25 and 35 percent. Alternative 3 would reduce the art gallery space but would add a creative office component to the Artist CoLab space, resulting in a larger combined square footage devoted to these uses (15,905 versus 13,771 square feet in the Project). Similar to the Project, Alternative 3 would provide ground- and second-floor retail and restaurant spaces and would place the art gallery/Artist CoLab/creative office space on the third level. The hotel and live/work units would occupy the 4th through 9th levels, with a roof garden, pool, spa, clubhouse, and restaurant

occupying the building rooftop. The proposed maximum building height would be 131 feet above street grade level as compared to a height of 148 feet for the Project.

Based on the analysis in Section VI, Alternative 2 was selected as the environmentally superior alternative.

5. Environmental Impacts and Mitigation Measures

Table 1-1 summarizes the various environmental impacts associated with construction and operation of the Project. Mitigation measures are recommended for significant environmental impacts, and the level of significance remaining for each impact after mitigation is also identified. The environmental impacts included in Table 1-1 are analyzed in detail throughout **Section IV, Environmental Impact Analysis**, of the Draft EIR.

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
SECTION IV.B, AESTHETICS		
Scenic Vista		
Construction activities associated with the Project and the Project's proposed building would not substantially affect existing scenic vistas of the Downtown skyline because no scenic vistas are available from the Project area. The Project Site and surrounding area are characterized by dense urban development, and the construction activities associated with development of the Project would not substantially alter existing views available in the area. Therefore, impacts with respect to scenic vistas would be less than significant. Moreover, pursuant to State Bill (SB) 743 and Zoning Information (ZI) 2452, the Project's aesthetics impacts would not be considered significant.	None required	Less Than Significant
Scenic Resources		
The Project Site does not contain trees with scenic significance or rock outcroppings and is not located within a state scenic highway. Therefore, no impact would occur with respect to scenic resources within a state scenic highway. Moreover, pursuant to SB	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.		
Visual Character		
Although the Project's construction and development of a new building on the Project Site would alter the visual character of the Project Site and surrounding area, this alteration would not be considered a substantial degradation. Therefore, Project impacts related to visual character would be less than significant. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.	None required	Less Than Significant
Light and Glare		
Although the Project's construction and operation of a new building at the Project Site would introduce new sources of light and glare at the Project Site, the Project would comply with LAMC light and glare requirements. Thus, the Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the Project Site area. Therefore, Project impacts related to light and glare would be less	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
than significant. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.		
SECTION IV.C, AIR QUALITY		
Air Quality Plan Consistency		
The Project would not increase the frequency or severity of existing air quality violations, cause or contribute to new air quality violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the South Coast Air Management District's (SCAQMD) Air Quality Management Plan (AQMP). Also, the Project would be consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based, would be consistent with the Los Angeles Green Building Code's (LAGBC) measures that reduce pollutant emissions, and would be consistent with the AQMP's land use policies. Thus, the Project would be consistent with the AQMP. Therefore, Project impacts related to AQMP consistency would be less than significant.	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Violate Air Quality Standards		
The Project's construction and operational activities would not exceed SCAQMD's regional or localized significance thresholds. Thus, the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Therefore, impacts related to this issue would be less than significant.	None required	Less Than Significant
Cumulative Air Quality Impacts		
Neither construction nor operation of the Project would result in a cumulatively considerable contribution to cumulative pollutant concentrations at nearby sensitive receptors. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, and impacts would be less than significant.	None required	Less Than Significant
Sensitive Receptors		
The Project's construction and operational activities would not exceed SCAQMD's localized significance	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
thresholds. Thus, the Project would not expose sensitive receptors to substantial pollutant concentrations. Also, the Project would not result in any substantial emissions of toxic air contaminants (TACs) during the construction or operational phases. Therefore, impacts related to this issue would be less than significant.		
SECTION IV.D, CULTURAL RESOURCES		
Historical Resources		
The demolition of the building on the Project Site would not result in a substantial adverse change to the Potential Historic District, because the building is neither individually eligible as a historical resource nor a contributor to the significance of the Potential Historic District. The Project would result in the introduction of a new visual element that would slightly diminish the integrity of setting and feeling within the study area. However, the Project would not impair the integrity of the Potential Historic District as a whole to the degree that it would no longer be eligible for listing under national, state, and local landmark designation programs, and it would	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
continue to be eligible for listing as a historical resource as defined by CEQA. Overall, the relationships among the Potential Historic District's components, including its contributing buildings, would not be substantially changed from the period of significance as a result of the Project. Therefore, impacts to historical resources would be less than significant.		
Archaeological Resources		
Although no archaeological resources have been previously recorded within the Project Site, it is possible that historic-period archaeological resources could exist below the current ground surface, especially within the surface fill identified in the geotechnical borings taken at 12 feet below ground surface (bgs). Specifically, there is potential to encounter the remains of the known historic-period archaeological resource Zanja No. 2, in the form of a wooden flume box, domestic refuse or building materials associated with two 1890s residences, and construction materials and building foundations associated with two	**CUL-MM-1**: Prior to the issuance of a demolition permit, the project proponent shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology, during the excavation phase to carry out and ensure proper implementation of the mitigation measures related to archaeological resources. The qualified archaeologist shall submit a letter of retention to the project proponent no fewer than 15 days before demolition or excavation activities commence. The letter shall include a resume for the qualified archaeologist that	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
warehouses demolished in the 1910s. For these reasons, the Project Site is concluded to possess a high sensitivity for containing historic archaeological resources. If present, the Project would have the potential to cause a substantial adverse change in the significance of such archaeological resources pursuant to Section 15064.5 of the CEQA Guidelines. Therefore, without mitigation, impacts related to archaeological resources would be potentially significant. However, implementation of Mitigation Measures CUL-MM-1 through CUL-MM-4 would result the impacts to less than significant.	demonstrates fulfillment of the Secretary of Interior standards. **CUL-MM-2**: Prior to the commencement of demolition and excavation, an Archaeological Resource Monitoring and Mitigation Plan (ARMMP) shall be prepared. The ARMMP shall include, but not be limited to, a construction worker training program (described in CUL-MM-3), monitoring protocol for demolition and excavation activities, discovery and processing protocol for inadvertent discoveries of archaeological resources, and identification of a curation facility should artifacts be collected. The ARMMP shall identify areas that require monitoring, provide a framework for assessing the geoarchaeological setting to determine whether sediments capable of preserving archaeological remains are present, and include a protocol for identifying the conditions under which additional or reduced levels of monitoring (e.g., spot-checking) may be appropriate. The duration and	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	timing of the monitoring shall be determined based on the rate of excavation, geoarchaeological assessment, and, if present, the quantity, type, and spatial distribution of archaeological resources identified. The ARMMP shall minimally include a historical context statement, research design, and methodology by which any newly identified archaeological sites shall be evaluated for California Register eligibility and as unique archaeological resources. The ARMMP shall specify the specific types of archaeological sites likely to be encountered, the means by which significance shall be assessed. If any archaeological resources are identified and are found not to be significant or do not retain integrity, then they shall be recorded to a level sufficient to document the contents and condition. The ARMMP shall include a proactive identification and documentation protocol that would facilitate preservation or mitigation of impacts to Zanja No. 2 and any other archaeological sites identified in a cost-effective manner. The ARMMP shall	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	include potential treatment plans to be implemented in the event a newly discovery archaeological resource is determined by the qualified archaeologist to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to PRC 21083.2(g). The ARMMP shall require that if the treatment plans outlined therein are found to be infeasible or other alternatives are proposed, the qualified archaeologist shall coordinate with the project proponent and City Planning to amend the ARMMP with a formal treatment plan that would reduce impacts to the resource(s). The treatment plans stated in the ARMMP or prepared after the discovery of a historical resource, shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment and if it is determined avoidance is not	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	feasible, treatment may include but not be limited to any of the following depending on the type of resource and the significance evaluation: • **Prehistoric archaeological sites.** Data recovery shall be conducted (i.e., excavation, laboratory processing and analysis) to remove the resource(s) and reduce potential impacts to less than significant where significance is determined under California Register Criterion 4 and integrity is retained. • **Historical archaeological sites.** If a historic-period site, including but not limited to a refuse scatter or building foundation(s), is present and found to retain integrity, data recovery shall be conducted (i.e., excavation, laboratory processing and analysis) to remove the resource(s) and reduce potential impacts to less than significant. In addition to	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	data recovery, specific treatments shall be developed and implemented based on potential California Register or eligibility criteria or as a unique archaeological resource as follows: ○ **Treatment Under Criteria 1 and 2, or as a unique archaeological resource:** Treatment shall include interpretation for the public. Interpretive materials may include, but not be limited to, signage at the project site, relocating preserved materials in a publicly accessible display, or visual representations of recovered materials. The interpretive materials shall be prepared, at the expense of the project applicant, by professionals meeting the Secretary of the Interior	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	standards in history or historical archaeology. The details of the interpretive materials, including the form, content, and timing of their preparation, shall be completed to the satisfaction and subject to the approval of the Department of City Planning. The results of the historical and archaeological studies conducted for the Project shall be made available to the public through repositories such as the local main library branch or identified non-profit historic groups interested in the subject matter. ○ **Treatment Under Criterion 3:** Architectural documentation of exposed zanja segments shall be conducted by producing narrative	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	records, measured drawings, and photographs in conformance with Historic American Engineering Record (HAER) standards prior to any alteration or demolition activity. ○ **Treatment Under Criterion 4:** No additional work; data recovery is sufficient. • **Zanja No. 2**. If segments of Zanja No. 2 are present and found to retain integrity, architectural documentation of exposed zanja segments shall be conducted by producing narrative records, measured drawings, and photographs in conformance with HAER standards prior to any alteration or demolition activity. In addition to HAER documentation, specific treatments shall be developed and implemented	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	based on potential California Register or eligibility criteria or as a unique archaeological resource as follows: o **Treatment Under Criterion 1:** Treatment shall include interpretation of Zanja No. 2 for the public. The interpretive materials may include, but not be limited to, interpretive displays of photographs and drawings produced during the HAER documentation, signage at the Zanja No. 2 alignment, relocating preserved segments in a publicly accessible display, or other visual representations of zanja alignments through appropriate means such as a dedicated internet website other online-based materials. At a minimum, the interpretive	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	materials shall include photographs and drawings produced during the HAER documentation, and signage. These interpretive materials shall be employed as part of Project public outreach efforts that may include various forms of public exhibition and historic image reproduction. Additionally, the results of the historical and archaeological studies conducted for the Project shall be made available to the public through repositories such as the local main library branch or with identified non-profit historic groups interested in the subject matter. The interpretive materials shall be prepared at the expense of the Project applicant, by professionals meeting	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	the Secretary of the Interior standards in history or historical archaeology. The development of the interpretive materials shall consider any such materials already available to the public so that the development of new materials would add to the existing body of work on the historical Los Angeles water system, and to this end, shall be coordinated, to the extent feasible and to the satisfaction of the Department of City Planning, with the content, format and location of any public interpretive materials that may be developed as part of the proximate related projects Nos. 99 and 101. The interpretive materials shall include a consideration of the	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	Zanja No.2 segment located on the Project Site in relation to the entire Zanja No. 2 and the entire Zanja system as a whole. The details of the interpretive materials, including the content and format, and the timing of their preparation, shall be completed to the satisfaction and subject to the approval of the Department of City Planning. ○ **Treatment Under Criterion 2:** No additional work; archival research about important persons directly associated with the construction and use of Zanja No. 2 would be addressed as part of HAER documentation. ○ **Treatment Under Criterion 3:** No	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	additional work; HAER documentation is sufficient. ○ **Treatment Under Criterion 4:** No additional work; archaeological data recovery and HAER documentation are sufficient. ○ **Treatment as a unique archaeological resource:** Same as Criterion 1 treatment. The ARMMP shall summarize the requirements for tribal coordination in the event of an inadvertent discovery of Native American archaeological resources, including the applicable regulatory compliance measures or conditions of approval for the inadvertent discovery of tribal cultural resources to be carried out in concert. The ARMMP shall be prepared in compliance with Public Resources Code Section 5024.1, Title 14	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	California Code of Regulations, Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1. **CUL-MM-3**: Before the commencement of initial demolition or excavation at the Project Site, the retained qualified archaeologist or their designee shall provide a Worker Environmental Awareness Program (WEAP) training to on-site project personnel responsible for supervising demolition and excavation (i.e., foreman or supervisor) and machine operators. The WEAP training shall brief construction crews regarding the regulatory compliance requirements and applicable mitigation measures that must be adhered to during demolition and excavation activities for the protection of archaeological resources. As an element of the WEAP training, the qualified archaeologist or their designee shall advise the construction crews on proper procedures to follow if an unanticipated archaeological resource is discovered during construction. The qualified	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	archaeologist or their designee shall also provide the construction workers with contact information for the qualified archaeologist and their designee(s) and protocols to follow if inadvertent discoveries are made. In addition, workers shall be shown examples of the types of archaeological resources that would require notification of the archaeologist, if encountered. Once the ground disturbances have commenced, the need for additional or supplemental WEAP training shall be determined through consultation with the qualified archaeologist, project proponent or their designated project supervisor. Within five days of completing WEAP training, a list of those in attendance shall be provided by the qualified archaeologist to the project proponent. **CUL-MM-4**: Before the commencement of demolition or excavation activities, an archaeological monitor shall be present during ground disturbing activities as stipulated in the ARMMP. The qualified archaeologist	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	may designate an archaeologist to conduct the monitoring under their direction. The monitor shall have the authority to temporarily halt or redirect construction activities in soils that are likely to contain potentially significant archaeological resources, as determined by the qualified archaeologist. The monitor shall complete a daily log documenting construction activities and observations. The field observations shall include assessment of the geoarchaeological setting and whether sediments are identified that are no longer capable or unlikely to contain archaeological material (i.e., sterile), which could be encountered prior to reaching the total depth of excavation expected for the project. If initial archaeological monitoring identifies low archaeological sensitivity (i.e., sterile soil strata) below a certain depth or within a certain portion of the project site, a corresponding reduction of monitoring coverage would be appropriate. In the event that potentially significant archaeological resources are exposed during	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	construction, work in the immediate vicinity of the find (within 8 meters [25 feet]) shall stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas in coordination with the qualified archaeologist. If the discovery is determined by the qualified archaeologist to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to PRC 21083.2(g), and the treatments proposed in the ARMMP are found to be infeasible or other alternatives are proposed, the qualified archaeologist shall coordinate with the project proponent and the Department of City Planning to amend the ARMMP with a formal treatment plan that would reduce impacts to the resource(s). The treatment plan established for the resource(s) shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance)	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	is the preferred manner of treatment and if it is determined avoidance is not feasible, treatment may include architectural documentation and archaeological data recovery (i.e., excavation, laboratory processing and analysis) to remove the resource(s) and reduce potential impacts to less than significant. Within 30 days of concluding the archaeological monitoring, the qualified archaeologist shall prepare a memo stating that the archaeological monitoring requirement of the mitigation measure has been fulfilled and summarize the results of any archaeological finds. The memo shall be submitted to the project proponent and the Department of City Planning. Following submittal of the memo, the qualified archaeologist shall prepare a technical report documenting the methods and results of all work completed under the ARMMP, including, if any, treatment of archaeological materials, results of artifact processing, analysis, and research, and evaluation of the	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	resource(s) for the California Register of Historical Resources. Once laboratory analysis is complete, any recovered archaeological materials shall be curated at a public, non-profit research institution that would ensure their long-term preservation and allow access to interested scholars, and shall be done at the expense of the project applicant. Should no such institutions accept the materials, they shall be donated to an educational institution or historical society. The format and content of the report shall follow the California Office of Historic Preservation's *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format*. Any archaeological resources identified shall be documented on appropriate California Department of Parks and Recreation 523-Series Forms. The report shall be prepared under the supervision of a qualified archaeologist and submitted to the Department of City Planning within 6 months of completion of the monitoring. The final draft of the report shall be submitted to the South Central	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	Coastal Information Center.	
Paleontological Resources		
A records search conducted for the Project Site indicates there are no previously encountered fossil vertebrate localities located within the Project Site. The closest identified locality in proximity to the Project Site is LACM 1755, collected at a depth of 43 feet below the surface area. While the Project Site has been subject to grading and development in the past, grading for the Project would consist of excavation to a maximum a depth of approximately 50 feet below the existing ground surface. Thus, the possibility exists that paleontological artifacts that were not recovered during prior construction or other human activity may be present. As such, the Project would have the potential to destroy a unique paleontological resource or site or unique geologic feature. Therefore, without mitigation, impacts related to paleontological resources would be potentially significant. However, implementation of Mitigation Measure CUL-MM-5 would result the impact to less than	**CUL-MM-5**: A qualified paleontologist shall be retained to perform periodic inspections of excavation and grading activities at the Project Site. The frequency of inspections shall be based on consultation with the paleontologist and shall depend on the rate of excavation and grading activities and the materials being excavated. If paleontological materials are encountered, the paleontologist shall temporarily divert or redirect grading and excavation activities in the area of the exposed material to facilitate evaluation and, if necessary, salvage. The paleontologist shall then assess the discovered material(s) and prepare a survey, study, or report evaluating the impact. The Project Applicant shall then comply with the recommendations of the evaluating paleontologist, and a copy of the paleontological survey report shall be submitted to the Los Angeles County Natural History Museum.	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
significant.		
SECTION IV.E, GEOLOGY AND SOILS		
Fault Rupture		
The Project Site is not located within an Alquist-Priolo Earthquake Fault Zone or within a city-designated Preliminary Fault Rupture Study Area for surface fault rupture hazards. The Project Site is not located within an active fault zone. Accordingly, the potential for surface rupture due to faulting occurring beneath the Project Site is considered very low. As a result, the Project would not exacerbate geologic hazards related to fault rupture. Therefore, impacts associated with fault rupture would be less than significant.	None required	Less Than Significant
Strong Seismic Ground Shaking		
As with all properties in the seismically active Southern California region, the Project Site is susceptible to ground shaking during a seismic event. The main seismic hazard affecting the Project Site is moderate to strong ground shaking on one of the local regional faults. However, the Project would be required to conform to all applicable provisions of the City	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Building Code and California Building Code with respect to new construction. Adherence to current building codes and engineering practices would ensure that the Project would not expose people, property, or infrastructure to seismically induced ground shaking hazards that are greater than the average risk associated with locations in the Southern California region and would minimize the potential to expose people or structures to substantial risk, loss, or injury. As such, the Project would not exacerbate existing hazardous environmental conditions related to seismic ground shaking. Therefore, impacts related to seismic ground shaking would be less than significant.		
Seismic-Related Ground Failure		
The State of California Seismic Hazard Zone Map for the Los Angeles Quadrangle (1998) indicates that the Project site is not located in an area designated as “liquefiable.” The native soils at the planned foundation levels consist of very dense sand and gravel with sand and cobbles. The historic	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
high groundwater level at the Project Site is approximately 90 feet beneath the ground surface. Typically, saturated soils within the upper 50 feet of the ground surface or lowest adjacent grade are considered subject to liquefaction. Based on the conditions documented at the Project Site, the potential for liquefaction is very low. Thus, the potential for ground failure to occur at the Project Site is considered low, and development of the Project at this location would not exacerbate existing hazardous conditions related to liquefaction or seismically induced ground failure. Therefore, impacts related to ground failure would be less than significant.		
Landslides		
The Project Site is relatively flat and not near any hillside areas. The Project Site is not classified as a landslide hazard zone in the State Seismic Hazard Zones Map. The Project Site is also not identified by ZIMAS as being within a landslide hazard zone. Finally, the City of Los Angeles Seismic Safety Element shows that the Project Site is not within a landslide area. Therefore,	None required	No Impact

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
no impact with respect to landslides would occur.		
Soil Erosion		
As the Project would comply with all mandatory Code requirements, Project impacts related to soil erosion during construction would be minimal and less than significant. The potential for soil erosion during Project operation would be relatively low due to the urban nature of the Project area and the generally level topography of the Project Site. The Project would develop the entire Project Site with a new building, paving, landscaping, and surface treatments. Therefore, impacts related to soil erosion and the loss of topsoil would be less than significant.	None required	Less Than Significant
Geologic or Soil Instability		
The Project Site is not located in an area designated as "liquefiable," and the potential for liquefaction beneath the Project Site is very low. Also, the Project Site is not susceptible to landslides. Furthermore, there appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the Project Site. Given the absence of these geologic hazards	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
and the physical conditions within which they are likely to occur at the Project Site, the Project would not have the potential to exacerbate existing hazardous conditions related to soil or geologic unit instability. Therefore, impacts related to soil/geologic instability would be less than significant.		
Expansive Soils		
The soils encountered during the site exploration are primarily granular in nature and are considered to be "non-expansive." Such soils are not subject to measures to mitigate expansive soils. Therefore, the Project would not exacerbate existing environmental conditions related to expansive soils, and impacts related to expansive soils would be less than significant.	None required	Less Than Significant
Wastewater Disposal		
The Project Site is located in a developed area of the City, which is served by a wastewater collection, conveyance, and treatment system operated by the City. No septic tanks or alternative disposal systems are necessary or are proposed as part of the Project. Therefore, no impact	None required	No Impact

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
would occur.		
Destroy, Cover, or Adversely Modify Distinct/Prominent Geologic/Topographic Feature		
The Project Site does not contain any distinct or prominent geologic or topographic features, such as hilltops, ridges, canyons, ravines, rock outcrops, water bodies, streambeds, or wetlands. The Project Site is level and is fully developed with an existing structure. Thus, development of the Project would not result in the permanent covering, damaging, or destruction of any prominent geologic or topographic features. Therefore, no impacts related to alteration of a landform would occur.	None required	No Impact
SECTION IV.F, HAZARDS AND HAZARDOUS MATERIALS		
Transport, Use, or Disposal of Hazardous Materials		
Construction and operation of the Project would involve the temporary transport, use, or disposal of potentially hazardous materials, including paints, adhesives, surface coatings, cleaning agents, fuels, and oils. All potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, which	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
would ensure that impacts are less than significant. Thus, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, impacts related to this issue would be less than significant.		
Risk of Upset		
Given the age of the existing structure, it is possible that asbestos-containing materials (ACMs) and lead-based paint (LBP) could be encountered during the Project's demolition phase. However, the Project Applicant would be required to comply with existing regulations to abate these materials. No above or underground storage tanks are known to exist at the Project Site. Little evidence of soil contamination was encountered at the Project Site during either site reconnaissance or soil boring investigation work. Low levels of metals, below applicable regulatory limits, were detected via laboratory analysis of the soil cuttings from Boring B-4. In its Phase I ESA, GeoDesign concluded that no RECs associated with current or historic use of the	**HAZ-MM-1**: A Soil Management Plan (SMP) shall be prepared and submitted to the Department of Building and Safety prior to issuance of a grading permit to review and address any impacted soil that may be encountered during excavation and grading. The SMP shall provide for the sampling, testing, and timely disposal of such soil and shall specify the testing parameters and sampling frequency. Any impacted soils shall be properly treated and disposed of in accordance with applicable SCAQMD, DTSC, and LARWQCB requirements.	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Project Site and the surrounding land uses pose a risk at the Project Site. However, given the known historic industrial uses of the Project Site and the difficulty of performing a complete subsurface investigation of the currently developed property, the possibility that subsurface contamination exists at the Project Site cannot be completely discounted. Accordingly, it is possible that the Project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving contaminated soil. Therefore, Project impacts related to soil contamination would be potentially significant. However, implementation of Mitigation Measure HAZ-MM-1 would reduce the impact to less than significant.		
Hazardous Emissions Near a School		
Two schools are located with 0.25 miles of the Project Site. However, pursuant to 23 CFR 772, sensitive receptors are considered to be areas with potential to contain children under 14, the elderly over 65, or the sick/disabled including, but not limited	None required	No Impact

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
to, churches, schools, residential uses, day care centers, and hospitals. Neither of these institutions serves children under 14. The nearest school, at which children under 14 are present, is the Metropolitan High School, located at 727 Wilson Street, approximately 2,000 feet to the south, with several intervening buildings. Therefore, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Thus, no impact would occur with respect to schools.		
Section 65962.5 List		
The Project Site is not included on any list compiled pursuant to Government Code Section 65962.5. Thus, construction and operation of the Project would not create a significant hazard to the public or the environment, as a result of being on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, construction and operation of the Project would not cause or exacerbate	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
a significant hazard to the public or the environment. Therefore, no impacts related to this issue would occur.		
Airport Safety Hazard		
No public or public use airports are located within two miles of the Project Site. The Project Site is not located within an area covered by an airport land use plan. Therefore, the Project would have no impact with respect to this issue.	None required	No Impact
Private Airstrip		
The Project Site is not located within the vicinity of a private airstrip. Therefore, the Project would have no impact with respect to this issue.	None required	No Impact
Emergency Response/Evacuation		
Through implementation of the Project's Construction Traffic Management Plan (refer to Project Design Feature TR-PDF-2) and compliance with City requirements governing the placement of evacuation signs and the establishment of an emergency response plan, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Therefore, Project impacts related to emergency evacuation and response plans would be less than significant.		
Wildand Fires		
The Project Site is not located within a Very High Fire Hazard Severity Zone. The Project Site is not located within a designated Fire Buffer Zone or Mountain Fire District. The nearest potential area for fire hazard is the base of the Elysian Hills, approximately two miles north of the Project Site. Therefore, the Project would have no impact with respect to wildland fires.	None required	No Impact
SECTION IV.G, GREENHOUSE GAS EMISSIONS		
The Project would not generate greenhouse gas (GHG) emissions either directly or indirectly, that would have a significant impact on the environment. The Project would be consistent with applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of GHG. Therefore, Project impacts related to GHG emissions would be less than significant.	None required	Less Than Significant
SECTION IV.H, LAND USE AND PLANNING		
Physically Divide a Community		
The Project would not physically divide	None required	No Impact

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
an established community. The Project Site is 1.05 acres in size and is currently developed with a two-story building containing light industrial/arts production spaces and live/work uses. The existing building covers the majority of the Project Site. Redevelopment of the Project Site with the Project would not physically divide an established community. Therefore, no impact with respect to community division would occur.		
Plan, Policy, and Regulation Consistency		
The Project would be substantially consistent with applicable plans, policies, and regulations associated with development of the Project site. Therefore, Project impacts related to this issue would be less than significant.	None required	Less Than Significant
Habitat Conservation Plan Conflict		
There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that applies to the Project Site. Therefore, the Project would have no impact with respect to this issue.	None required	No Impact

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
SECTION IV.I, NOISE		
Noise in Excess of Established Standards		
Construction Arts District Park and the 1201 E. 5th Street Residence would both experience noise levels in excess of the 5-dBA noise increase threshold as a result of the Project's on- and off-site construction activities, though noise increases at Beacon Lofts and Barker Block Lofts would remain below this threshold. Therefore, the overall composite construction noise impact would be significant. Implementation of Mitigation Measures NOI-MM-1 through NOI-MM-3 would reduce the Project-specific impact to less than significant. However, if nearby cumulative projects undergo construction at the same time as the Project, concurrent construction activities would have the potential to exceed this threshold. Therefore, the Project could result in a cumulatively considerable contribution to a potentially significant cumulative construction noise impact, for which no additional feasible mitigation is	Construction **NOI-MM-1**: All diesel-powered construction vehicles shall be equipped with exhaust mufflers or other suitable noise-reduction devices. **NOI-MM-2**: Temporary sound barriers with a transmission loss value of at least 25 dBA shall be erected along the Project's eastern boundary. At plan check, building plans shall include documentation prepared by a noise consultant verifying compliance with this measure. **NOI-MM-3**: No more than 7 haul trucks per hour shall access or exit the Project via Colyton Street. The Project Applicant (or grading or haul contractor) shall maintain logs documenting the hourly and daily number of haul trucks accessing or exiting the site via Colyton Street that shall be provided to the Construction Monitor. The logs shall contain license plate numbers or vehicle identification	Construction *Project-Specific Impact:* Less Than Significant *Cumulative Impact:* Significant and Unavoidable Operation Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
available. Thus, the Project's cumulative construction noise impacts would be significant and unavoidable. Operation The Project's operational activities would not generate noise in excess of the City's threshold. Therefore, the Project's operational noise impacts would be less than significant.	numbers (VIN) to identify trucks visiting the site. The logs shall be validated every two weeks by the Construction Monitor and maintained on-site and made available to the SCAQMD or the City for inspection upon request. Operation None required	
Groundborne Vibration		
Construction – Building Damage Construction activities utilizing auger drills or large earthmoving equipment and occurring at or within 11 feet of the Project Site's northern property line could cause these buildings to experience groundborne vibration levels in excess of the Federal Transit Administration's (FTA) 0.3 inches/second peak particle velocity (PPV) damage threshold for engineered concrete and masonry structures. The structures that could be impacted include a three-story brick building at 440 Seaton Street and a single-story warehouse building	Construction – Building Damage **NOI-MM-4**: Construction activities that produce vibration shall be sequenced so that vibration sources within 80 feet of the 1201 E. 5th Street Residence and within 11 feet of 440 Seaton Street and 441 S. Colyton Street do not operate simultaneously. **NOI-MM-5**: Pre-construction surveys shall be performed to document the existing conditions at the boundary of Project Site adjacent to 440 S. Seaton Street and 441 S. Colyton Street properties. A structural monitoring program shall be implemented and	Construction – Building Damage Less Than Significant Construction – Human Annoyance Significant and Unavoidable Operation Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
located at 441 S. Colyton Street. Smaller earthmoving equipment operating within 2 feet of these structures could expose them to groundborne vibrations in excess of the 0.3 inches per second PPV threshold. Loaded trucks operating within 10 feet of these structures could also result in such an impact. Therefore, without mitigation, the Project's vibration impact related to potential building damage would be significant. However, implementation of Mitigation Measures NOI-MM-4 and NOI-MM-5 would reduce the impact to less than significant. <u>Construction – Human Annoyance</u> With regard to human annoyance, the 1201 E. 5th Street Residence is located just 60 feet east of the Project Site. At this distance, the receptor could experience groundborne vibration levels of 75.6 vibration decibel (VdB) from auger drills and large steel-tracked earthmoving equipment. This would exceed the FTA's 72 VdB significance criteria for frequent	recorded during construction to ensure that groundborne vibration levels at the boundary of the Project Site adjacent 440 S. Seaton Street and 441 S. Colyton Street properties do not exceed 0.3 PPV inches/second. The performance standards of the structure monitoring plan shall include the following: • Documentation, consisting of video and/or photographic documentation of accessible and visible areas on the exterior of the building. • A registered civil engineer, certified engineering geologist, or vibration control engineer shall review the appropriate vibration criteria for the identified vibration receptors, taking into consideration their age, construction, condition, and other factors related to vibration sensitivity in order to develop additional recommendations for the structure-monitoring program. • Vibration sensors shall be installed on and/or around the identified	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
vibration events impacting residential land uses. Additionally, loaded haul and delivery trucks driving past this receptor could expose it to peak groundborne vibration levels of 97.9 VdB, which would also exceed the FTA significance criteria for this land use. Additionally, although Beacon Lofts is located 500 feet north of the Project, well beyond the distance where on-site construction-generated vibrations could be perceptible, up to inbound 40 haul trucks per hour and delivery trucks could pass this receptor when accessing the Project Site, exposing it to peak groundborne vibration levels of 81.6 VdB. This would also exceed the FTA's 72 VdB significance criteria for frequent vibration events impacting residential land uses. Therefore, the Project's human annoyance vibration impact would be significant. Implementation of Mitigation Measures NOI-MM-3 and NOI-MM-4 would reduce human annoyance vibration levels but not below the significance threshold. Thus, human annoyance vibration impacts would be significant and unavoidable.	vibration receptors to monitor for horizontal and vertical movement. These sensors shall remain in place for the duration of excavation, shoring, and grading phases. • The vibration sensors shall be equipped with real-time warning system capabilities that can immediately alert construction supervisors when monitored vibration levels approach or exceed threshold limits. • Should an exceedance of vibration thresholds occur, work in the vicinity of the affected area shall be halted and the respective vibration receptor shall be inspected for any damage. Results of the inspection shall be logged. In the even that damage occurs, the damage shall be repaired in consultation with a qualified preservation consultant. In the event of an exceedance, feasible steps to reduce vibratory levels shall be undertaken, such as halting/staggering concurrent activities and utilizing lower-	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Operation During the Project's operational phase, virtually imperceptible levels of groundborne vibration would be generated by cars moving within the parking areas. Minimal levels of groundborne vibration in the Project Site's vicinity would be generated by its related vehicle travel on local roadways. However, road vehicles rarely create vibration levels perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps. Project-related traffic would expose nearby land uses and other sensitive receptors to vibrations far below levels associated with human annoyance or land use disruption. Therefore, the Project's long-term vibration impacts would be less than significant.	vibratory techniques. Construction – Human Annoyance Refer to Mitigation Measures NOI-MM-3 and NOI-MM-4. Operation None required	
Permanent Increase in Noise Levels		
The Project's operation activities would not result in noticeable increases in noise. Thus, the Project would not result in a substantial permanent increase in ambient noise levels in the	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Project Site vicinity above levels existing without the Project. Therefore, Project impacts related to substantial permanent increase in ambient noise levels would be less than significant.		
Substantial Temporary/Periodic Noise Increase		
The Project's construction activities could result in noticeable increases in noise. However, with implementation of Mitigation Measure NOI-MM-1, construction noise levels would not exceed the City's significance threshold. Thus, the Project would not result in a substantial temporary increase in ambient noise levels in the Project Site vicinity above levels existing without the Project. Therefore, Project impacts related to substantial temporary increase in ambient noise levels would be less than significant	Refer to Mitigation Measure NOI-MM-1.	Project Specific Less Than Significant Cumulative Significant and Unavoidable
Airport Noise		
The Project Site is not located within an area covered by an airport land use plan and is not located within two miles of a public or public use airport. Therefore, the Project would have no impact with respect to this issue.	None required	No Impact
Private Airstrip Noise		
The Project Site is not located within	None required	No Impact

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
the vicinity of a private airstrip. Therefore, the Project would have no impact with respect to this issue.		
SECTION IV.J, POPULATION, HOUSING, AND EMPLOYMENT		
Inducement of Substantial Population Growth		
Construction Project-related construction workers would not be likely to relocate their place of residence as a consequence of working on the Project. Project-related construction would not represent a permanent or substantial new employment generator that would significantly contribute to local or regional growth. There would be no significant housing or population impacts from construction of the Project. Operation The Project's increase in housing, population, and employment at the Project Site would fall with anticipated growth for the City. Additionally, the Project does not include the development of any new roadways or other infrastructure that would allow for	Construction None required Operation None required	Construction Less Than Significant Operation Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
off-site growth. Thus, the Project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)		
Displace Housing/People		
Ten live/work units are located on the Project Site that would be removed as part of the Project. Based on a persons-per-household rate of 2.43, approximately 25 residents would be displaced due to the Project. However, existing and projected available dwelling units in the Project Site area and on the Project Site could absorb the need for the loss of 10 units at the Project Site and the need to house the approximately 25 residents that currently live on-site who would be displaced due to the Project. As discussed under "Cumulative Impacts," cumulative development in the Project area includes approximately 31,334 dwelling units. For these reasons, the Project would not displace a substantial number of existing housing or people, necessitating the	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
construction of replacement housing elsewhere. Thus, the Project would not displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere. Therefore, impacts related to these issues would be less than significant.		
SECTION IV.K, PUBLIC SERVICES		
Fire Protection		
The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for fire protection. Therefore, Project impacts related to fire protection services would be less than significant.	None required	Less Than Significant
Police Protection		
The Project's direct population increase and associated demand for police services, along with the provision of on-site security features,	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
coordination with the Los Angeles Police Department (LAPD), and incorporation of crime prevention features, would not require the provision of new or physically altered police stations in order to maintain acceptable service ratios or other performance objectives for police protection. Therefore, Project impacts on the LAPD would be less than significant.		
Schools		
Based on the mandatory payment of the school fees established by the LAUSD in accordance with existing rules and regulations regarding the calculation and payment of such fees, the Project's direct and indirect impacts to school services would be less than significant.	None required	Less Than Significant
Parks and Recreation		
Due to the amount, variety, and availability of the Project's proposed open space and recreational amenities, it is anticipated that Project residents would generally utilize on-site open space to meet their recreational needs. As such, the Project would meet the applicable requirements set	None required	Less Than Significant.

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
forth in LAMC Section 12.21. Furthermore, in accordance with the regulatory requirements discussed above, the Project would pay a Dwelling Unit Construction Tax in accordance with LAMC Section 21.10.3(a)(1) and comply with the requirements of LAMC Section 17.12 regarding payment of Quimby/Finn fees. Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. Therefore, Project impacts would be less than significant.		
Libraries		
Operation of the Project would not create any new exceedance of the capacity of local libraries to adequately serve the existing residential population based on target service populations or as defined by the Los	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Angeles Public Library (LAPL), which would result in the need for new or altered facilities, or substantially increase the demand for library services for which current and future demand exceeds the ability of the facility to adequately serve the population. Therefore, Project impacts related to library services would be less than significant.		
SECTION IV.L, TRANSPORTATION/TRAFFIC		
Intersection LOS		
Construction During the Project's construction phase, temporary impacts could occur related to: traffic impacts, loss of access, loss of bus stops, rerouting of bus lines, and loss of on-street parking. However, the Project includes Project Design Feature TR-PDF-2, which requires preparation and implementation of the Construction Traffic Management Plan, and construction traffic impacts would be less than significant.	Construction None required Operation **TR-MM-1**: A preliminary Transportation Demand Management (TDM) program shall be prepared as part of the Project and provided for Los Angeles Department of Transportation (LADOT) review prior to the issuance of the first building permit for the Project. A final TDM program approved by LADOT shall be required prior to the issuance of the first certificate of occupancy for	Construction Less Than Significant Operation Significant and Unavoidable

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Operation Under the Baseline (2017) Plus Project traffic condition, the Project's traffic generation would not exceed the Los Angeles Department of Transportation's (LADOT) intersection level of service (LOS) significance thresholds. However, under the Future Base (2021) Plus Project traffic conditions, the Project's traffic generation would result in significant impacts at study intersections 8, 9, 10, 11, 16, and 17. Implementation of Mitigation Measures TR-MM-1 and TR-MM-2 would reduce the impacts at study intersections 8, 9, 11, 16, and 17 to less than significant. However, the impact at study intersection 10 during the AM peak hour would remain significant and unavoidable.	the Project. The TDM program should include, but not be limited to, the following strategies: • An on-site Transportation Information Center; • Preferential rideshare loading/unloading or parking location; • Convenient parking and facilities for bicycle riders; • Guaranteed ride home programs for employees; • Allowance for flexible and alternative work schedules; • Administrative support for the formation of carpools/vanpools; • Promotion of transit, walk, or bike to work events; • Project design elements to ensure a bicycle, transit, and pedestrian-friendly environment;	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	• Unbundled parking from housing cost; • Parking cash-out programs for Project and uses as appropriate; • A Covenant and Agreement to ensure that the TDM program will be maintained; • Make a one-time financial contribution of $50,000 to the City of Los Angeles Department of Transportation to be used in the implementation of the Mobility Hub in the general area of the Project; • Make a one-time fixed-fee financial contribution of $50,000 to the City's Bicycle Plan Trust Fund to implement bicycle improvements in the general Downtown Los Angeles area of the Project. **TR-MM-2**: The Project shall contribute up to $175,000 toward Transportation	

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
	Systems Management (TSM) improvements within the Central District that may be considered to better accommodate intersection operations and increase intersection capacity throughout the study area. LADOT's ATSAC Section has identified the need of new system upgrades from Alameda Street & 4th Place/3rd Street to Alameda Street & 7th Street, and from Alameda Street & 7th Street to 7th Street & Mateo Street. The system upgrades would provide and improve the network capacity for additional closed-circuit television (CCTV) cameras to real-time video monitoring of intersection, corridor, transit, and pedestrian operations in Downtown Los Angeles. Collectively, these TSM improvements provide a system wide benefit by reducing delays experienced by motorists at study intersections.	
Congestion Management Plan Analysis		
Since the Project would contribute fewer than 150 trips would be added during the AM or PM peak hours in either direction at any of the CMP freeway segments in the vicinity of the	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
study area or 50 trips during the AM or PM peak hours at CMP arterial monitoring stations, no further CMP analysis is required. Therefore, the Project's CMP impacts would be less than significant.		
Change in Air Traffic		
The Project would not result in a change in air traffic patterns that would result in a substantial safety risk. No airports are located within a five-mile radius of the Project Site. Therefore, the Project would have no impact with respect to this issue.	None required	Less Than Significant
Hazardous Design Features		
No sharp curves, dangerous intersections, or incompatible uses are being proposed in the Project's access and circulation system. Therefore, the Project would not substantially increase hazards due to a design feature or incompatible uses.	None required	Less Than Significant
Emergency Access		
The Project Applicant would be required to submit a plot plan for approval by the Los Angeles Fire Department (LAFD), to help ensure that Project construction and operations would not impede fire	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
access to and from the Project Site. Pursuant to Fire Code requirements, emergency access shall be maintained to the Project Site during construction through marked emergency access points approved by the LAPD. Therefore, the Project would not result in inadequate emergency access, and impacts would be less than significant.		
Policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities		
The Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Therefore, impacts would be less than significant.	None required	Less Than Significant
SECTION IV.M, UTILITIES AND SERVICE SYSTEMS		
Wastewater		
During the Project's operational phase, the Project would generate a total net increase of approximately 35,429 gallons per day (gpd) (or 0.035 mgd) of wastewater over existing site uses. The Hyperion Water Reclamation Plant (HWRP) is designed to process up to 450 mgd of wastewater. The HWRP is currently processing 275 mgd of wastewater. With a dry weather	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
capacity of approximately 450 mgd, the HWRP has an additional treatment capacity of approximately 175 mgd. The 0.035 mgd net increase in wastewater generation over the existing Project Site conditions represents approximately 0.02 percent of the remaining capacity at the HWRP. Thus, the HWRP would have adequate capacity to accommodate the Project's wastewater treatment demands. Further, the Los Angeles Bureau of Sanitation (LASAN) would be required to confirm that the HWRP and local trunk lines have sufficient capacity to accommodate the Project's projected wastewater flows. Therefore, Project impacts related to wastewater would be less than significant.		
Water		
The Project would result in a net increase in water consumption at the Project Site of approximately 35,429 gallons per day (or 0.035 mgd). (This estimated water consumption does not take into consideration the effectiveness of current water conservation measures that are required by the City.) LADWP's 2015	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
UWMP forecasts adequate water supplies to meet all projected water demands in the City for normal, single-dry, and multi-dry years from 2020 to 2040. Demographic projections were provided for the Los Angeles Department of Water and Power (LADWP) service area by Metropolitan Water District (MWD), who received the data from Southern California Association of Governments (SCAG). SCAG applied its 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (2012-2035 RTP/SCS) demographic data to water service areas for MWD's member agencies. These data were used for water demand projections in LADWP's 2015 UWMP. As discussed in detail **in Section IV.J, Population, Housing, and Employment**, of the Draft EIR, the Project's population growth is consistent with SCAG's projected population growth for the City. Thus, the Project would not require or result in the construction of new water treatment facilities or expansion of		

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
existing facilities, the construction of which would cause significant environmental effect. Therefore, Project impacts related to water treatment would be less than significant. In addition, the Project would not have insufficient water supplies available to serve the Project from existing entitlements and resources or new or expanded entitlements. As such, Project impacts related to water supply would be less than significant.		
Solid Waste		
The Project Site is located in an urban area with established solid waste collection routes. Transport of the Project's solid waste would occur along one of the established routes. Thus, the Project would not result in the need for additional solid waste collection routes. The Project would not be served by a landfill with insufficient permitted capacity to accommodate the Project's solid waste disposal needs. Therefore, Project impacts related to solid waste would be less than significant.	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
Energy		
Wasteful, Inefficient, Unnecessary use of Energy The Project would not cause a wasteful, inefficient, or unnecessary consumption of energy during the Project's construction or operation phases. The Project's energy needs would not significantly affect local and regional supplies or capacity. The Project's energy usage during peak and base periods would also be consistent with electricity and natural gas future projections for the region. Electricity generation capacity and supplies of natural gas and transportation fuels also would be sufficient to meet the needs of the Project's construction and operation phases. During operation of the Project, the Project would comply with existing energy efficiency requirements such as the City's Green Building Code (LAGBC). Thus, the Project's demand for energy would not significantly affect available energy supplies and would comply with existing energy efficiency standards. Therefore, Project impacts	None required	Less Than Significant

Table I-1
Summary of Project Impacts, Mitigation Measures, and Level of Impact Significant After Mitigation

Environmental Impacts	Mitigation Measures	Level of Impact Significance After Mitigation
related to this issue would be less than significant. <u>Exceed Energy Supplies/ Distribution Infrastructure</u> Construction and operation of the Project would not result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, Project impacts related to this issue would be less than significant.		

II. Project Description

1. Introduction

The purpose of this section is to describe the characteristics and objectives of the Arts District Center Project (Project). The Project would involve the construction and operation of a new mixed-use live/work, hotel, retail, restaurant, art gallery, and artist collaborative space (Artist CoLab) development that would replace an existing light-industrial and live/work facility on the north side of E. 5th Street between Seaton Street and Colyton Street within the Arts District area of Downtown Los Angeles.[1] The Project description below includes the following information:

- the location and boundaries of the Project Site;
- a general description of the Project's technical and environmental characteristics;
- the Project Objectives and Discretionary Actions sought by the Project Applicant; and
- a brief statement regarding the intended uses of this Draft Environmental Impact Report (Draft EIR).

2. Project Site Location and Setting

a) Project Site Location

The 1.05-acre Project Site is located at 1129 E. 5th Street (with additional addresses of 1101 E. 5th Street, 445-457 South Colyton Street, and 450-456 South Seaton Street) within the Central City North Community Plan Area of the City of Los Angeles (City), approximately one mile east of the heart of Downtown Los Angeles. The Hollywood Freeway (US-101) to the east and north of the Project Site and the Santa Monica Freeway (I-10) to the south and east of the Project Site provide primary regional access to the Project Site.

Major surface street arterials within the vicinity include Alameda Street, Santa Fe Avenue, 4th Street, 6th Street, and 7th Street. 6th Street is located a block to the south of the Project Site, while 4th Street is located less than a block north of the Project Site.

[1] *"Artist CoLab" refers to a collaborative workspace for artists and business people to share ideas and conduct business transactions.*

Seaton and Colyton Streets border the Project Site to the west and east, respectively. Alameda Street is located a block to the west of the Project Site. The Project Site is approximately 14 miles east of the Pacific Ocean. Figure II-1 shows the Project Site within the context of the Greater Los Angeles area, while Figure II-2 provides an aerial view of the Project Site and surrounding land uses.

b) Surrounding Uses

The Project Site is immediately surrounded by a mix of industrial uses, a gas station, residential uses, restaurants, and commercial uses contained in low-rise and mid-rise buildings of widely varying age. Arts District Park is also located within a block to the southeast of the Project Site. Some of the uses are physically separated from the Project Site by streets, while others are adjacent to the Project Site within the same block. The residential uses closest to the Project Site are the four-story Barker Block Residences, located southwest at 510 Hewitt Street, and the Beacon Lofts, located to the north at 825 East 4th Street. To the southeast at the corner of 5th Street and Hewitt Street are a restaurant, a tow service parking lot, and the half-acre Arts District Park. The park sits immediately north of the La Kretz Innovation Campus, a 60,000-square-foot facility, which serves as an incubator for local startups in the cleantech industry.

The immediate surroundings are zoned M3-1-RIO (Heavy Industrial), where "M3" refers to Heavy Industrial Zone and the "1" refers to Height District 1. The "RIO" extension refers to the Los Angeles River Improvement Overlay District. For a Height District of 1 in an M zone, the floor area ratio (FAR) is limited to 1.5:1. Properties located approximately 725 feet south of the Project Site on Palmetto Street and one-third of a mile east of the Project Site adjacent to the Los Angeles River are zoned PF (Public Facilities) and OS (Open Space).

A more detailed discussion of land uses surrounding the Project Site is included in **Section III, Environmental Setting**, of this Draft EIR.

c) Transit Access

The Project Site is located approximately 0.5 miles south of the Metro Gold Line Little Tokyo/Arts District Station and approximately 0.2 miles northeast from the Metro Rapid 720 bus stop (refer to Figure II-3). The Metro Gold Line provides access to other transit lines operated by Metro. The Project Site is also served by LADOT's Downtown DASH A and D bus lines, which run on weekdays along 3rd Street and Temple Street (respectively) near the Project Site, and Metro Local 18 bus service along 6th Street near the Project Site on both weekdays and weekends.



Legend

Project Site

Source: Google Maps 2018.

Figure II-1
Project Vicinity Map



Legend

Project Site

Source: Google Maps, 2018.

Figure II-2
Aerial Map

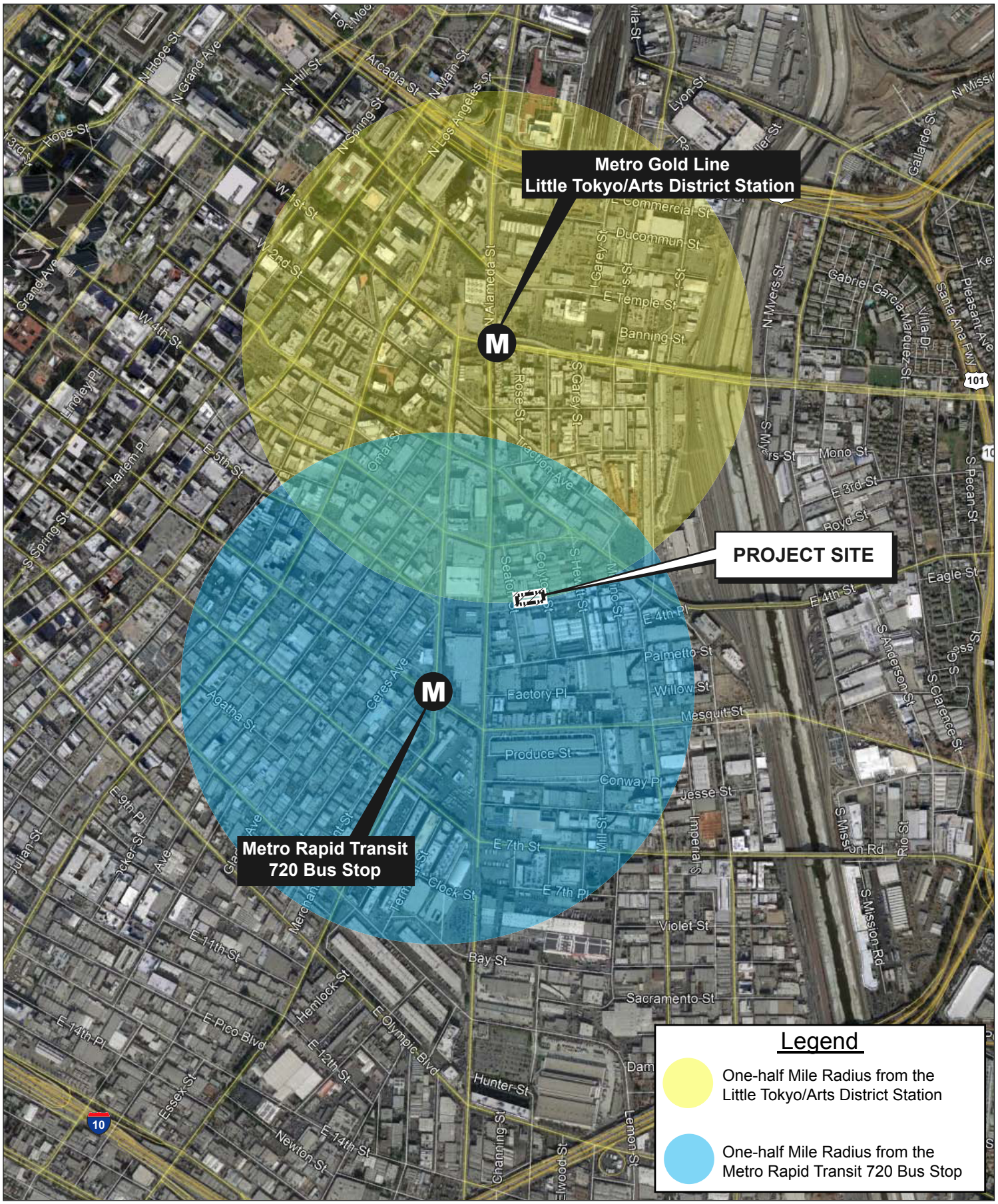


Figure II-3
Transit Priority Area

Source: Google Earth and CAJA Environmental Services, LLC., 2018

3. Project Site Characteristics

a) Land Use Designation and Zoning

The Project Site is also zoned M3-1-RIO. The Project Site's assessor parcel number (APN), zoning, census tract, land use, and acreage are listed in Table II-1. The Project Site is also located within the East Los Angeles State Enterprise Zone, the Arts District Business Improvement District, and the Central City Parking District. The Project Site is located in the Central City North Community Plan (Community Plan) Area. Under the Community Plan, the land use designation for the Project Site is Heavy Industrial. Additionally, the Project Site is located within a Transit Priority Area (TPA) (refer to Figure II-3), as defined in Public Resources Code (PRC) Section 21099 and as clarified by the City's Zoning Information File No. 2452 (refer to **Section IV.B, Aesthetics**, for a more detailed discussion).

Table II-1
Project Site Information

Address	APN	Zoning	Census Tract	Land Use Designation	Size
456 S. Seaton Street	5163-025-009	M3-1-RIO	2060.31	Heavy Industrial	7,500 sf
454 S. Seaton Street	5163-025-009	M3-1-RIO	2060.31	Heavy Industrial	7,500 sf
450 S. Seaton Street	5163-025-009	M3-1-RIO	2060.31	Heavy Industrial	7,860 sf
457 S. Colyton Street	5163-025-009	M3-1-RIO	2060.31	Heavy Industrial	7,503 sf
451 S. Colyton Street	5163-025-009	M3-1-RIO	2060.31	Heavy Industrial	7,503 sf
445 S. Colyton Street	5163-025-009	M3-1-RIO	2060.31	Heavy Industrial	7,863 sf

sf = square feet

Sources: http://zimas.lacity.org/ and ALTA Survey, Psomas, 2014.

b) Existing Uses

The Project Site is located on the north side of 5th Street between Seaton Street and Colyton Street. The Project Site is developed with an approximately 91,200-square-foot, two-story brick building that contains approximately 45,600 square feet of light industrial/arts production space and approximately 45,600 square feet of live/work space, which consists of 10 units. The building covers the majority of the Project Site and is bordered on its north side by adjacent arts, industrial, and warehousing businesses. Street parking (head-in) is provided on three sides (5th, Seaton, and Colyton Streets) of the existing structure, which directly abuts the adjoining off-site buildings to the north. The existing building at the Project Site was built in approximately 1915. No trees or planted vegetation are present on the Project Site,

although potted plants and trees are currently positioned along the Project Site's Colyton Street frontage in the paved area between the travel lane and the building.

4. Project Characteristics

a) Project Overview

The Project includes the removal of the existing two-story structure from the Project Site and the development of the Project Site with a 12-story (148-foot-tall) building, containing 129 live/work condominium units (200,021 square feet); a 113-room hotel (97,850 square feet); 72,469 square feet of commercial space; one level of subterranean bicycle parking and storage; and four levels of subterranean parking (513 parking spaces). Tables II-2 and II-3 provide a breakdown of the proposed uses. Project plans, elevations, and renderings are shown in Figures II-4 through II-25.

Most of the proposed commercial space would be located on the first three levels of the building and would include the hotel lobby and business center and art gallery, retail, restaurant, and Artist CoLab uses. A restaurant with outdoor dining and a bar would be located on the 12th level. The live/work units and hotel rooms would be located on levels 4 through 11. Of the 129 live/work units, 15 units (i.e., 11 percent) would be set aside as restricted affordable (Very Low Income) units. A breakdown of the quantity and location of the live/work units is shown in Table II-4.

A more detailed discussion of Project design/massing/height, access and parking, open space and landscaping, green/conservation features, signage and lighting, and construction is included below.

Table II-2
General Breakdown of Project Uses and Square Footage

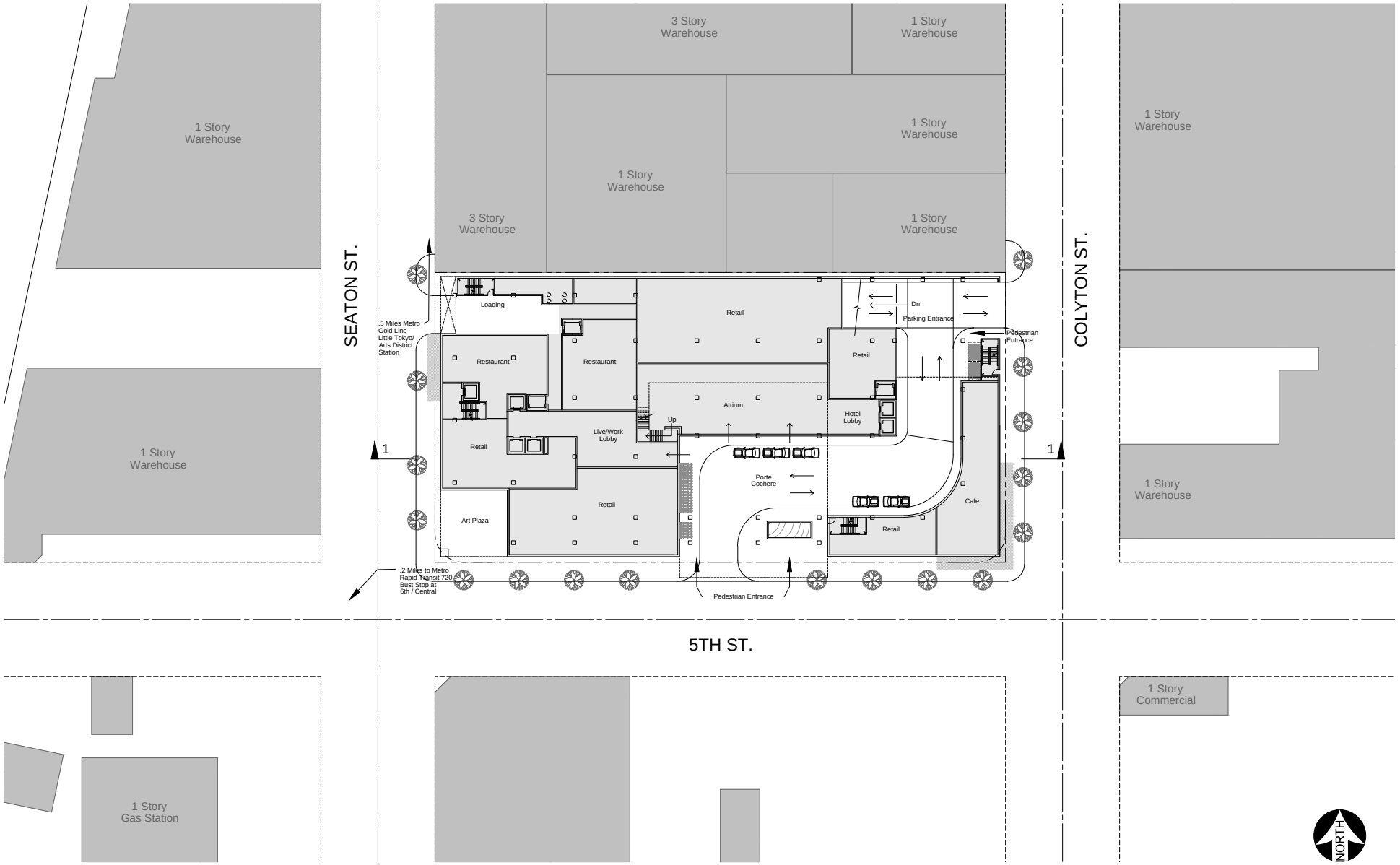
Use	Floor Level	Size (Gross sf)
Live/Work (129 units)	4-11	200,021
Hotel (113 rooms)	1, 3-12	97,850
Art Galleries	3	10,341
Retail	1-2	26,979
Restaurant	1-2, 12	31,719
Artist CoLab	3	3,430
Parking	B1-B5	NA*
Total	**12**	**370,340**

sf = square feet *NA = not applicable*

**Note: This table shows the Project's gross square footage. City of Los Angeles Planning and Zoning Floor Area calculations exclude exterior walls, stairs, shafts, rooms housing building equipment, parking areas, driveways, ramps, and basement storage. Floor Area calculations include private balconies enclosed on three sides by walls.*

Table II-3
Breakdown of Project Uses by Floor

Floor Level	Use	Size (Gross sf)	Figure Reference
Ground Floor	Restaurant 1 Restaurant 2 Café Retail Atrium and Dining	3,460 sf 3,460 sf 2,300 sf 1,500 sf 510 sf	II-5
2nd Floor	Restaurant 1 Restaurant 2 Restaurant 3 Retail	4,270 sf 4,620 sf 5,600 sf 12,350 sf	II-6
3rd Floor	Art Gallery Gym Locker Rooms Artist CoLab Hotel Office Hotel Business Center	10,341 sf 4,250 sf 1,168 sf 3,430 sf 1,620 sf 1,300 sf	II-7
4th – 8th Floors	Live/Work Units Hotel Rooms	95 units 90 Rooms	II-8
9th – 10th Floors	Live/Work Units Hotel Rooms	33 units 23 rooms	II-9
11th Floor	Live/Work Units Hotel Rooms	10 units 8 rooms	II-10
12th Floor	Restaurant Outdoor Dining Bar Clubhouse	1,870 sf 1,780 sf 1,060 sf 7,910 sf	II-11
Source: Togawa Smith Martin Architects, 2016.			



Source: Togawa Smith Martin Architects, 2018.

Figure II-4
Proposed Site Plan

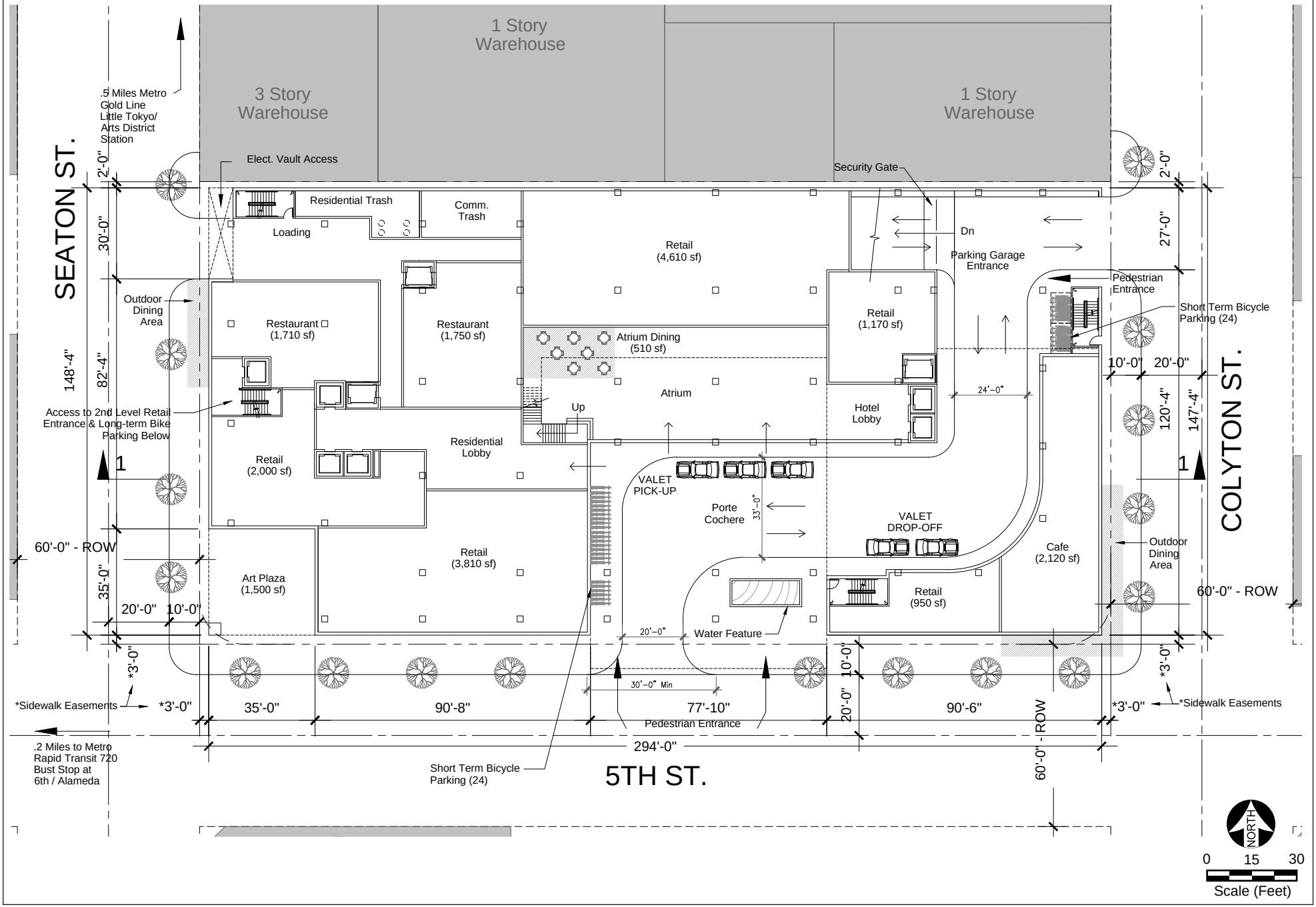
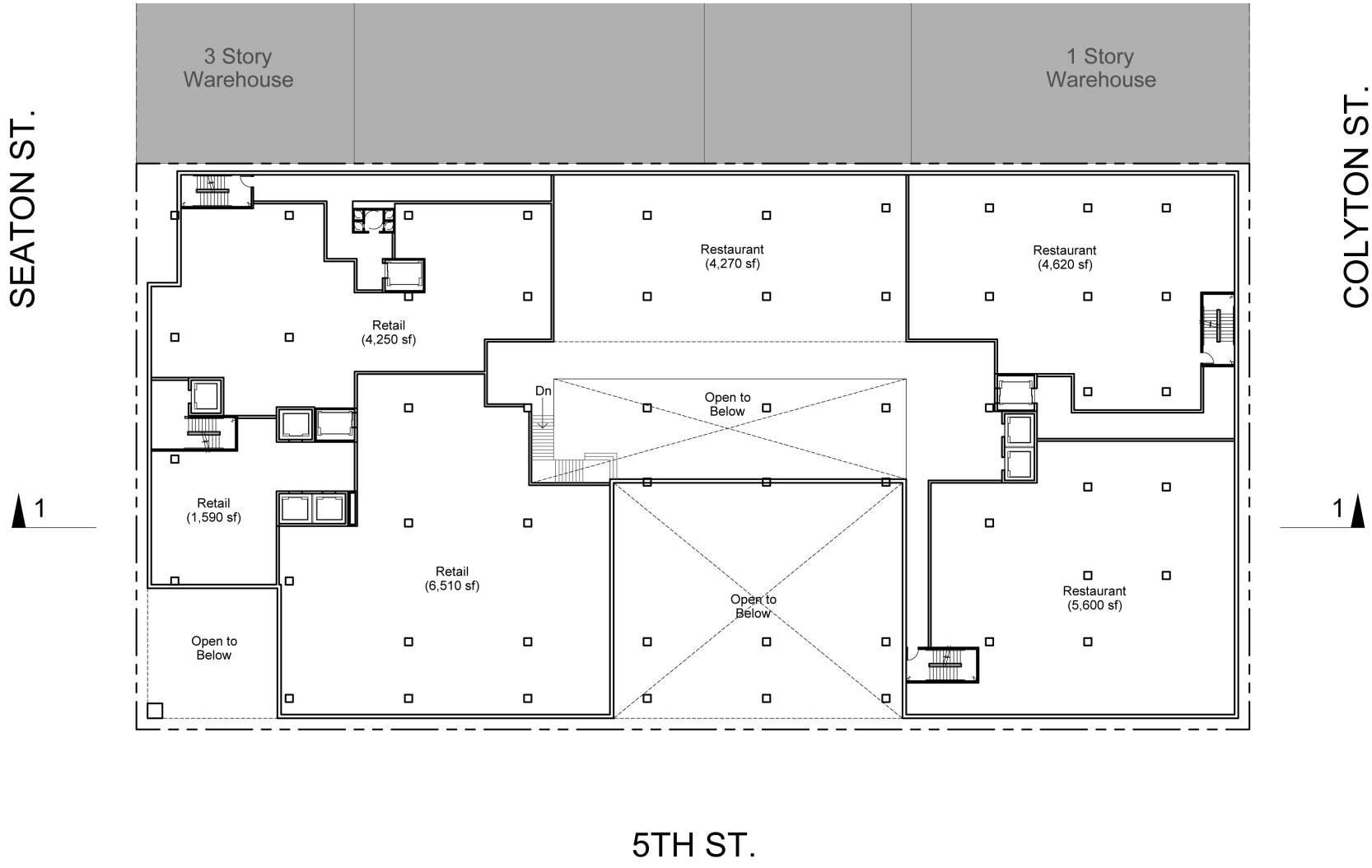


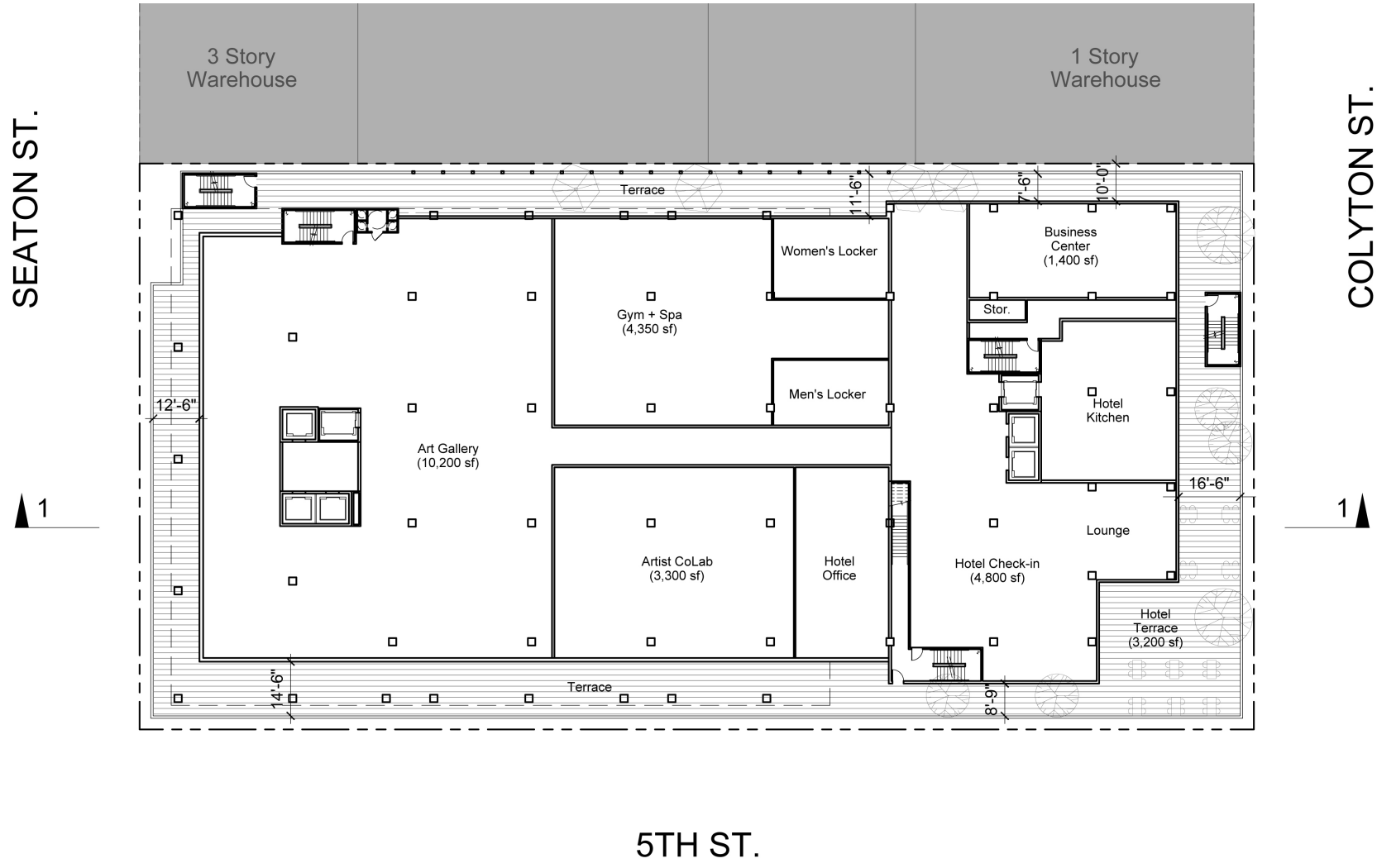
Figure II-5
Ground Level Plan

Source: Togawa Smith Martin Architects, 2018.



Source: Togawa Smith Martin Architects, 2016.

Figure II-6
Second Level Plan



Source: Togawa Smith Martin Architects, 2016.

Figure II-7
Third Level Plan

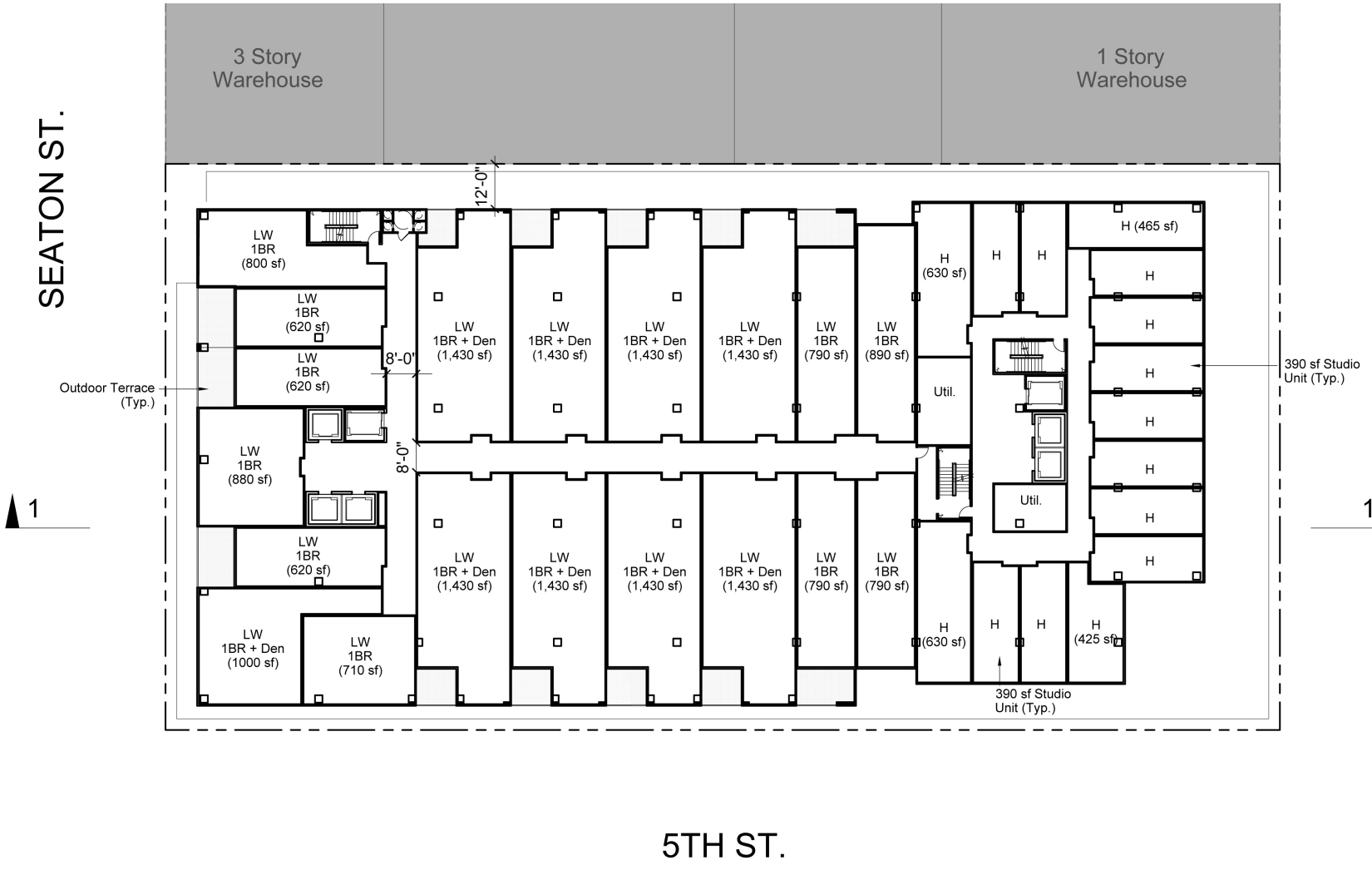
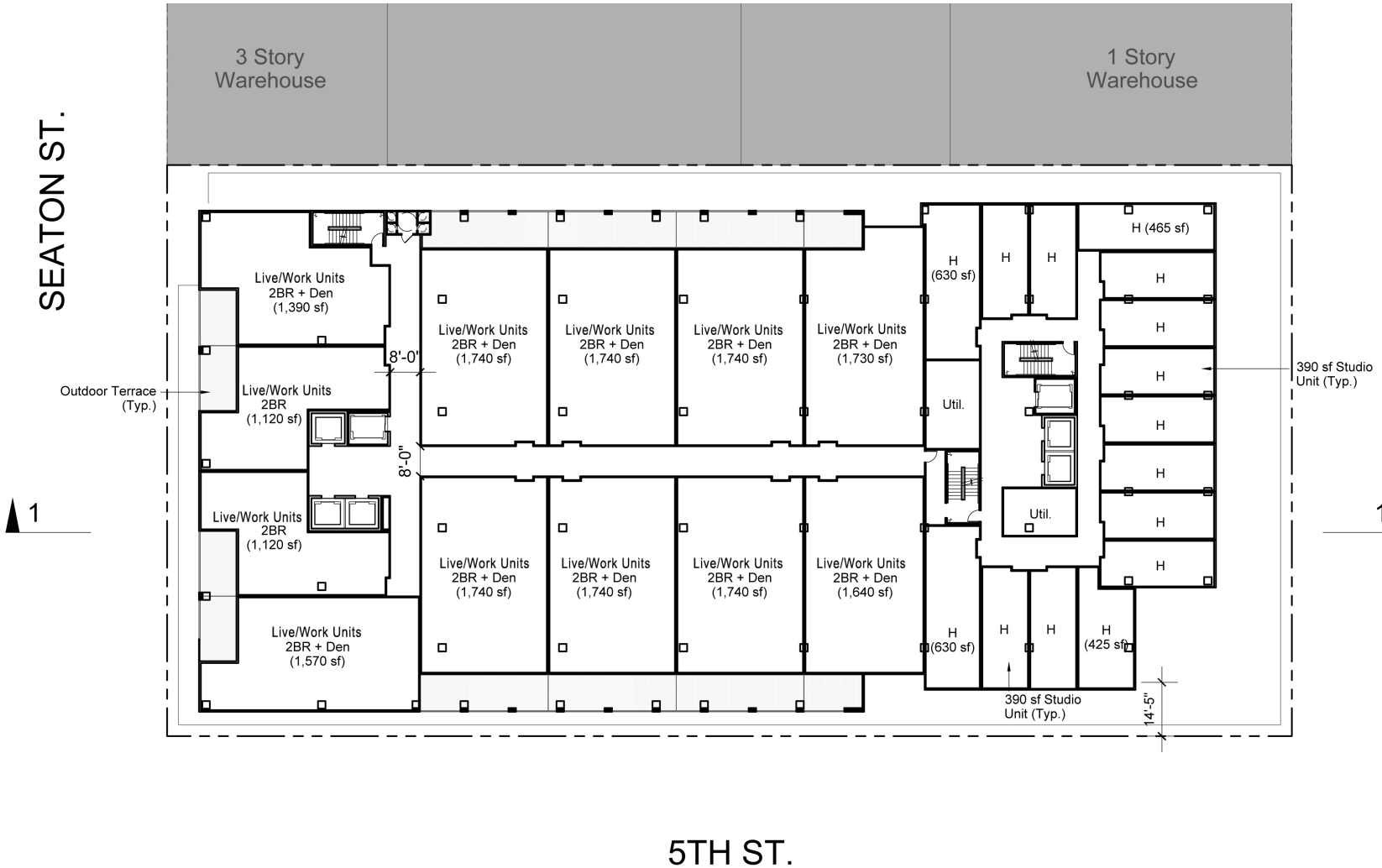


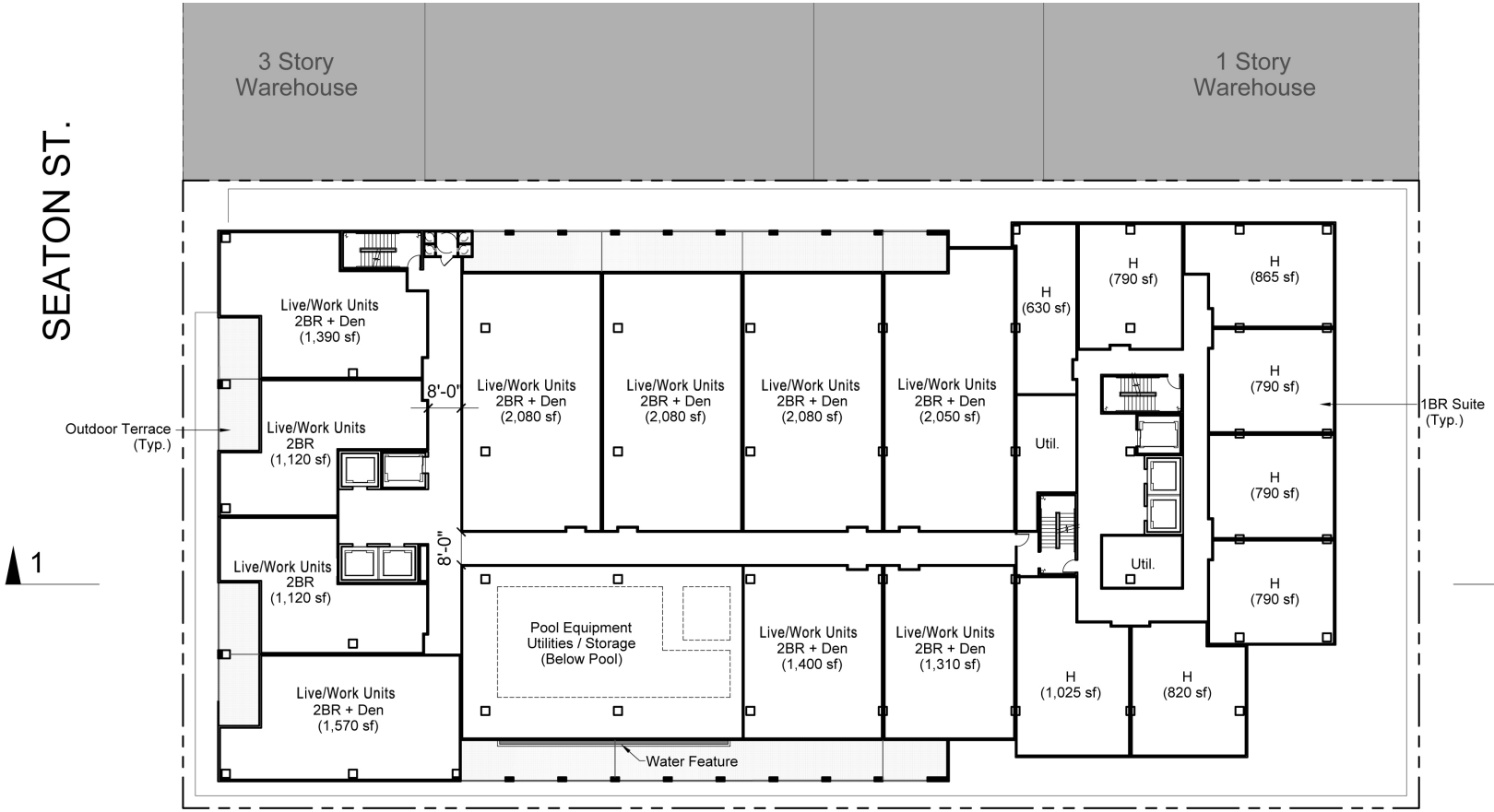
Figure II-8
Fourth-Eighth Level Plan

Source: Togawa Smith Martin Architects, 2016.



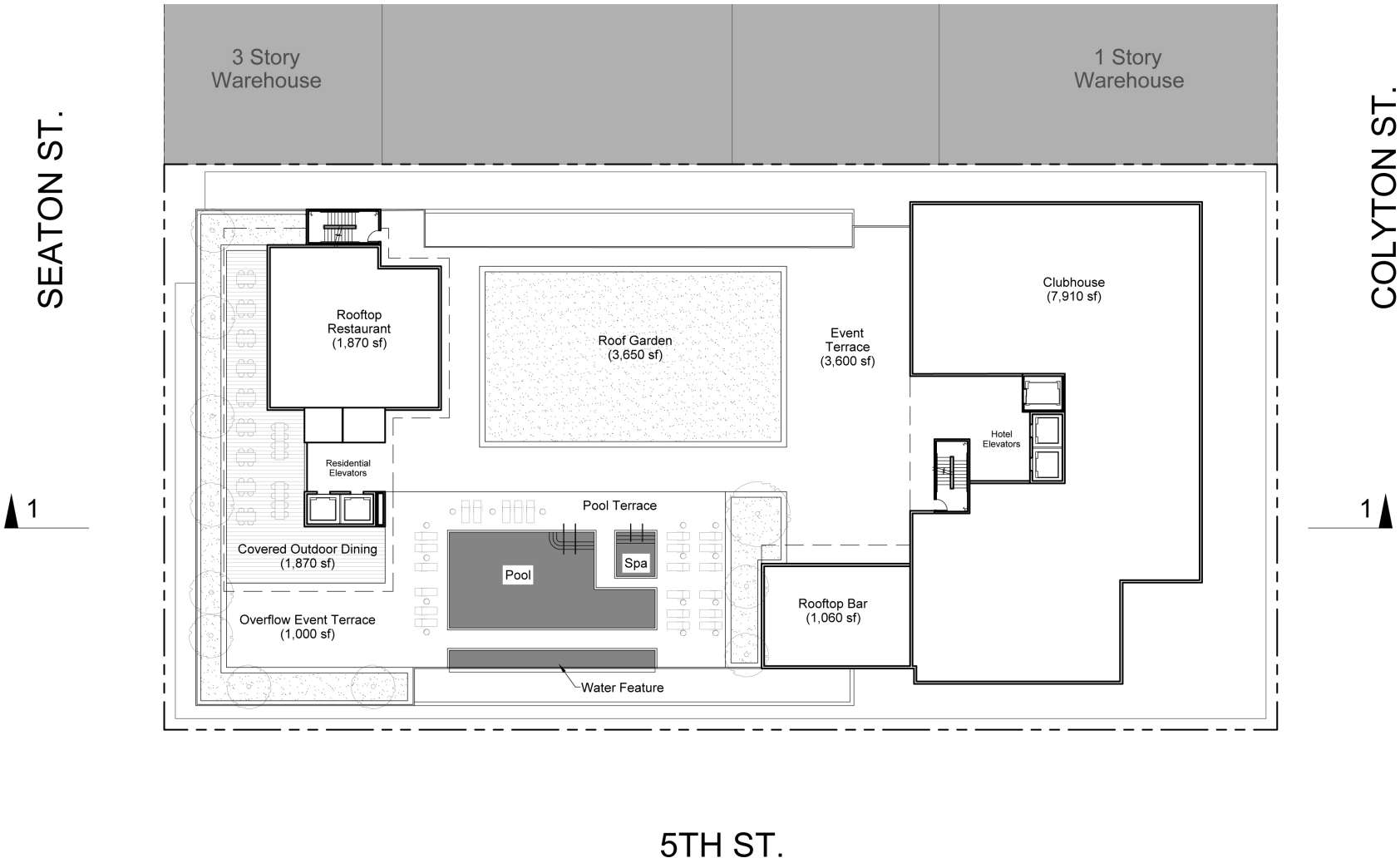
Source: Togawa Smith Martin Architects, 2016.

Figure II-9
Ninth-Tenth Level Plan



Source: Togawa Smith Martin Architects, 2016.

Figure II-10
Eleventh Level Plan



Source: Togawa Smith Martin Architects, 2016.

Figure II-11
Twelfth Level Plan

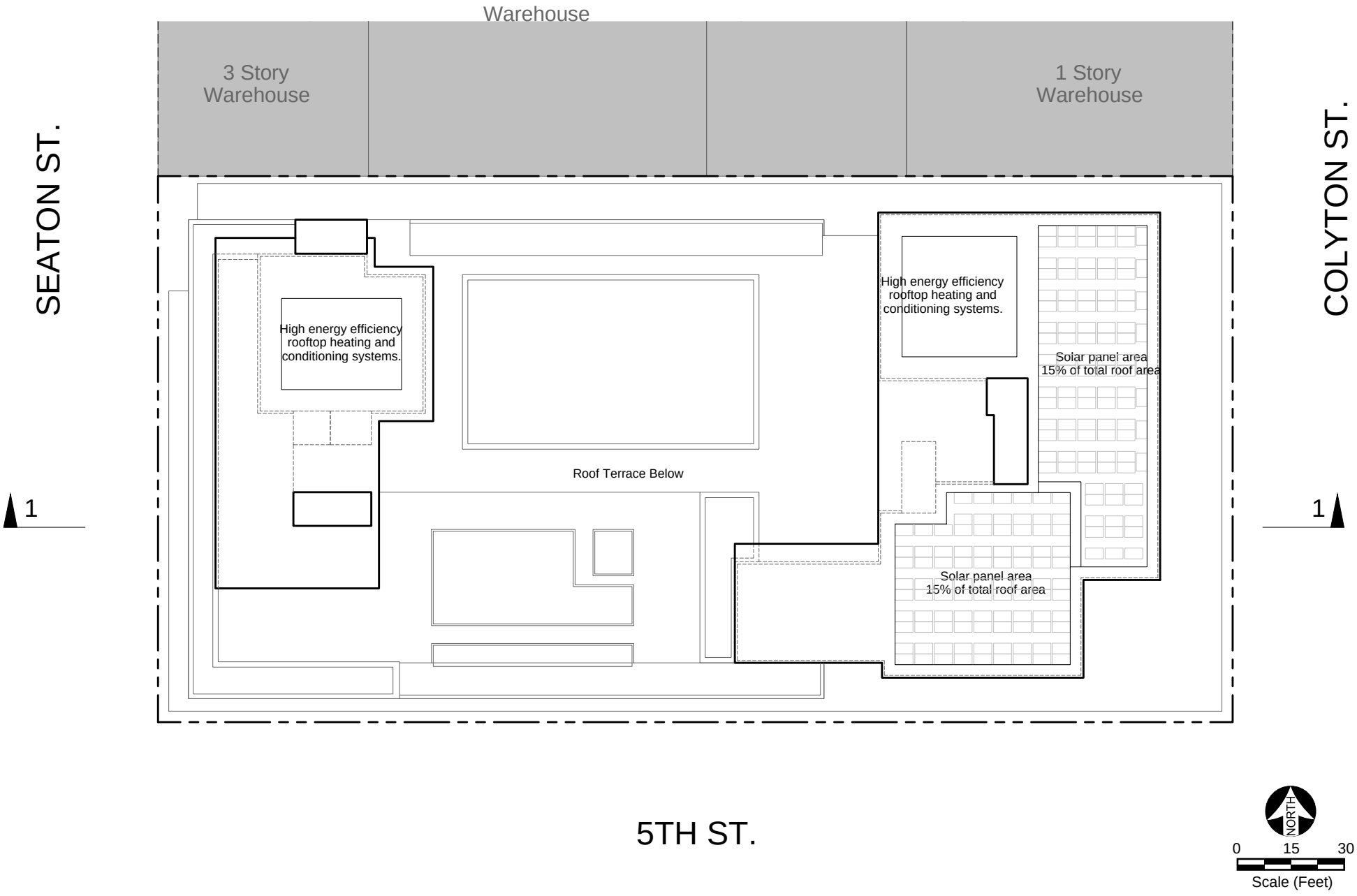
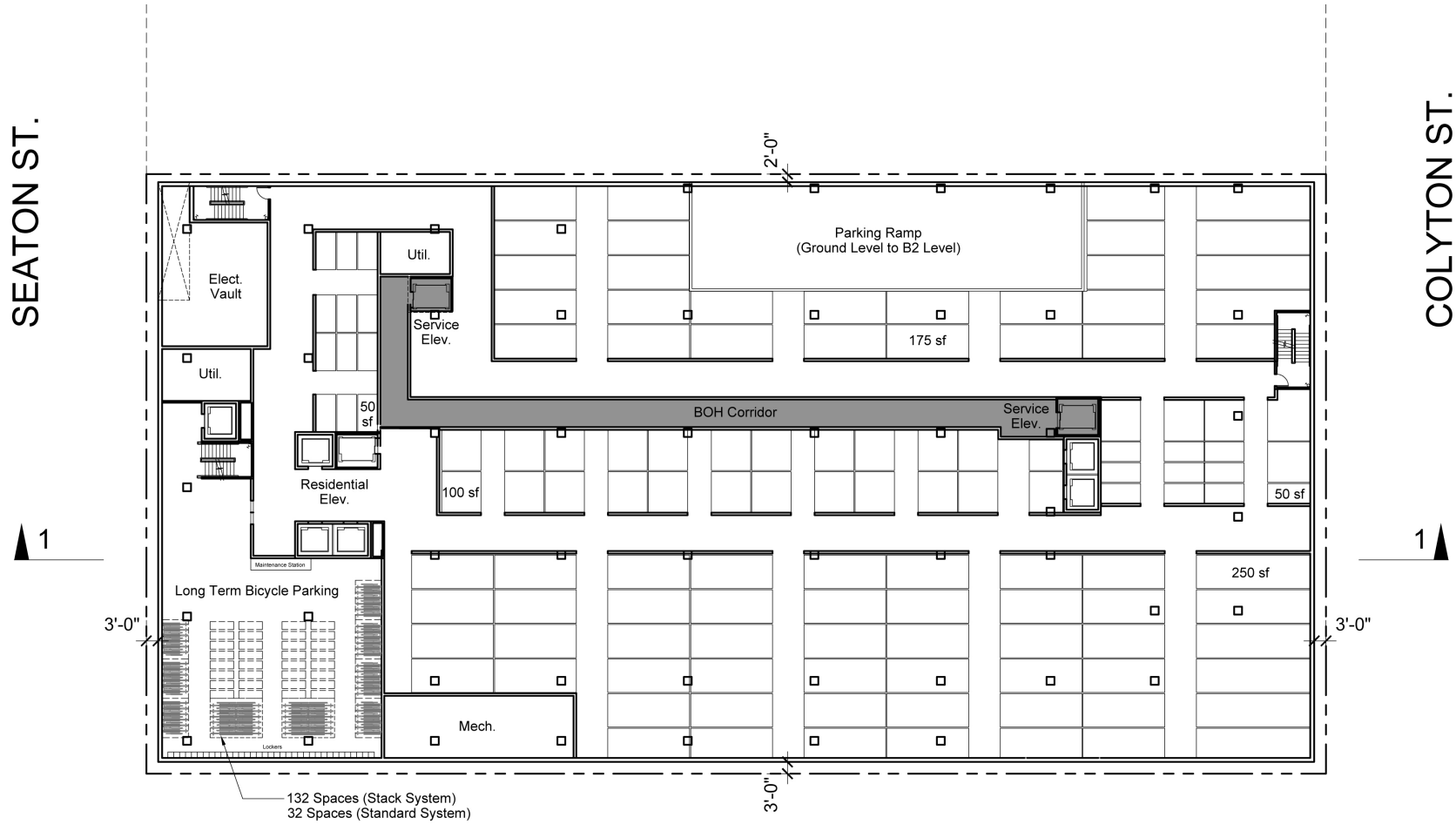


Figure II-12
Roof Plan

Source: Togawa Smith Martin Architects, 2018.



Source: Togawa Smith Martin Architects, 2016.

Figure II-13
B1 Level Plan

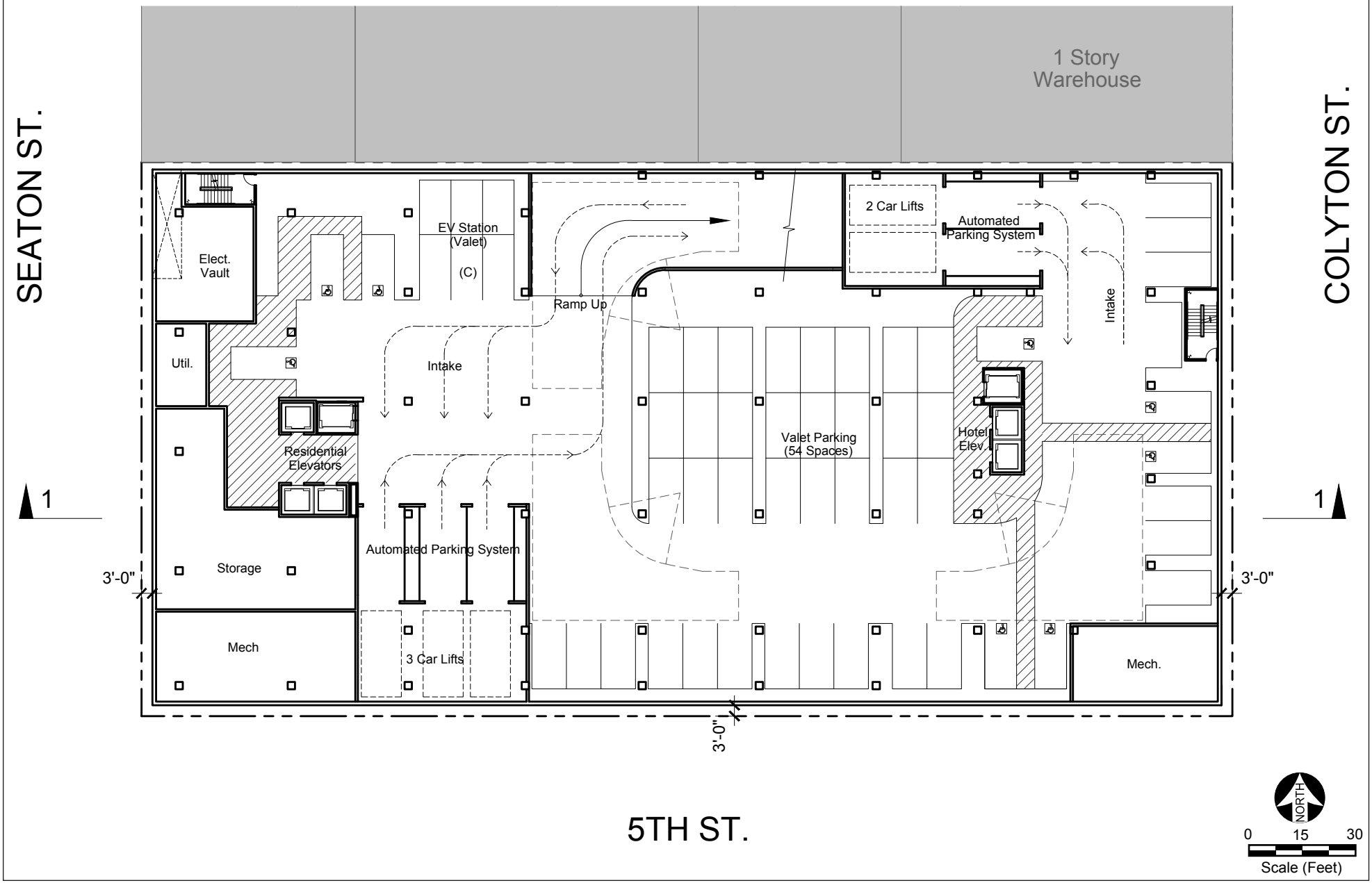


Figure II-14
B2 Level Plan

Source: Togawa Smith Martin Architects, 2018.

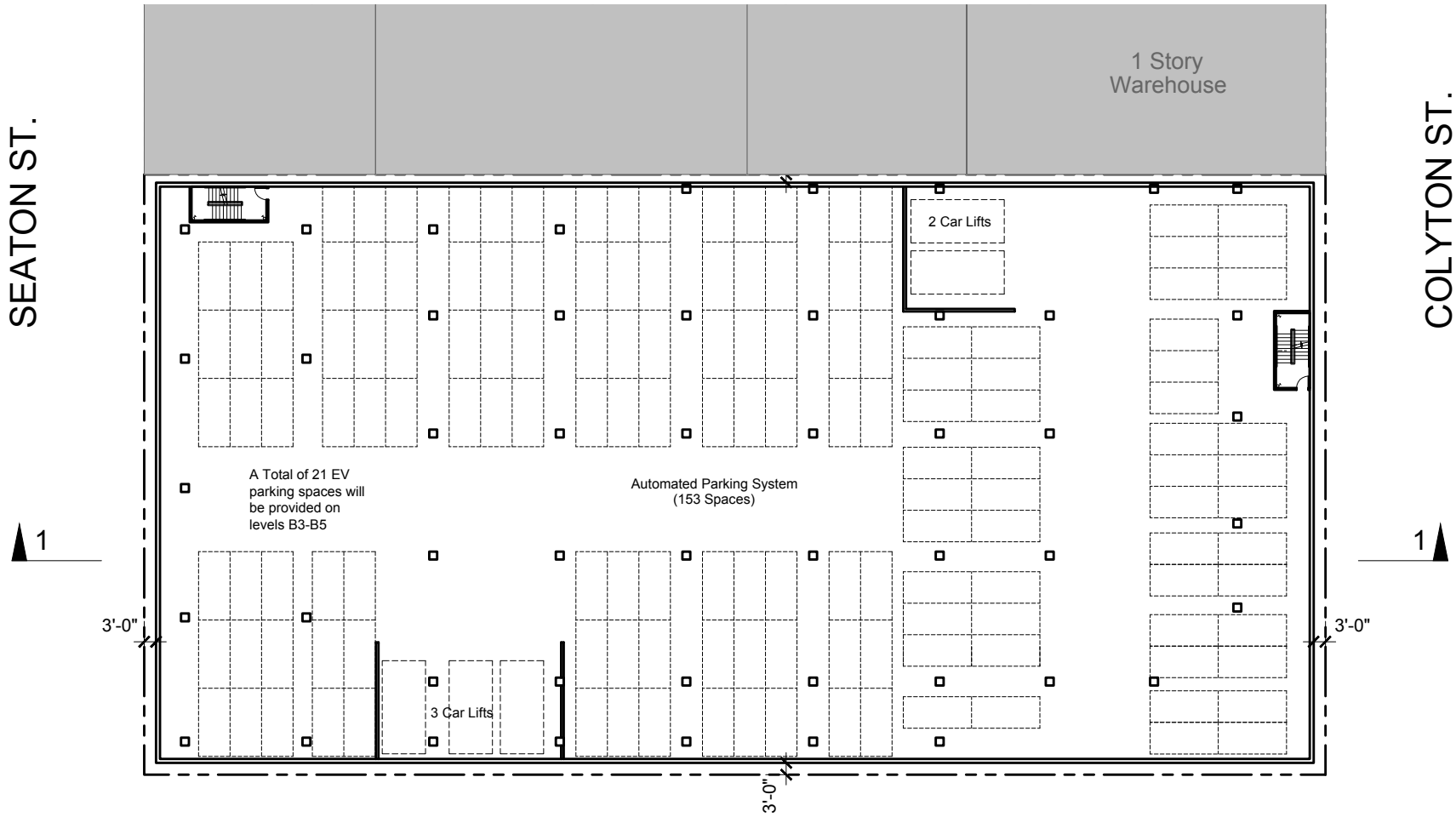


Figure II-15
B3-B5 Level Plan

Source: Togawa Smith Martin Architects, 2016.

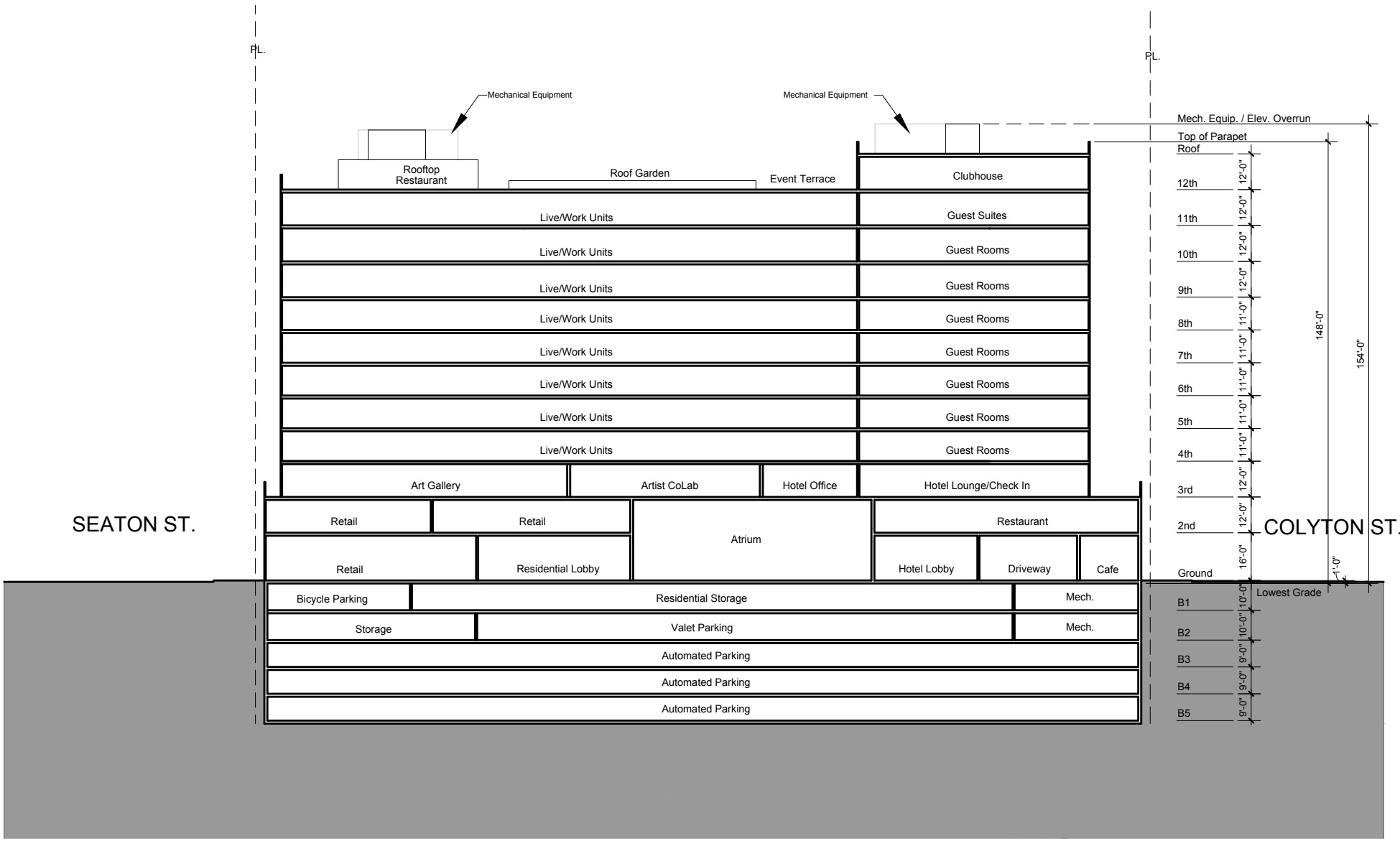
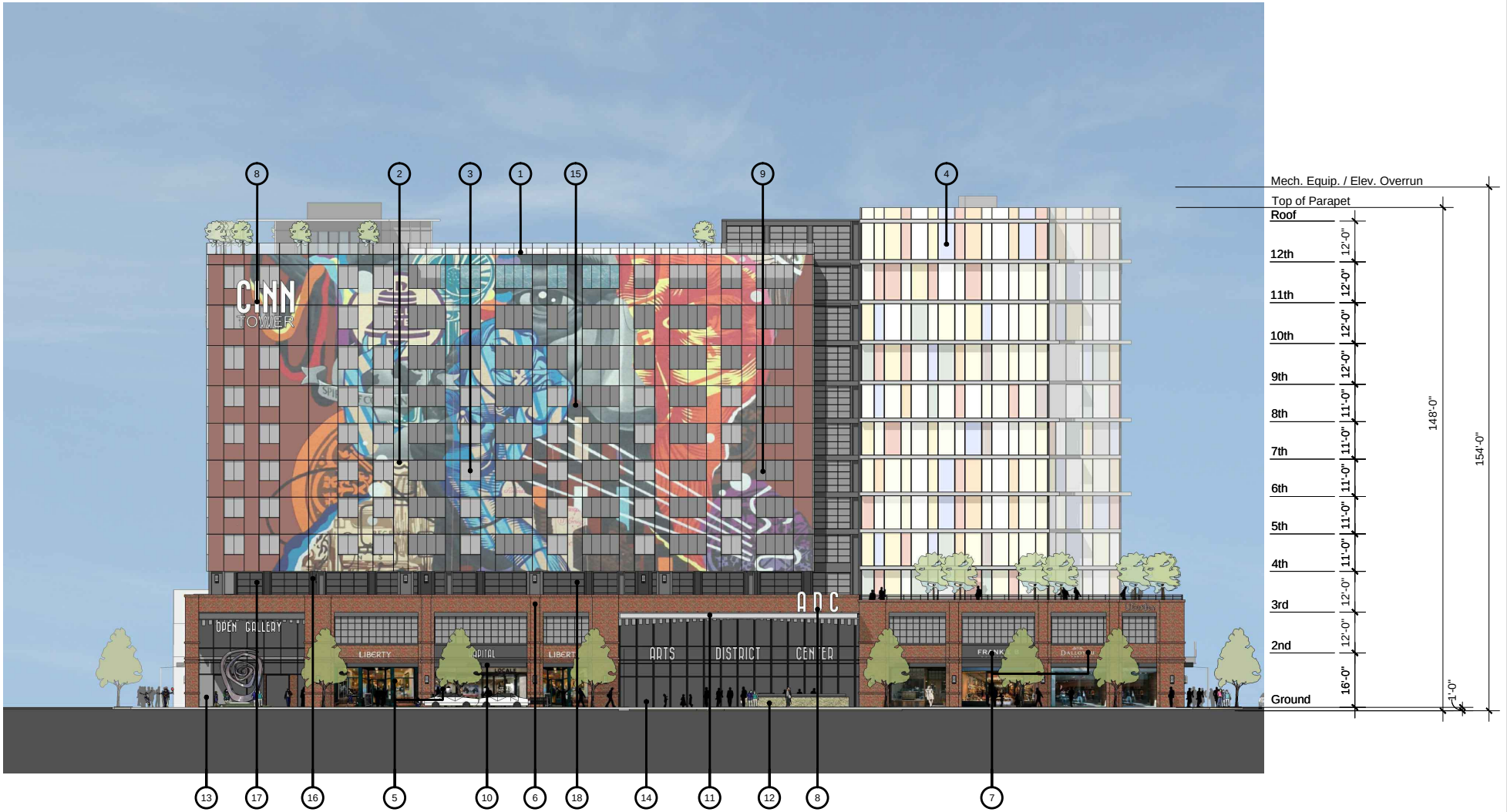


Figure II-16
Building Section

Source: Togawa Smith Martin Architects, 2018.

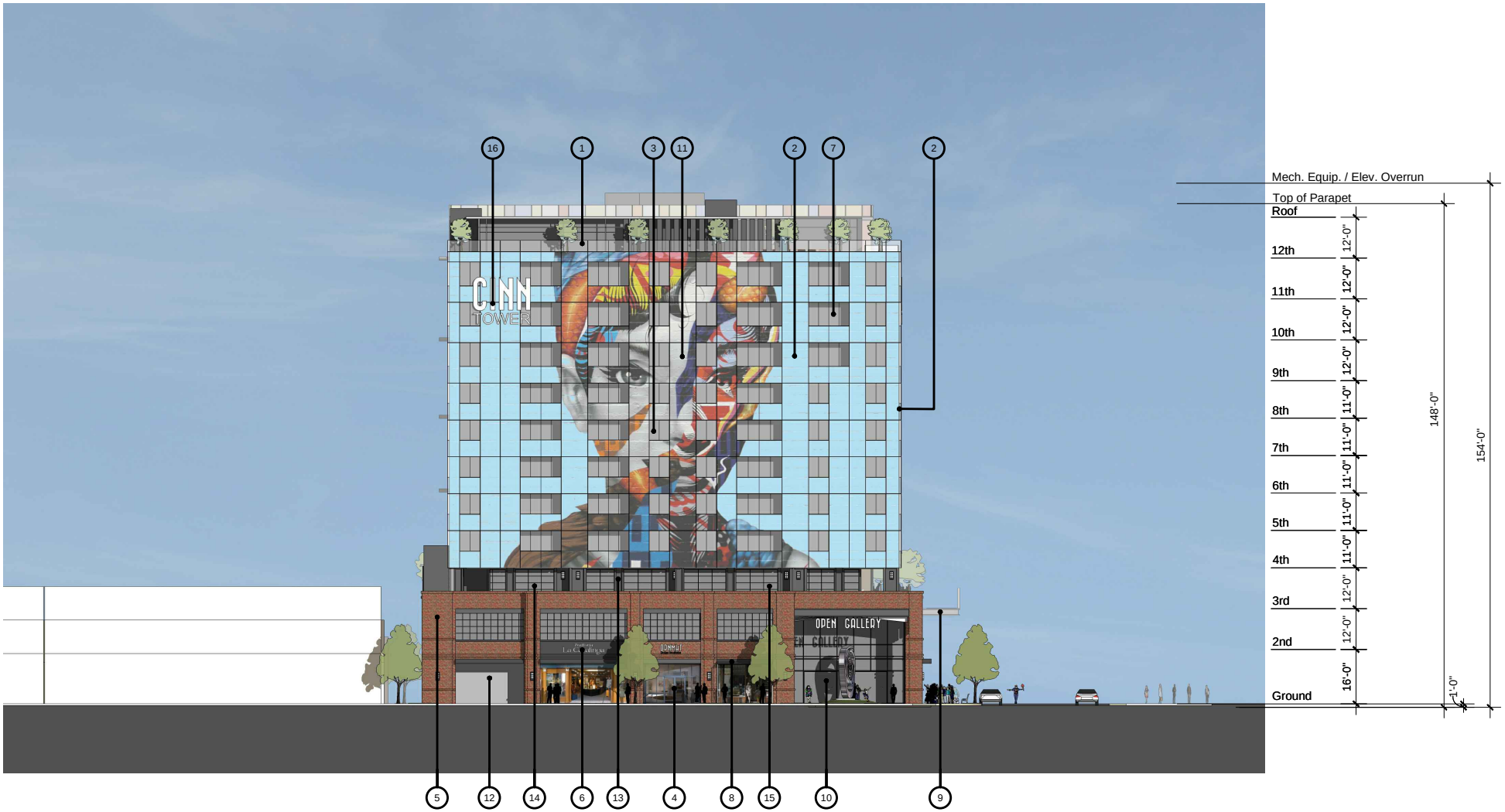


1. Glass Guardrail
2. Glass Curtain Wall
3. Residential Window
4. Window Wall Glass
5. Storefront @ Retail
6. Brick Veneer
7. Tenant Signage
8. Project Signage
9. Balcony
10. Metal Awning
11. Metal Canopy
12. Water Feature
13. Art Plaza
14. Porte Cochere
15. Artwork
16. Metal Veneer
17. Art Gallery
18. Sectional Glass Roll-up Door

NOTE: Artwork shown is a placeholder to illustrate concept only

Source: Togawa Smith Martin Architects, 2018.

Figure II-17
5th Street Elevation

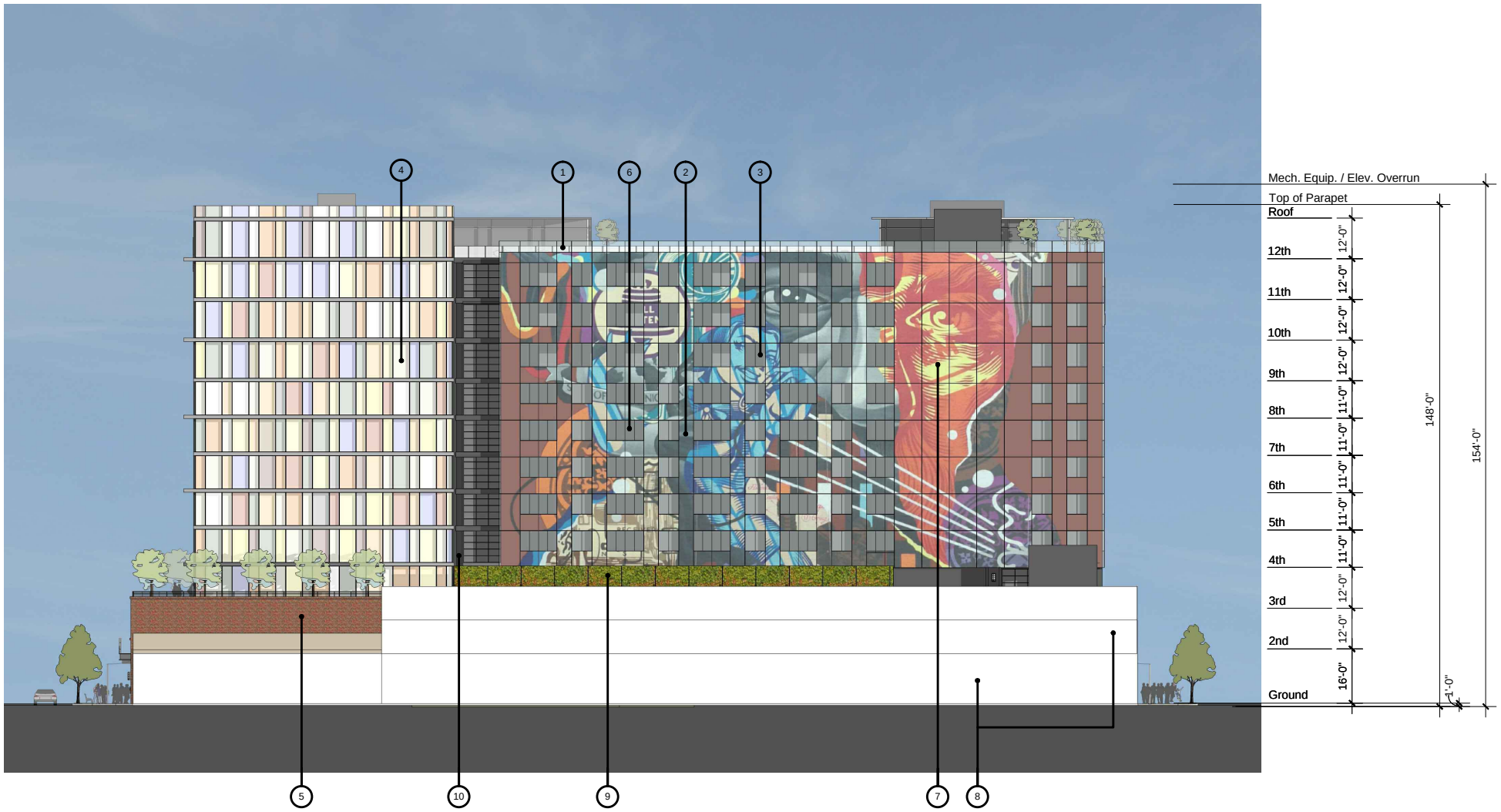


1. Glass Guardrail
2. Glass Curtain Wall
3. Residential Window
4. Commercial Storefront
5. Brick Veneer
6. Tenant Signage
7. Cantilevered Balcony
8. Metal Awning
9. Metal Canopy
10. Art Plaza
11. Artwork
12. Loading Dock
13. Metal Veneer
14. Art Gallery
15. Sectional Glass Roll-up Door
16. Project Signage

NOTE: Artwork shown is a placeholder to illustrate concept only

Source: Togawa Smith Martin Architects, 2018.

Figure II-18
Seaton Street Elevation



1. Glass Guardrail
2. Glass Curtain Wall
3. Residential Window
4. Window Wall Glass
5. Brick Veneer
6. Balcony
7. Artwork
8. Existing Adjacent Building
9. Landscape Screen Wall
10. Metal Veneer

NOTE: Artwork shown is a placeholder to illustrate concept only

Source: Togawa Smith Martin Architects, 2018.

Figure II-19
North Elevation



1. Glass Guardrail
2. Glass Curtain Wall
3. Window Wall Glass
4. Commercial Storefront
5. Brick Veneer
6. Tenant Signage
7. Project Signage
8. Metal Canopy
9. Metal Awning
10. Parking Garage Entry

Source: Togawa Smith Martin Architects, 2018.

Figure II-20
Colyton Street Elevation



NOTE: Artwork shown is a placeholder to illustrate concept only

Source: Togawa Smith Martin Architects, 2016.

Figure II-21
Project Rendering: View Northeast from Seaton Street



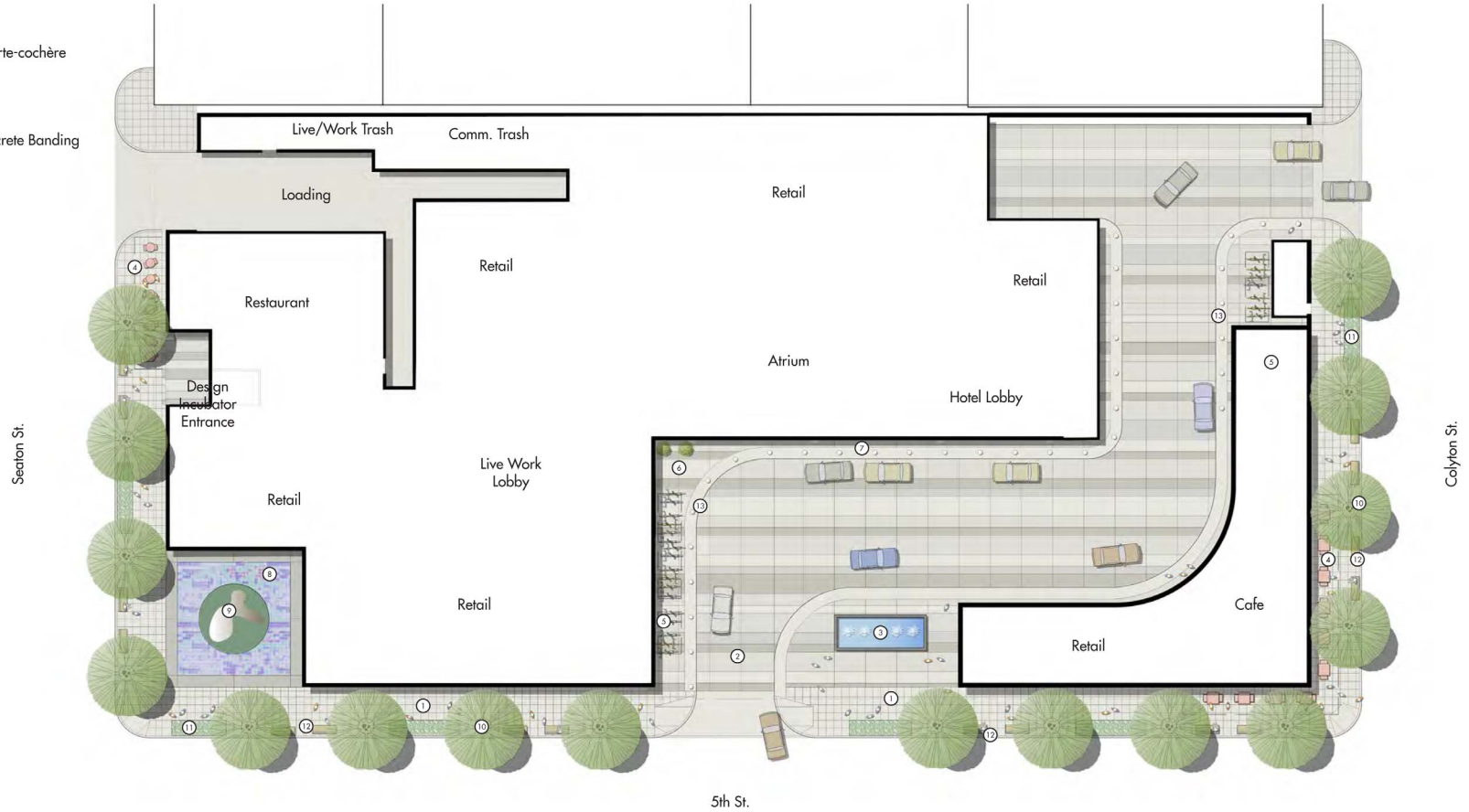
NOTE: Artwork shown is a placeholder to illustrate concept only

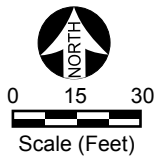
Source: Togawa Smith Martin Architects, 2016.

Figure II-22
Project Rendering: View From 5th Street/Seaton Street Intersection

LEGEND

1. Scored Concrete Sidewalk
2. Integral Colored Concrete Bands at Porte-cochère
3. Entry Fountain 220 SF
4. Outdoor Dining Tables along Sidewalk
5. Short Term Bicycle Parking
6. Entry Plaza with Integral Colored Concrete Banding
7. Hotel Entrance
8. Interactive/Kinetic Paving
9. Public Art
10. Street Tree with Metal Grate, Typical
11. Sidewalk Planter Cutout, Typical
12. Bench, Typical
13. Bollard, Typical



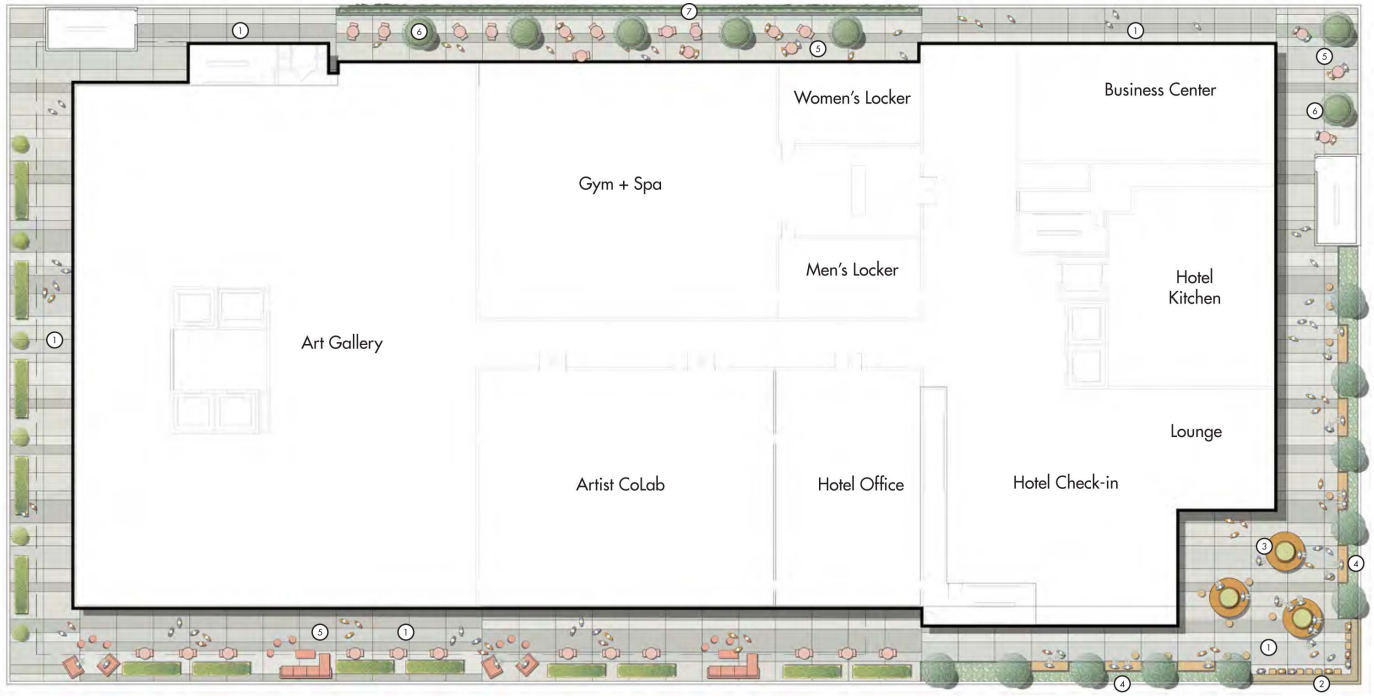


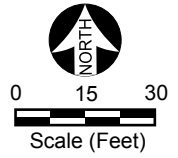
Source: Togawa Smith Martin Architects, 2016.

Figure II-23
Ground Level Landscape Design

LEGEND

① Stone Paving Bands
② Countertop Seating Overlook
③ Custom Seating Pods
④ Raised Planter with Built-In Seating
⑤ Outdoor Furniture
⑥ Raised Planter
⑦ Green Screen Trellis and Raised Planter





Source: Togawa Smith Martin Architects, 2016.

Figure II-24
Third Level Landscape Design

LEGEND

① Integral Colored Concrete Tile Paving
② Raised Planter On Casters, Typical
③ Pool 25'x55'
④ Raised Spa 10'x12'
⑤ Poolside Terrace with Cabanas
⑥ Outdoor Lounge and Dining
⑦ Central Lawn (Synthetic)
⑧ Raised Rooftop Garden with Seating
⑨ Raised Planters
⑩ Water Feature



Source: Togawa Smith Martin Architects, 2016.

Figure II-25
Roof Level Landscape Design

Table II-4
Project Live/Work Unit Distribution

Type	Quantity	Floor Level
1-Bedroom	50	4-8
1-Bedroom + Den	45	4-8
2-Bedroom	6	9-11
2-Bedroom + Den	28	9-11
Total	**129**	**4-11**
Source: Togawa Smith Martin Architects, Inc.		

b) Project Design

Elevations depicting the Project are shown in Figures II-17 through II-20. Renderings of the Project are shown in Figures II-21 and II-22. At the street level, the Project is designed to be pedestrian-friendly, maintaining a strong street wall, with distinct entrances, commercial glass storefront, and an art plaza (1,500 square feet) on the southwest corner (corner of 5th and Seaton Streets), that provides an open space for pedestrians. The Project would also provide retail and restaurant uses at the ground level, as well as movable and fixed outdoor furniture and an outdoor dining area along the sidewalk, at the southeast corner (corner of 5th and Colyton Streets).

The design of the Project is intended to enhance pedestrian activity as the retail and café window design would create a visual connection between the interior and exterior of the building. Vertical breaks and pedestrian-scaled storefront bays would prevent a monolithic "box-like" feeling and would maintain a storefront rhythm. The street-level façade treatment, especially by the Downtown-facing art plaza at the southwest corner, is intended to complement the architecture of the proposed building.

As shown in Figures II-17 and II-21, the Project would provide a large covered entrance (porte cochere) opening to an entry plaza and a double-height ceiling atrium. The porte cochere would connect 5th and Colyton Streets at the ground level to allow passenger pick-up/drop-off, as well as enable vehicles to pass through at ground level or access the subterranean parking. The porte cochere would include sidewalks protected by bollards on both sides for pedestrian access. The porte cochere would also break the building massing by providing wide façade openings on both streets and creating a series of scaled spaces at the ground level. An entry fountain (220 square feet) would be placed at the entrance of the porte cochere on 5th Street, and short-term bicycle parking would be installed in the passage, by both the 5th and Colyton Street entrances. The porte cochere and the internal entry plaza would be covered by colored concrete banding paving and would lead to two different lobbies, the live/work lobby and the hotel lobby, which are separated by the atrium. The lobbies would be highlighted

architecturally, so visitors could easily find and access these entry points. Special paving treatment would demarcate special areas in order to make pedestrian crossings more distinct.

As shown in Figures II-17 through II-20, the Project would incorporate traditional storefront elements by including a solid base for the storefront windows, made of high-quality durable red bricks. Metallic elements such as metal panels, metal veneers, and metal awnings and canopies would add to the building's character. The architecturally integrated awnings and canopies would enhance the pedestrian activity and provide shelter from sun and rain for pedestrians along the public right-of-way, where the building meets the street. The design would also allow opportunities for signage to be integrated with the architecture of the building and contribute to an articulated storefront character. The Project would feature signage that would be consistent in shape, size, color, height, and lettering. The Project's signage would provide pedestrians a feeling of order as they walk and would also add to the Project's identity.

To keep the building visually interesting and define the spaces when looking from the street, the Project would feature residential-style windows to visually delineate human-scale spaces. The live/work part of the building would also be covered by printed panels with contemporary urban artwork (in the form of murals) on the south, west, and north façades (refer to Figures II-17 through II-19 and Figures II-21 and II-22). This external skin would be designed to improve the building's appearance and to illustrate the importance of creative art expression for the Arts District neighborhood. An outdoor layer of a glass photovoltaic curtain wall would allow the collection of solar energy and would promote sustainability. Cantilevered private balconies would be sporadically placed to ensure that the building is broken into comfortable-sized units. The hotel part of the building would have a continuous window wall façade with a varied color palette (refer to Figures II-21 and II-22).

As shown in Figure II-16, in order to promote a human-scale building design, on the third floor, the Project would "step back," allowing space for a partially landscaped terrace that would surround the building. Glass roll-up doors would allow visitors to physically access the terrace from the gallery space (refer to Figures II-17 and II-18). On the hotel side, the building design would grant additional space for a hotel terrace (3,200 square feet) with outdoor seating furniture. Glass guardrail would surround the Project's rooftop, along with landscaping that would create a protected rooftop deck for the pool area, the rooftop restaurant, the roof garden, and the outdoor event space.

c) Project Massing

The Project would consist of a single building that would occupy the Project Site. The Project's massing is illustrated in Figures II-16 through II-22. The façade and massing

of the building are designed to differentiate between on-site uses and to add interest and dimension. The bottom two levels are characterized by brick veneer, glass, and steel, reminiscent of the existing structure. The western portion of the building is differentiated by height and material from the eastern portion.

The Project would have a height of 148 feet from ground level to the top of the parapet.[2] The Project would have an 8.1:1 FAR. The Project's setback from the Colyton Street, 5th Street, and Seaton Street property lines is proposed to be three feet at the ground level. Starting at the third level, the rear yard setback of the residential floors would be 12 feet. The northern boundary of the Project would have a two-foot setback.

As discussed below under "5. Discretionary Actions and Approvals," the Project Applicant is requesting a Vesting Zone Change and Height District Change to change the zoning and height district associated with the Project Site from M3-1-RIO to C2-2-RIO. The C2 zone in Height District 2 restricts the maximum FAR to 6:1. In addition to the request for a zone and height district change, the Project Applicant is requesting a Density Bonus Compliance Review for the provision of 11 percent Very-Low Income housing units with two on-menu incentives (a 35-percent increase in FAR and a reduced side yard setback of 12 feet in lieu of 14 feet).

d) Vehicular and Pedestrian Access and Circulation

As shown in Figure II-4, vehicular access to the Project would be provided from both 5th Street and Colyton Street, with a connecting driveway between each entrance through the center of the Project building. The 5th Street entry would be a porte-cochere that offers valet parking and temporary valet pick-up/ drop-off areas. Access to the subterranean parking levels, which would feature an automated/robotic parking system, would be from the Colyton Street entrance, which would connect to the 5th Street porte cochere.

A loading area to serve the Project would be located at-grade on the northwest side of the building and accessed from Seaton Street. The loading area would be large enough to accommodate a single typical semi-tractor/trailer truck, or two smaller vehicles simultaneously. The loading area would be connected by stairs and two service elevators to the B1 subterranean level (refer to Figure II-13). The loading area would also allow access to the live/work and communal trash rooms at the ground level.

[2] *The height to the top of the mechanical equipment on the roof of the building would be 154 feet above grade. However, the City doesn't include mechanical equipment in the calculation of building height (refer to LAMC Section 12.21-A,17). Maximum building height is calculated by measuring from the lowest finished grade to the highest building elevation (not including mechanical equipment).*

e) Parking

Vehicle parking would be provided in Levels B2 through B5 below grade (refer to Figures II-14 and II-15).

As stated previously, the Project proposes to set aside 11 percent of the base density of the live/work units for restricted affordable units. Pursuant to Los Angeles Municipal Code (LAMC) Section 12.22-A,25(d), development projects that qualify for a Density Bonus and comply with Section 12.22-A,25 to provide at least 5 percent Very Low Income restricted units, may comply with whichever of the options [either LAMC Section 12.21-A,4(p)(1) or LAMC Section 12.22–A,25(d)(1)], requires the least amount of parking. Additionally, as stated previously, the Project Site is located within the East Los Angeles State Enterprise Zone, which allows for lower parking standards pursuant to LAMC Section 12.21-A,4(x)(3), utilizing a lower parking ratio for commercial office, business, retail, restaurant, bar and related uses, trade schools, or research and development buildings. Furthermore, the Project Site is located in the Central City Parking District, which allows for lower parking standards pursuant to LAMC Section 12.21-A,4(p)(1) and (2).

Table II-5 presents the amount of code-required and Project-provided automobile parking and reflects the lower parking requirements permitted under the East Los Angeles State Enterprise Zone and the Central City Parking District. As shown, the Project is required to have 321 spaces but would provide 513 spaces, including 54 valet spaces (on Level B2) and 459 automated parking spaces (on Levels B3 through B5). The automated parking would be a robotic parking system utilizing car lifts that would allow cars to be stored more efficiently than traditional ramped-parking. The system would utilize automatic sensors to ensure that vehicles are correctly positioned for parking. Drivers would exit and lock their vehicle, walk up to the automated parking ticket kiosk, remove a parking card from the kiosk, and walk away. From this point, the automated system would take over and the computer-controlled lifts would pick up the vehicle and safely place it inside the garage on a shelving system. Multiple redundancies built into these systems safeguard against failure, and an emergency power generator with an automated transfer switch would ensure that the system remains operational during power outages.

Parking Level B2 would also include electric vehicle (EV) charging stations.

All off-street automobile parking would be located below grade and, thus, screened from view. As noted previously, the entrance and exit to the subterranean parking levels for residents, customers, employees, and guests are provided through one ingress/egress driveway on Colyton Street, with an adjacent porte cochere area for temporary drop-offs and pick-ups accessible via a driveway from 5th Street.

Table II-5
Vehicle Parking

Use	Amount	Rate	Total
Required Parking			
Live/Work Unit (less than 3 habitable rooms) [LAMC Section 12.22-A,4(p)(1)]	50 units	1.0 space/unit	50
Live/Work Unit (3 or more habitable rooms) [LAMC Section 12.22–A,4(p)(1)]	79 units	1.25 spaces/unit	99
Hotel (1-20 rooms) [LAMC Section 12.21-A,4(p)(1)]	20 rooms	0.5 space/room	10
Hotel (21-40 rooms) [LAMC Section 12.21–A,4(p)(1)]	20 rooms	0.25 space/unit	5
Hotel (41-113 rooms) [LAMC Section 12.21-A,4(p)(1)]	73 rooms	0.17 space/unit	12
Restaurant [LAMC Section 12.21–A,4(x)(3)]	31,719 sf	1 space/500 sf	63
Retail [LAMC Section 12.21–A,4(x)(3)]	26,979 sf	1 space/500 sf	54
Art Gallery [LAMC Section 12.21-A,4(x)(3)]	10,341 sf	1 space/500 sf	21
Artist CoLab [LAMC Section 12.21-A,4(x)(3)]	3,430 sf	1 space/500 sf	7
		Total Required	**321**
Provided Parking			
Valet Parking (Level B2)			54
Automated Parking (Levels B3, B4, B5)			459
		Total Provided	**513**

sf = square feet

Source: Togawa Smith Martin Architects, Inc.

f) Bicycle Parking

Long-term bicycle parking would be provided on Level B1 (refer to Figure II-13); short-term bicycle parking would be provided on the ground level (refer to Figure II-5). As shown in Table II-6, the Project would provide a minimum of 52 short-term and 168 long-term bicycle spaces, consistent with LAMC requirements.

Table II-6
Bicycle Parking

Use	Amount	Rate	Bicycle Parking Spaces Required and Provided	
			Short-Term	Long-Term
Live/Work	129 units	1 per 10 units (short-term) 1 per unit (long-term)	13	129
Hotel	113 rooms	1 per 20 rooms (short-term) 1 per 20 rooms (long-term)	6	6
Retail	26,979 sf	1 per 2,000 sf (short-term) 1 per 2,000 sf (long-term)	13	13
Restaurant	31,719 sf	1 per 2,000 sf (short-term) 1 per 2,000 sf (long-term)	16	16
Art Gallery	10,341 sf	1 per 10,000 sf (short-term) 1 per 10,000 sf (long-term)	2	2
Artist CoLab	3,430 sf	1 per 10,000 sf (short-term) 1 per 5,000 sf (long-term)	2	2
Total			**52**	**168**

sf = square feet

Source: Togawa Smith Martin Architects, Inc.

g) Open Space

As shown in Table II-7, based on LAMC open space requirements, the Project is required to have 16,275 square feet of open space. The Project would exceed LAMC requirements by providing 22,500 square feet of open space.

Open space amenities that would be provided as part of the Project include an art plaza on the ground level (refer to Figure II-5); a terrace, gym, and locker rooms on Level 3 (refer to Figure II-7); outdoor residential terraces on Levels 4 through 11 (refer to Figures II-8 through II-10); a pool on Level 11 (refer to Figure II-10); and a pool, roof garden, and clubhouse on Level 12 (refer to Figure II-11).

h) Landscaping

Project landscaping plans are shown in Figures II-23 through II-25. No trees are present on the Project Site. Proposed landscaping would consist of trees throughout the ground floor exterior of the Project, as well as trees in planters on the exterior portions of the Level 3 and the rooftop amenities area and would comply with LAMC requirements concerning trees (one tree per four residential dwelling units pursuant to LAMC 12.21-G,2(a)(3)). A total of 33 trees would be required for the Proposed Project by the LAMC, and the Project would provide 42 trees.

Table II-7
Open Space

Live/Work Unit Type	Amount	Rate[1]	Total size (sf)
Required Open Space			
Less than 3 habitable rooms	50 units	100 sf/unit	5,000
3 habitable rooms	51 units	125 sf/unit	6,375
More than 3 habitable rooms	28 units	175 sf/unit	4,900
		Total Required	**16,275**
Provided Open Space			
3rd Level Terrace			9,000
Roof Garden/Pool/Terrace			13,500
		Total Open Space Provided	**22,500**

sf = square feet

[1] *LAMC 12.21-G,2: New construction (resulting in additional floor area and additional units) of a building or group of buildings containing six or more dwelling units on a lot shall provide at a minimum the following usable open space per dwelling unit: 100 square feet for each unit having less than three habitable rooms; 125 square feet for each unit having three habitable rooms; and 175 square feet for each unit having more than three habitable rooms. Kitchens do not count as habitable rooms for open space calculations.*

Source: Togawa Smith Martin Architects, Inc.

i) Signage and Lighting

Project signage would be integrated with the architecture of the building. The Project would feature coherent signage that would be consistent in shape, size, color, height, and lettering and complimentary to the buildings architecture. Exterior Project and tenant signage would consist of wayfinding and tenant identification signs.

The Project would include low to moderate levels of interior and exterior lighting for security, parking, and architectural highlighting. Consistent with LAMC lighting requirements, the Project's lighting would not produce sources of illumination that point towards adjacent buildings but would be directed downward to provide safe and adequate lighting levels for pedestrians. Specifically, LAMC Section 91.6205 requires that new lighting sources not exceed 1 foot-candle of new light spillover at residential property lines.[3] Additionally, compliance with City and state energy conservation measures currently in place would limit unnecessary interior illumination during evening and nighttime hours. Soft accent lighting used for signage and architectural highlighting would be directed to permit visibility of the highlighted elements but would not be so

[3] *The Project Site is not located adjacent to any residential uses.*

bright as to cause light spillover. All proposed outdoor lighting would be subject to applicable regulations contained within the LAMC.

j) Green/Conservation Features

The Project would comply with the Los Angeles Green Building Code (LAGBC), which is based on the 2016 California Green Building Standards Code (CALGreen Code), as well as several other applicable laws and codes requiring the installation of various features designed to promote environmental sustainability and conservation.[4] These requirements are discussed in greater detail within each of the relevant environmental issue category sub-sections within **Section IV (Environmental Impact Analysis)** of this Draft EIR. Examples of some of the Project's sustainable features include the following:

(1) Water Conservation

- High-efficiency toilets (with flush volume of 1.06 gallons of water per flush or less) throughout, including ultra-low-flow urinals in all nonresidential restrooms, as appropriate.
- Residential lavatory faucets with a maximum flow rate of 1.2 gallons per minute and kitchen faucets with a maximum flow rate of 1.5 gallons per minute.
- High-efficiency washers, whether within individual units (with water factor of 6.0 or less) and/or in common laundry rooms (commercial washers with water factor of 7.5 or less). Equipment is required to be Energy Star-certified.
- High-efficiency dishwasher within individual units, using 3.5 gallons per cycle or less. Equipment is required to be Energy Star-certified.
- No-flush or waterless urinals in all nonresidential restrooms as appropriate.
- Nonresidential lavatory faucets with a maximum flow rate of 0.4 gallons per minute and of a self-closing design (i.e., that would automatically turn off when not in use.

[4] *Los Angeles Department of Building and Safety, 2014 Green Building Forms & Correction Sheets, http://ladbs.org/LADBSWeb/green-bldg.jsf, accessed October 23, 2018.*

- Nonresidential kitchen faucets (except restaurant kitchens) with a maximum flow rate of 1.5 gallons per minute. Restaurant kitchen faucets shall have pre-rinse self-closing spray heads with a maximum flow rate of 1.6 gallons per minute.
- Installation of tankless and on-demand water heaters in commercial kitchens and restrooms, where appropriate.
- Water-saving pool filter.
- Pool/spa recirculating filtration equipment.
- Pool splash troughs around the perimeter that drain back into the pool.
- Leak detection system for swimming pools and Jacuzzi.
- Minimum irrigation system distribution uniformity of 75 percent.
- Use of proper hydro-zoning, turf minimization, zoned irrigation and use of native/drought-tolerant plant materials.
- Use of landscape contouring to minimize precipitation runoff.

(2) Energy Conservation and Efficiency

- Installation of Energy Star-certified products and appliances, where appropriate.
- Meeting or exceeding Title 24, Part 6, California Energy Code baseline standard requirements for energy efficiency, based on the 2016 Energy Efficiency Standards requirements. Examples of design methods and technologies that could be implemented may include, but would not be limited to, high-performance glazing on windows, appropriately-oriented shading devices, high-efficiency boilers (if single metered); instantaneous water heaters (if individual meters), and enhanced insulation to minimize thermal gain.
- Application of energy-saving lighting technologies and components to reduce the Project's electrical usage profile. Examples of these components include occupancy-sensing controls (where applicable), use of light-emitting diode (LED) lighting or other energy-efficient lighting technologies where

appropriate, and exterior lighting controlled by photo sensor and/or timeclocks to ensure safety and visibility while preventing unnecessary energy usage.

- Commissioning of building energy systems to verify that the Project's building energy systems are installed, calibrated, and performing to the Owner's Project requirements.

(3) Transportation

- Provision of EV charging stations in the parking structure; 5 percent of total spaces designated for low emitting, fuel-efficient and carpool/van pool vehicles.[5]

- Twenty percent of the total code-required parking spaces shall be capable of supporting future electric vehicle charging equipment.

(4) Air Quality

- Prohibit the use of natural gas-fueled fireplaces in the proposed live/work units.

- Provide filtered outside air supply sufficient to meet American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) 62.1 standards.

- Participation in fundamental refrigerant management to preclude the use of chlorofluorocarbons (CFCs) in heating, cooling, and ventilation (HVAC) systems.

- Use of adhesives, sealants, paints, finishes, and other materials that emit low quantities of volatile organic compounds (VOCs) and/or other air quality pollutants.

(5) Solid Waste

- At least 50 percent of construction and demolition debris from Project construction would be diverted from landfills.

[5] *The EV charging stations would be located on Level B2 and would not be part of the automated parking system proposed for Levels B3 through B5.*

- Provide on-site recycling containers to promote the recycling of paper, metal, glass, and other recyclable materials and adequate storage areas for such containers.

- Use of locally (within 500 miles) manufactured construction materials and of building materials with recycled content, where possible.

(6) Water Quality

- Installation of a Low Impact Development (LID) compliant on-site stormwater treatment system, capable of treating the volume of stormwater runoff from a local 85th percentile storm event.

- Installation of pre-treatment stormwater infrastructure for the stormwater runoff tributary to the on-site stormwater treatment system.

- During construction of the Project, best management practices (BMPs) would be implemented to control stormwater runoff and minimize pollutant loading and erosion effects.

- During operation, BMPs would be implemented to minimize pollutant loading in stormwater runoff.

(7) Construction and Design Elements

- Contractors would reference Partnership for Advancing Technology in Housing (PATH) and other current references for state-of-the-art construction methods, materials, and mechanical equipment and utilize same methods where applicable.

- Recycling and reuse of building and construction materials to the maximum extent feasible, including the on-site recycling and reuse of concrete removed during demolition and salvaging of existing appliances and fixtures.

- Waste diversion accounting would be utilized.

    - Installation of a “cool roof” that reflects the sun’s heat and reduces urban heat island effect.

- Use of sub-base in parking lots, fly ash-based concrete and recycled content in joists and joist girders when feasible.
- 15 percent of the roof area set aside for future solar panels.

k) Project Design Features

In addition to the sustainability features listed above, the Project would incorporate the following Project Design Features (PDFs):

- **AES-PDF-1**: All mechanical and electrical equipment that is located on the rooftops will be screened from public view.
- **AES-PDF-2**: Utility equipment will be placed underground, screened from public view, or incorporated into the design of the Project.
- **AES-PDF-3**: The Project will include security lighting. Lighting associated with the Project will be directed downward or toward the interior of the Project Site. All exterior residential lighting will be designed with internal and/or external glare control and will be designed, arranged, directed, or shielded to contain direct illumination on-site, thereby preventing excessive illumination and light spillover onto adjacent land uses and/or roadways.
- **AES-PDF-4**: The exterior of the proposed structures will be constructed of materials such as, but not limited to, high-performance and/or non-reflective tinted glass (no mirror-like tints or films), brick, and metal to minimize glare and reflected heat. The exterior artwork on the residential portion of the Project will not utilize highly reflective materials.
- **AES-PDF-5**: Tenant signs for the ground-floor retail and restaurant uses will not include blinking, flashing, or oscillating lights.

l) Construction Information

The estimated construction schedule is shown in Table II-8 and is expected to last approximately 30 months. Project operation would begin in 2021. The amount of excavation materials exported from the Project Site is estimated at approximately 60,000 cubic yards.[6] The Project would contain five subterranean levels under the

[6] *Estimates provided by the Applicant, May 2017.*

proposed building (approximately 50 feet below grade) in addition to any other excavation typically required for foundation and utility work.

Table II-8
Estimated Construction Schedule[1]

Phase	Duration
Demolition/Site Preparation	1 month
Grading/Excavation	2 months
Building Construction	25 months
Architectural Coatings[2]	2 months
Paving/Landscaping[2]	1 month

[1] *Construction schedule, including start, end, and duration dates are estimates only.*

[2] *Would occur simultaneously during the building construction period.*

A Haul Route program would be required as part of the City's permitting process. It is anticipated that the demolition, export, and construction debris would be transported to either the Chiquita Canyon Sanitary Landfill in Castaic and/or the Manning Pit Sediment Placement Site in Irwindale. The estimated haul route to Chiquita Canyon is approximately 40 miles and would generally include (most direct path and to avoid residential neighborhoods) local streets (Mateo Street to Santa Fe Avenue to Center Street to Ramirez Street) to US-101 to CA-170 to I-5 to CA-126 freeway to Chiquita Canyon Landfill. The estimated haul route to Manning Pit is approximately 22 miles and would generally include (most direct path and to avoid residential neighborhoods) local streets (Mateo Street to 4th Place to Pecan Street) to US-101 to CA-60 to I-605 to I-10 to Vincent Avenue to Manning Pit.

m) Project Objectives

Section 15124(b) of the CEQA Guidelines states that the project description shall contain "a statement of the objectives sought by the proposed project." Section 15124(b) of the CEQA Guidelines further states, "the statement of objectives should include the underlying purposes of the project." The underlying purpose of the Project is develop a site within the Arts District with a new mixed-use development that includes a combination of complementary uses, such as live/work dwelling units and community-serving retail, hotel, and Artist CoLab uses. The objectives of the Project are as follows:

- Maximize the density of an existing Transit Priority Site to increase access to local transit for local residents, employees, and visitors.

- To construct a mixed-use development that combines complementary uses, such as community serving retail, an Artist CoLab, and live/work uses.
- Create an economically viable mixed-use project, including hotel, residential, and retail uses, focused on the arts that attracts residents and visitors to the Arts District community.
- Meet the demand for urban housing, including affordable housing, within the general Downtown area and specifically within the Arts District.
- Maximize the availability of market-rate and affordable housing in proximity to the Metro Gold Line Little Tokyo/Arts District Station.
- Improve the aesthetic quality of the Project Site by removing older structures and developing new efficient buildings that are consistent in terms of mass, scale, and character with others within the Arts District.
- Improve public safety by creating a development that provides the level of density and mix of uses necessary to activate the area both day and night.
- Create a range of construction and permanent jobs to support local workers.
- Maximize the contribution of the Project Site to the City's economic growth by developing commercial, residential, and hotel uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses.

n) Discretionary Actions and Approvals

As part of the Project, the Applicant is requesting approval of the following actions from the City:

1. Pursuant to LAMC Section 11.5.6 and Charter Section 555, a General Plan Amendment (GPA) to change the Central City North Community Plan land use designation of the Project Site from Heavy Industrial to Regional Center Commercial;
2. Pursuant to LAMC Section 12.32-Q, a Vesting Zone Change and Height District Change to change the zoning of the Project Site from M3-1-RIO to C2-2-RIO (permitting a maximum FAR of 8.1:1 and a maximum building height of 148 feet to the top of the parapet);

3. Pursuant to LAMC Section 17.01 et seq., a Vesting Tentative Tract Map No. 74703 for a 12-lot subdivision for merger and re-subdivision with a request for haul route approval;

4. Pursuant to LAMC Section 16.05, Site Plan Review;

5. Pursuant to LAMC Section 12.22-A,25(g)(2), Density Bonus Compliance Review for the provision of 11 percent Very-Low Income housing units with two on-menu incentives (a 35-percent increase in FAR and a reduced side yard setback of 12 feet in lieu of 14 feet). No density bonus units are requested;

6. Pursuant to LAMC Section 12.24-W,1, Master Conditional Use Permit for on-site and off-site sales and consumption of alcohol;

7. Pursuant to LAMC Section 12.24-W,18, Conditional Use Permit for live entertainment and dancing; and

8. Any other entitlements and permits necessary to construct the Project.

o) Intended Use of the EIR

This EIR serves as the environmental document for the City's discretionary action associated with development of the Project. This EIR is also intended to cover all federal, state, regional and/or local government discretionary or ministerial permits or approvals that may be required to develop the Project, whether or not they are explicitly listed above. State, regional agencies, and City departments and commissions that may have jurisdiction over the Project include, but are not limited to:

- Los Angeles Board of Public Works;
- Los Angeles Fire Department;
- Los Angeles Police Department;
- Los Angeles Regional Water Quality Control Board;
- South Coast Air Quality Management District;
- Los Angeles Department of Transportation; and
- Bureau of Engineering.

III. Environmental Setting

1. Overview of Environmental Setting

a) Regional Setting

The Project Site is located approximately 14 miles east of the Pacific Ocean and approximately one mile east of the Los Angeles Civic Center. The Hollywood Freeway (US-101) and the Santa Monica Freeway (I-10) provide primary regional access to the Project Site. The Hollywood Freeway runs in a north-south direction east of the Project Site, while the Santa Monica Freeway runs in an east-west direction south of the Project Site. These two freeways also provide access to the Harbor Freeway (I-110) to the west, to the Santa Ana (I-5) freeway to the south, to the Golden State Freeway (I-5) to the north, and the San Bernardino (I-10) and Pomona (SR-60) freeways to the east. Major surface street arterials within the vicinity include Alameda Street, Santa Fe Avenue, 4th Street, 6th Street and 7th Street.

The Project Site is located within the Central City North Community Plan (Community Plan) area of the City of Los Angeles (City). The Community Plan area is located on the east side of Downtown Los Angeles and along the west bank of the Los Angeles River. The Community Plan area is generally bounded by Alameda Street and Macy Street/Sunset Boulevard on the west, Elysian Park on the north, the City of Vernon on the south, and the Los Angeles River on the east. Within the City, the other community plan areas adjacent to Central City North are Central City (to the west), Boyle Heights (to the east), Silver Lake-Echo Park-Elysian Valley (to the northwest), and Northeast Los Angeles (to the northeast).

The majority of the Community Plan area is currently developed with industrial and commercial land uses, including manufacturing and railroad-oriented properties. A mix of multiple-family residential development is located in the northwest portion of the Community Plan area, separated by the Chinatown district from the remainder of the Community Plan area. The Project Site is located within the Artists-in-Residence District (Arts District), which comprises a portion of the industrially zoned land in the central and southern portion of the Community Plan area. In recent years, former industrial sites within the Arts District have been redeveloped and/or replaced with arts-focused live-work projects, including loft developments. The residential population of this area has been steadily increasing, bringing with it retail amenities, restaurants, cafes, and other resident-serving uses.

The Union Station complex is located approximately one mile north of the Project Site and serves as the focus of public transit and train service within the Central City North Community Plan area. Union Station is surrounded by several public infrastructure facilities, including a county jail, educational facilities, and water/power utility facilities.

Adopted specific plans regulating land use development in the Community Plan area include the Alameda District Specific Plan and the Cornfield/Arroyo Seco Specific Plan, north of the Project Site. However, the Project Site itself is not located within a specific plan area.

b) Local Setting

The approximately 1.05-acre Project Site is located at 1101 E. 5th Street (with additional addresses of 445-457 South Colyton Street and 450-456 South Seaton Street) on the north side of 5th Street between Seaton Street and Colyton Street. The Project Site is developed with an approximately 91,200 square-foot, two-story brick building that contains approximately 45,600 square feet of light industrial arts production space and 10 live/work units. The building is constructed flush with adjacent off-site buildings, so that the frontages along both Colyton and Seaton Streets are unbroken. The building covers the majority of the Project Site and is bordered on its north side by adjacent arts, industrial, and warehousing businesses. Street parking (head-in) is provided on three sides (5th, Seaton, and Colyton Streets) of the existing structure, which directly abuts the adjoining off-site buildings to the north.

c) Public Transit

The Project Site is located approximately 0.5 miles south of the Metro Gold Line Little Tokyo/Arts District Station and approximately 0.2 miles from the Metro Rapid 720 bus stop (refer to Figure II-3). The Metro Gold Line provides access to other transit lines operated by Metro. The proximity of the Project Site to the Metro Gold Line Little Tokyo/Arts District Station and the Metro Rapid 720 bus line would encourage the use of transit by on-site residents and their guests, as well as by hotel guests and retail and restaurant patrons. The Project Site is also served by LADOT's Downtown DASH A and D bus lines, which run on weekdays along 3rd Street and Temple Street (respectively) near the Project Site, and Metro Local 18 bus service along 6th Street near the Project Site on both weekdays and weekends.

d) Surrounding Land Uses

Figure III-1 shows the land uses surrounding the Project Site. Photographs of the surrounding land uses are also provided in Figures III-2 through III-6. The surrounding land uses are characterized by a mix of industrial and former industrial, commercial, and loft residential uses. The immediate surroundings are zoned M3-1-RIO (Heavy Industrial). Properties located in the greater Project Site area to the east of the Project Site and adjacent to the Los Angeles River are zoned PF (Public Facilities) and OS (Open Space).

The Project Site is immediately surrounded by a mix of industrial uses, a gas station, residential uses, restaurants, and commercial uses contained in low-rise and mid-rise buildings of widely varying age and are physically separated from the Project Site by streets. Arts District Park is also located within a block to the southeast of the Project Site. The residential uses closest to the Project Site are the four-story Barker Block Residences, located southwest at 510 Hewitt Street, and the Beacon Lofts, located to the north at 825 East 4th Street. To the southeast at the corner of 5th Street and Hewitt Street are a restaurant, a tow service parking lot, and the half-acre Arts District Park. The park sits immediately north of the La Kretz Innovation Campus, a 60,000-square-foot facility, which serves as an incubator for local startups in the cleantech industry.

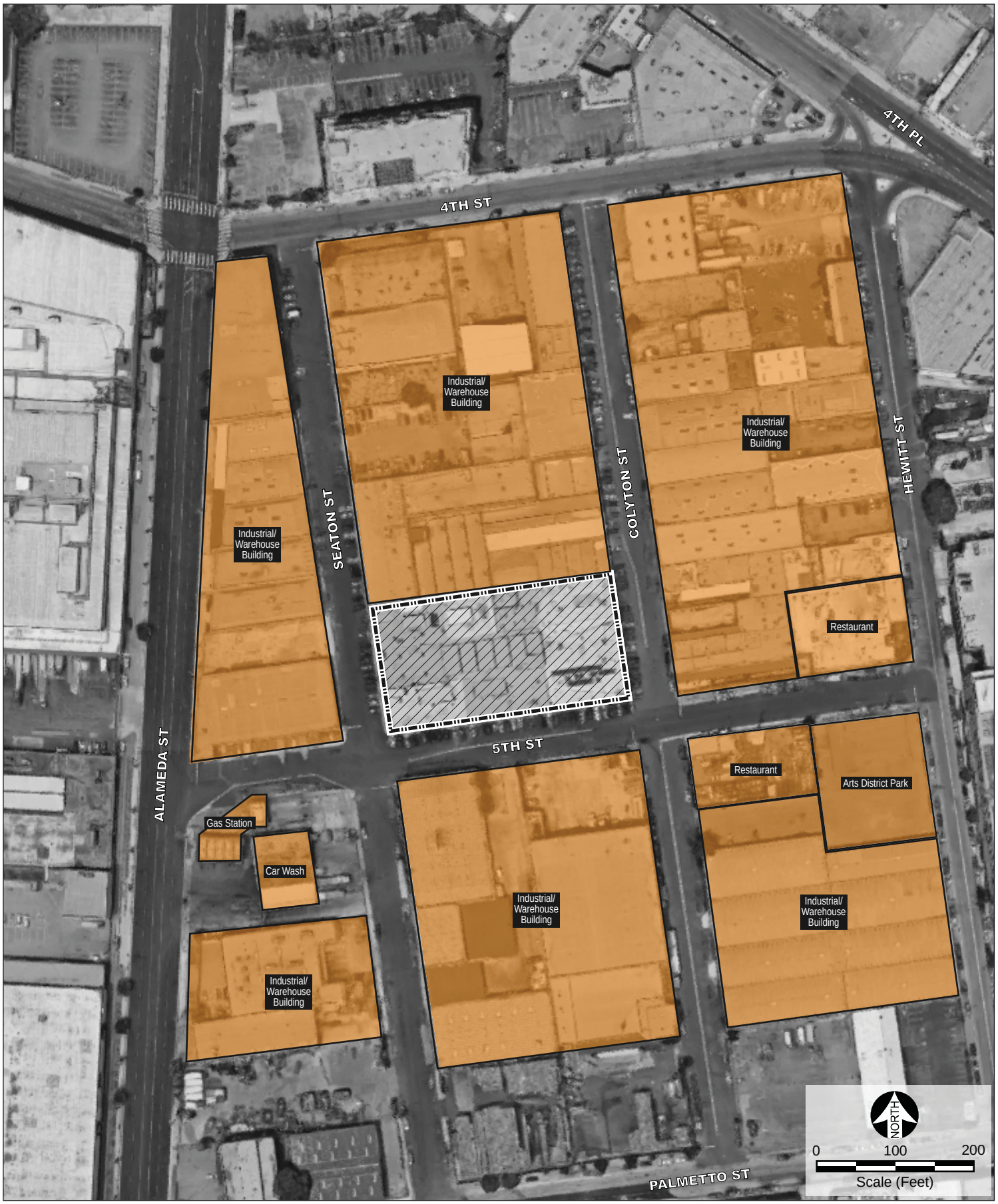
The Project Site is situated on the southern portion of the city block bounded by 4th Street to the north, Colyton Street to the east, 5th Street to the south, and Seaton Street to the west. Land uses immediately adjacent to or across from the Project Site are discussed below.

(1) North

Immediately to the north of the Project Site is a three-story warehouse, comprising an event space and creative business offices and creative business offices, and two one-story warehouses comprising commercial uses.

(2) South

South of the Project Site across 5th Street, located from east to west, are a surface asphalt parking lot associated with a four-story warehouse/office building (fronting on Colyton Street), another gated paved surface parking lot, and a single-story stucco industrial office building at the corner of 5th Street and Seaton Street.



Legend

Project Site

Source: Google Maps, 2017.

Figure III-1
Land Uses Surrounding the Project Site



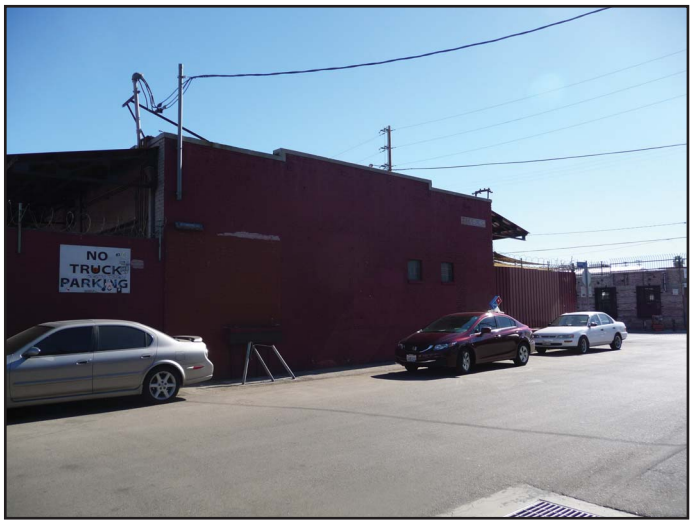
View 1: View looking north on Colyton Street of the commercial buildings adjacent to the northeastern portion of the Project Site.



View 2: View looking northwest on Colyton Street of the commercial buildings abutting the northern portion of the Project Site.



View 3: View looking southeast on Colyton Street of the commercial buildings across from the Project Site.



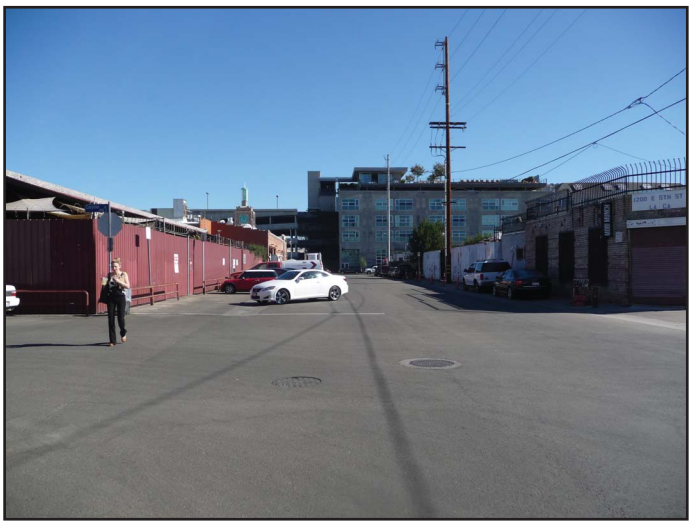
View 4: View looking southeast on Colyton Street of the commercial buildings south of 5th Street.



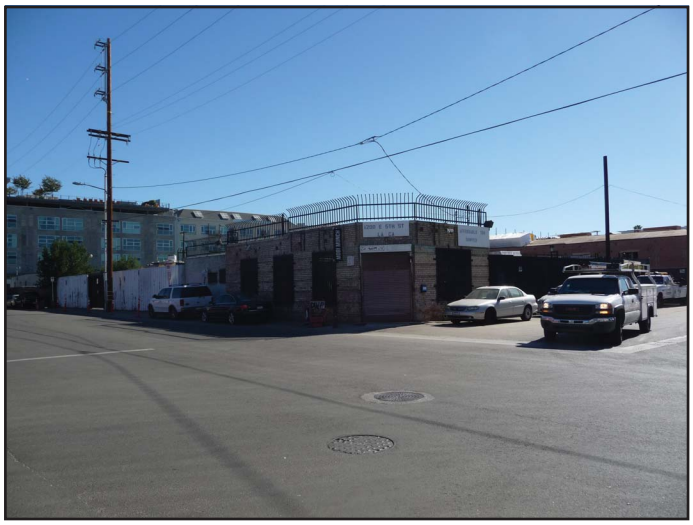
View Location Map

Figure III-2
Views of Surrounding Uses, 1-4

Source: CAJA Environmental Services LLC, 2016.



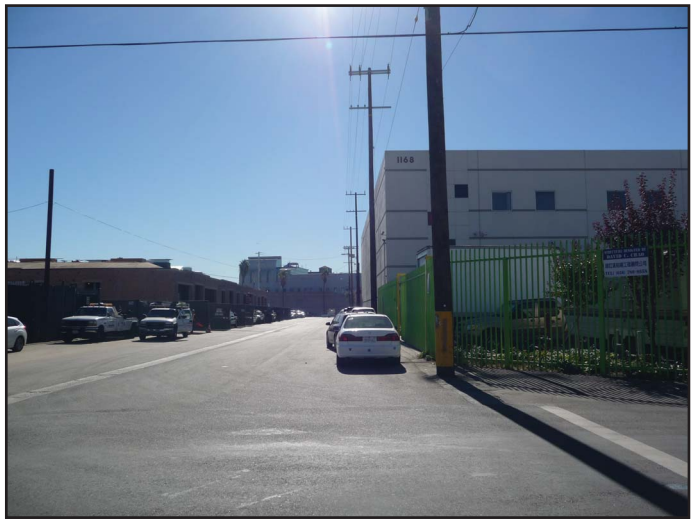
View 5: View looking east along 5th Street of the commercial uses east of the Project Site, with the Barker Block Lofts visible in the mid-ground of the photo, approximately one block east of the Project Site.



View 6: View looking southeast along 5th Street of the restaurant and commercial uses southeast of the Project Site, with the Barker Block Lofts visible in the mid-ground in the left portion of the photo.



View 7: View looking southeast along 5th Street of the restaurant and commercial uses southeast of the Project Site.



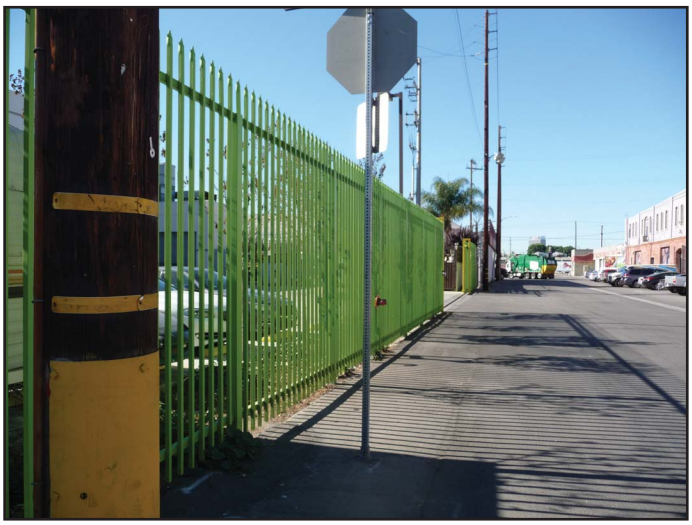
View 8: View looking south along Colyton Street of the commercial uses south of the Project Site.



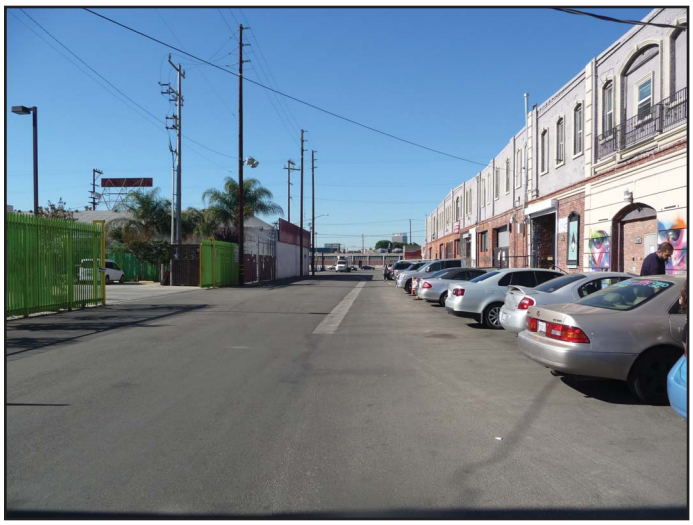
View Location Map

Figure III-3
Views of Surrounding Uses, 5-8

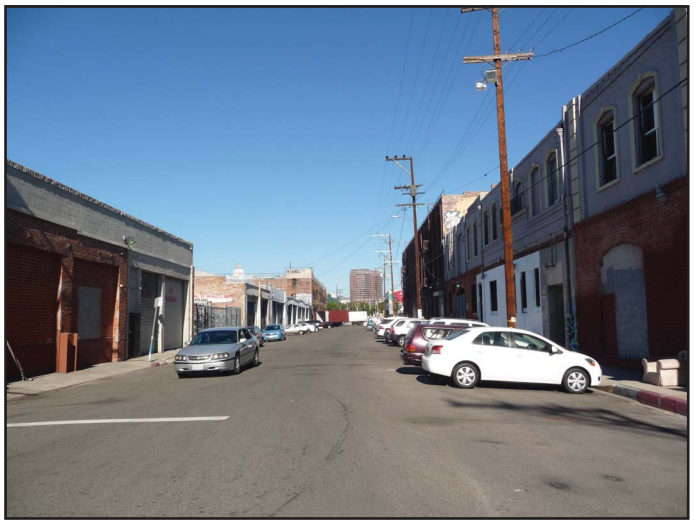
Source: CAJA Environmental Services LLC, 2016.



View 9: View looking west along 5th Street of fencing bordering warehouse facility to the south of the Project Site.



View 10: View looking west along 5th Street of fencing bordering warehouse facility to the south of the Project Site.



View 11: View looking north along Seaton Street of the commercial uses to the north and west of the Project Site.



View 12: View looking northeast along Seaton Street of the commercial building abutting the Project Site.



View Location Map

Figure III-4
Views of Surrounding Uses, 9-12

Source: CAJA Environmental Services LLC, 2016.



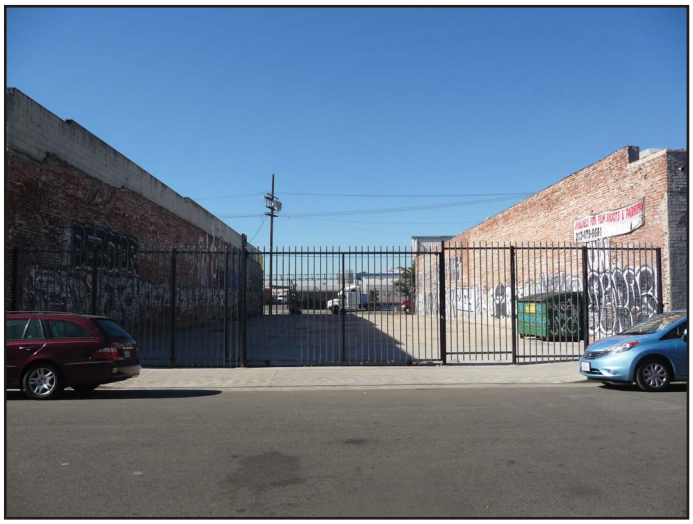
View 13: View looking northwest on Seaton Street of the commercial building across from the Project Site.



View 14: View looking southwest on Seaton Street of the commercial building across from the Project Site.



View 15: View looking south on Seaton Street.



View 16: View looking west on Seaton Street of the vacant lot across from the Project Site.



View Location Map

Figure III-5
Views of Surrounding Uses, 13-16

Source: CAJA Environmental Services LLC, 2016.



View 17: View looking northwest on 5th Street of the commercial building from the southwest corner of the Project Site.



View 18: View looking southwest of the gas station and truck wash from the southwest corner of the Project Site.



View 19: View looking southeast on 5th Street of the commercial building from the southwest corner of the Project Site.



View 20: View looking southeast on 5th Street of the commercial building south of the Project Site.



View Location Map

Figure III-6
Views of Surrounding Uses, 17-20

Source: CAJA Environmental Services LLC, 2016.

(3) East

East of the Project Site across Colyton Street are a single-story industrial and/or warehouse building with associated gated surface parking and exterior shed facilities.

(4) West

West of the Project Site across Seaton Street is a single-story brick industrial and/or warehouse building with an associated gated surface parking lot. Immediately to the south of this building (across 5th Street) is a commercial truck fueling station operated by Valero.

e) Sensitive Receptors

Sensitive receptors include such land uses as residences, schools, childcare centers, hospitals, and parks. In addition, noise-sensitive uses include sound recording spaces, such as studios and production facilities. The locations of known sensitive receptors surrounding the Project Site are shown in Figure III-7. The following are the closest identified sensitive receptors to the site (and their approximate distances):

- Live/work dwelling at 1201 East 5th Street, 60 feet east of the Project Site.
- Barker Block Residences – approximately 400 feet southeast
- Beacon Lofts – approximately 500 feet north
- Arts District Park – approximately 210 feet southeast



Legend

- Sensitive Receptor
- Project Site

Source: Google Maps, 2017.

Figure III-7
Sensitive Receptor Location Map

f) Related Projects

Section 15130 of the State CEQA Guidelines requires that an EIR consider the significant environmental effects of a proposed project as well as the project's "cumulative impacts." CEQA defines a cumulative impact as an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts (State CEQA Guidelines Section 15355). As stated in State CEQA Guidelines Section 15130(a)(1), the cumulative impacts discussion in an EIR need not discuss impacts that do not result in part from the project evaluated in the EIR. Cumulative impacts may be analyzed by considering a list of past, present, and probable future projects producing related or cumulative impacts (State CEQA Guidelines Section 15130[b][1][A]).

All projects that are proposed (i.e., with pending applications), recently approved, under construction, or reasonably foreseeable that could contribute to a cumulative impact on the local environment when considered in conjunction with the proposed project are included in an EIR. These projects can include, if necessary, projects outside of the control of the lead agency. If a concise list of related projects is not available, cumulative impacts may be analyzed using the regional or area-wide growth projections contained in an adopted or certified general plan or related planning document. The analysis includes both specific cumulative development projects and cumulative impacts (which takes into account ambient growth per the Project Traffic Study).

In this Draft EIR, cumulative impact analyses are provided for each environmental issue discussed in **Section IV, Environmental Impact Analysis**, and can be found in each respective subsection (e.g., Air Quality, Transportation/Traffic, etc.) under the heading "Cumulative Impacts."

Table III-1 lists the individual development projects that were considered in each cumulative impact analysis. This list was developed by the Department of City Planning, in consultation with the Department of Transportation, and includes proposed developments within a 1.5-mile radius of the Project Site that were on file with the City at the time the Notice of Preparation (NOP) for the Proposed Project EIR was circulated in March 2017. Some additional development proposals filed subsequently have also been included due to their proximity to the Project Site. The locations of these cumulative projects are depicted in Figure III-8. As shown in Table III-1, there are 117 cumulative development projects in the vicinity of the Project Site.

In addition, the Central City and Central City North Community Plan Update, known as the DTLA 2040 Plan, is currently being prepared by the Department of City Planning. Only the initial period of any projected growth associated with the plan would overlap with the Project's future baseline forecast, as the Project is anticipated to be completed

by 2021, well before the Community Plan Update's horizon year of 2040. As such, it can be assumed that the projected growth reflected by the list of cumulative development projects located within the Central City North Community Plan area, itself a conservative assumption as discussed above, would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

Table III-1
Cumulative Projects List

No.	Project Location	Land Use	Size	
1	540 S Santa Fe Ave	Office	65.812	ksf
2	601 S Main St	Apartments	452	du
		Retail	25.000	ksf
3	225 S Los Angeles St	Condominiums	300	du
		Retail	3.400	ksf
4	150 N Los Angeles St	Office	713	ksf
		Retail	35	ksf
		Child Care	2.5	ksf
5	534 S Main St	Apartments	160	du
		Retail	18	ksf
		Restaurant	3.5	ksf
		Fast-Food Restaurant	3.5	ksf
6	1057 S San Pedro St	Office	294.600	ksf
		Retail	224.862	ksf
		Cinema	744	seats
		Apartments	877	du
		Condominiums	68	du
		Hotel	210	rooms
		Medical Office	77.264	ksf
7	1525 E Industrial St	Apartments	344	du
		Office	21.4	ksf
		Retail	6.1	ksf
8	950 E 3rd St	School	532	students
		Retail	30.062	ksf
		Apartments	635	du
9	2051 E 7th St	Apartments	320	du
		Retail	15	ksf
		Restaurant	5	ksf
10	963 E 4th St	Office	79	ksf
		Retail	25	ksf
		Restaurant	20	ksf
11	826 S Mateo St	Condominiums	90	du
		Other	11	ksf
		Other	5.6	ksf
12	2030 E 7th St	Office	243.583	ksf
		Retail	40	ksf
13	360 S Alameda St	Apartments	55	du
		Other	2.5	ksf
		Other	6.3	ksf
14	649 S Wall St	Assisted Living	55	beds

Table III-1
Cumulative Projects List

No.	Project Location	Land Use	Size	
		Office	55	employees
15	410 Center St	Office	110	ksf
16	500 S Mateo St	Restaurant	12.82	ksf
17	300 S Main St	Apartments	471	du
		Retail	5.19	ksf
		Restaurant	27.78	ksf
18	400 S Alameda St	Hotel	66	rooms
		Retail	0.84	ksf
		Restaurant	2.13	ksf
19	719 E 5t St	Apartments	160	du
		Retail	7.5	ksf
20	2130 E Violet St	Office	94	ksf
		Retail	7.45	ksf
21	929 E 2nd St	Mixed Use Private Club	48.862	ksf
22	1800 E 7th St	Apartments	122	du
		Commercial	7.9	ksf
23	1722 E 16th St	Restaurant	8.151	ksf
24	454 E Commercial St	Bus Facility	2	acres
25	118 S Astronaut E S Onizuka St	Apartments	77	du
26	555 S Mateo St	Retail	153	ksf
27	1000 S Santa Fe Ave	Restaurant	8.447	ksf
		Hotel	48	rooms
28	747 Warehouse St	Office	1,300	ksf
		Retail	250	ksf
29	2110 Bay St	Apartments	110	du
		Office	113	ksf
		Retail	43.66	ksf
30	330 S Alameda St	Apartments	186	du
		Commercial	22	ksf
31	668 S Alameda St	Apartments	475	du
		Commercial	84.0	ksf
32	520 Mateo St	Apartments	200	du
		Office	30	ksf
		Restaurant	15	ksf
		Retail	15	ksf
33	717 Maple Ave	Apartments	452	du
		Retail	14.000	ksf
34	232 W 2nd St	Condominiums	320	du
		Office	534	ksf
		Retail	7.2	ksf
35	433 S Main St	Condominiums	161	rooms
		Mixed Use	6.9	ksf
36	676 Mateo St	Apartments	185	du
		Commercial	27	ksf
37	640 S Alameda St	Hotel	412	rooms

Table III-1
Cumulative Projects List

No.	Project Location	Land Use	Size	
		Art Space	22.429	ksf
38	732 Wall St	Apartments	323	du
		Office	53.2	ksf
		Retail	4.4	ksf
		Wholesale/Storage	63.585	ksf
		Restaurant	4.42	ksf
		Event Space	9.226	ksf
39	333 S Alameda St	Apartments	994	du
		Retail	993	ksf
40	670 Mesquit St	Hotel	236	rooms
		Apartments	308	du
		Retail	79.24	ksf
		Restaurant	89.576	ksf
		Event Space	93.617	ksf
		Gym	62.148	ksf
		Grocery	56.912	ksf
		Office	944.055	ksf
41	2650 E Olympic Blvd	Apartments	1000	du
		Restaurant	N/A	ksf
		Office	230	ksf
42	2143 E Violet St	Apartments	509	du
		Retail	123	ksf
43	848 S Grand Ave	Condominiums	420	du
		Retail	38.5	ksf
44	1050 S Grand Ave	Condominiums	151	du
		Retail	3.472	ksf
		Restaurant	22	ksf
45	1115 S Hill St	Mixed Use	N/A	other
46	201 S Broadway Ave	Retail/Restaurant	27.675	ksf
47	1200 S Grand Ave	Apartments	640	du
		Retail	45	ksf
48	928 S Broadway	Apartments	670	du
		Condominiums	17	du
		Retail	58.8	ksf
49	840 S Olive St	Condominiums	303	du
		Restaurant	9.68	ksf
		Retail	1.5	ksf
50	400 S Broadway	Apartments	450	du
		Retail	6.904	ksf
		Bar	5	ksf
51	1001 S Olive St	Apartments	225	du
		Restaurant	5	ksf
52	920 S Hill St	Apartments	239	du
		Retail	5.4	ksf
53	955 S Broadway	Apartments	201	du
		Retail	6	ksf

Table III-1
Cumulative Projects List

No.	Project Location	Land Use	Size	
54	801 S Olive St	Apartments	363	du
		Commercial	10	ksf
55	820 S Olive St	Apartments	589	du
		Retail	4.5	ksf
56	1148 S Broadway	Apartments	94	du
		Retail	2.5	ksf
57	1111 S Broadway	Apartments	391	du
		Office	39.7	ksf
		Retail	49	ksf
58	1120 S Grand Ave	Apartments	666	du
		Shopping	20.69	ksf
		Mixed use	N/A	other
59	1036 S Grand Ave	Restaurant	7.149	ksf
60	527 N Spring St	Apartments	345	du
		Restaurant	11	ksf
		Retail	23	ksf
		Retail	21	ksf
61	633 S Spring St	Hotel	176	rooms
		Restaurant	8.43	ksf
		Bar	5.29	ksf
62	737 S Spring St	Apartments	320	du
		Pharmacy/Drugstore	250	ksf
63	340 S Hill St	Apartments	428	du
		Restaurant	2.894	ksf
64	732 S Spring St	Apartments	400	du
		Pharmacy/Drugstore	15	ksf
65	940 S Hill St	Apartments	232	du
		Restaurant	14	ksf
66	744 S Figueroa St	Apartments	436	du
		Retail	10.0	ksf
67	850 S Hill St	Apartments	300	du
		Retail	4	ksf
		Restaurant	3.5	ksf
68	700 W 9th St	Apartments	341	du
		Retail	11.7	ksf
69	649 S Olive St	Hotel	241	rooms
70	1100 S Main St	Apartments	379	du
		Other	25.81	ksf
71	924 N Spring St	Condominiums	770	du
		Retail	51.39	ksf
72	845 S Olive St	Apartments	208	du
		Retail	2.4	ksf
73	888 S Hope St	Apartments	526	du
74	1000 S Hill St	Apartments	391	du
		Retail	9	ksf
75	237 S Los Angeles St	Sports Complex	43	ksf
76	640 S Santa Fe Ave	Commercial	107	ksf

Table III-1
Cumulative Projects List

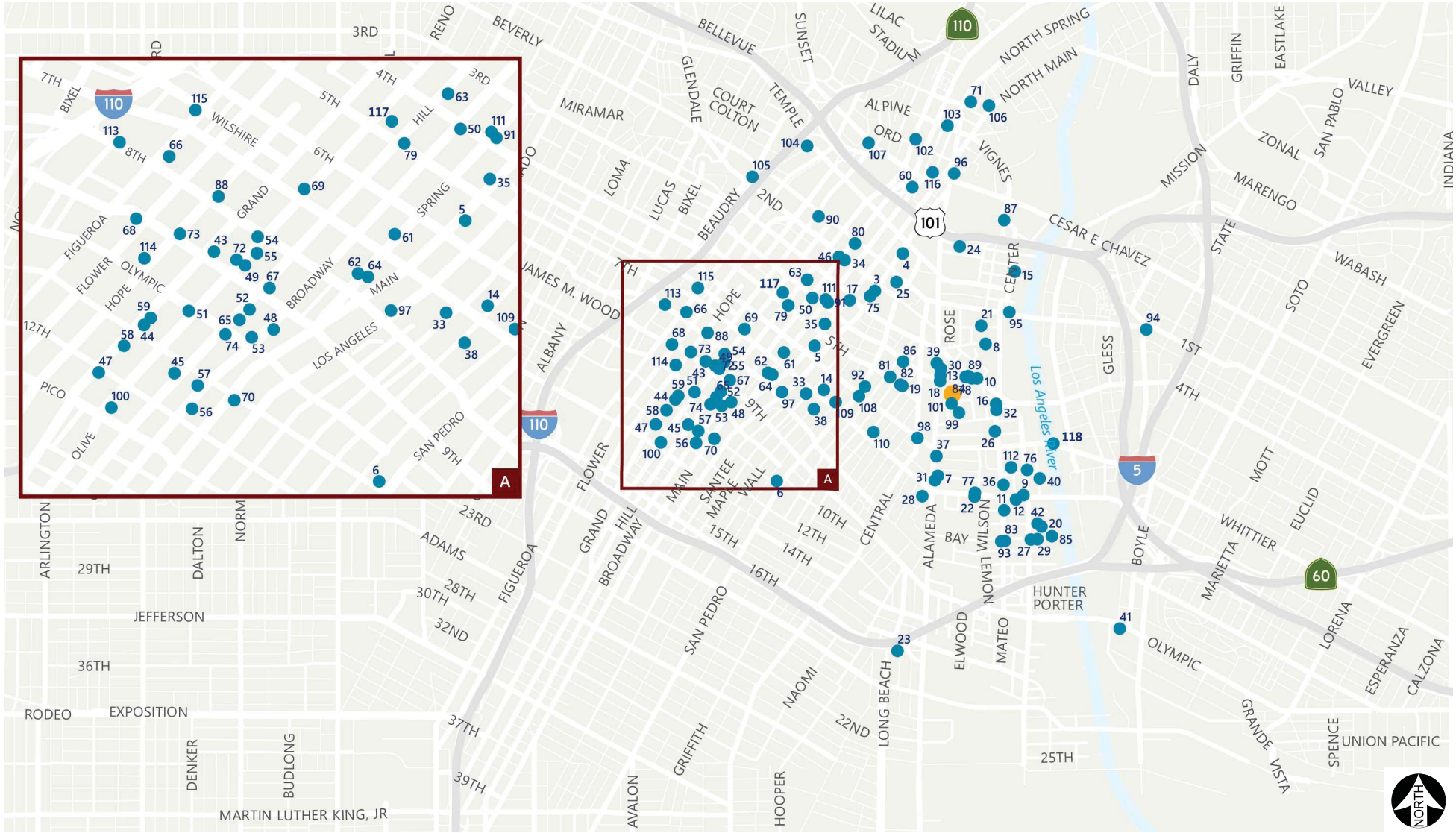
No.	Project Location	Land Use	Size	
77	1745 E 7th St	Apartments	57	du
		Commercial	6	ksf
78	940 E 4th St	Office	266	ksf
		Retail	18.2	ksf
79	333 W 5th St	Condominiums	100	du
		Hotel	200	rooms
		Commercial	27.5	ksf
80	100 S Broadway	Apartments	1127	du
		Commercial	410	ksf
81	609 E 5th St	Apartments	151	du
82	713 E 5th St	Apartments	51	du
83	1000 S Mateo St	Apartments	113	du
		Commercial	134	ksf
84	926 E 4th St	Office	225.514	ksf
		Commercial	14.906	ksf
85	2159 E Bay St	Retail	18.33	ksf
		Office	204	ksf
86	508 E 4th St	Apartments	41	du
		Office	39.7	ksf
		Retail	49	ksf
87	1 Gateway Plaza	Residential	22	du
		Office	7443.2	ksf
		Retail	645	ksf
		Hotel	750	rooms
		Restaurant	20	ksf
		Museum	70	ksf
88	754 S Hope St	Condominiums	409	du
		Retail	7.329	ksf
89	401 S Hewitt St	Office	255.5	ksf
		Retail	4.97	ksf
90	100 S Grand Ave	Apartment	412	du
		Condominium	1648	du
		Retail	225.3	ksf
		Supermarket	53	ksf
		Restaurant	67	ksf
		Health Club	50	ksf
		Event Facility	250	seats
		Hotel	275	rooms
		Office	681	ksf
91	354 S Spring St	Apartments	212	du
92	552 S San Pedro	Affordable Housing	407	du
		Retail	12.3	ksf
93	1005 S Mateo St	Industrial Park	94.8	ksf
94	1800 E 1st St	Apartments	65	du
		Retail	5	ksf
95	1001 E 1st St	Apartments	430	du
		Retail	8.742	ksf

Table III-1
Cumulative Projects List

No.	Project Location	Land Use	Size	
96	900 N Alameda St	Office	179.90	ksf
97	755 S Los Angeles St	Retail	16.694	ksf
		Office	60.243	ksf
		Restaurant	26.959	ksf
98	601 S Central Ave	Apartments	236	du
		Retail	12	ksf
99	527 Colyton St	Condominiums	310	du
		Retail	11.375	ksf
		Production Space	11.736	ksf
100	1230 S Olive St	Apartments	360	du
		Retail	6.4	ksf
101	1100 E 5th St	Apartments (Live/Work du)	220	du
		Commercial	49	ksf
102	708 N Hill St	Apartments	162	du
		Retail	5	ksf
103	211 W Alpine St	Apartments	122	du
		Retail	7.5	ksf
104	327 N Fremont Ave	Apartments	1200	du
		Retail	25	ksf
105	130 S Beaudry Ave	Apartments	220	du
106	1101 N Main	Condominiums	318	du
107	700 W Cesar Chavez Ave	Apartments	299	du
		Retail	8	ksf
108	600 S San Pedro St	Apartments	303	du
		Retail	20	ksf
109	655 S San Pedro St	Apartments	81	du
110	656 S Stanford Ave	Apartments	82	du
111	361 S Spring St	Hotel	315	rooms
112	641 Imperial St	Residential	140	du
		Office	14.749	ksf
113	945 W 8th St	Apartments	781	du
		Retail	6.7	ksf
114	949 S Hope St	Apartments	236	du
		Retail	5.954	ksf
115	900 W Wilshire Blvd	Hotel	560	du
		Office	1500	ksf
		Retail/Restaurant	275	ksf
		Apartments	100	du
116	643 N Spring St	Hotel	142	du
		Commercial	17	ksf
		Restaurant	2.532	ksf
		Apartments	281	du
117	437 W 5th St	Condominiums	660	du

ksf = thousand square feet du = dwelling units

*Source: City of Los Angeles Departments of Transportation and City Planning; Fehr & Peers. See **Appendix I** of the Draft EIR.*



Source: Fehr & Peers, 2018.

Figure III-8
Cumulative Projects Location Map

IV. Environmental Impact Analysis

A. Impacts Found to be Less Than Significant

1. Introduction

This section includes information from the following items, which are included in **Appendices A** and **E** of the Draft EIR:

A-3. *Initial Study, CAJA Environmental Services, March 31, 2017.*

A-4. *Tree Evaluation for Project Site Located at 450-456 South Seaton Street and 445-457 South Colyton Street, Los Angeles, CA, Psomas, November 4, 2016.*

E-1. *Archaeological Records Search for Arts District Center Project, South Central Coastal Information Center, June 2, 2015.*

E-2. *Paleontological Resources for the Proposed Arts District Center Project, Natural History Museum of Los Angeles County, May 28, 2015.*

E-3. *Sacred Lands File Search, Native American Heritage Commission, July 2017.*

In addition to the environmental impact categories analyzed in detail in this EIR, the City of Los Angeles (City) has determined through the preparation of an Initial Study (included in **Appendix A** of the Draft EIR) that the development and operation of the Project would not result in potentially significant impacts to the environmental impact topics discussed below. Section 15128 of the CEQA Guidelines states the following:

> *An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study.*

It has been determined that there is no evidence that the Project would cause significant environmental effects in the following areas and that no further environmental review of these issues, as presented in Appendix G of the State CEQA Guidelines, is necessary:

- Agricultural and Forestry Resources — All Thresholds
- Biological Resources — All Thresholds
- Hydrology and Water Quality — All Thresholds
- Mineral Resources — All Thresholds

Each of these issue areas is discussed subsequently in this section of the Draft EIR.

Additionally, it has been determined in the Initial Study that the Project would result in either no impact or a less-than-significant impact with respect to the following areas included in Appendix G of the State CEQA Guidelines:

- Air Quality — Threshold e
- Geology and Soils — Thresholds a.iv, b, and e
- Hazards and Hazardous Materials — Thresholds e, f, and h
- Land Use and Planning — Thresholds a and c
- Noise — Thresholds e and f
- Population and Housing — Thresholds b and c
- Transportation/Traffic — Threshold c
- Utilities and Public Service Systems — Thresholds c and g

Notwithstanding the conclusions of the Initial Study, a brief discussion of each of these Appendix G issues has been incorporated into the relevant sections of this Draft EIR.

2. Discussion of Impacts Found to be Less Than Significant

a) AGRICULTURAL AND FORESTRY RESOURCES

Threshold (a) ***Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

According to the *L.A. CEQA Thresholds Guide*, a significant impact may occur if a project were to result in the conversion of State-designated agricultural land from agricultural use to another non-agricultural use. The Project Site is currently occupied by a two-story commercial/industrial building. No farmland or agricultural activity exists on or in the vicinity of the Project Site. According to the Soil Candidate Listing for Prime Farmland of Statewide Importance, Los Angeles County, which was prepared by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), the soils at the Project Site are not candidates for listing as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. In addition, the Project Site has not been mapped pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. The California Department of Conservation, Division of Land Protection, lists Prime Farmland, Unique Farmland, and Farmland of Statewide Importance under the general category of "Important Farmland" in California. The Project Site is not included in the Prime Farmland, Unique Farmland, or Farmland of Statewide Importance category.[1] Therefore, the Project would have no impact on the conversion of farmland to non-agricultural uses, and no further analysis of this issue is required.

Threshold (b) ***Would the project conflict with existing zoning for agricultural use, or a Williamson Act Contract?***

The Williamson Act of 1965 allows local governments to enter into contract agreements with local landowners with the purpose of trying to limit specific parcels of land to agricultural or other related open space use.[2] The Project Site does not contain any

[1] *State of California Department of Conservation, Farmland Mapping and Monitoring Program, Los Angeles County Important Farmland 2010, Map, website: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2010/los10.pdf, accessed March 8, 2016.*

[2] *State of California Department of Conservation, Williamson Act Program, website: http://www.conservation.ca.gov/dlrp/lca/Pages/index.aspx, November 2016.*

State-designated agricultural lands or open space. Thus, the Project Site is not subject to a Williamson Act Contract.

The Project Site is located within the jurisdiction of the City and, thus, is subject to the applicable land use and zoning requirements in the Los Angeles Municipal Code (LAMC). The Project Site is currently zoned M3-1-RIO and has a land use designation of Heavy Industrial in the Central City North Community Plan. The Project Site is not zoned for agricultural production, and there is no farmland at the Project Site. Therefore, no impact with respect to land zoned for agricultural use or under a Williamson Act Contract would occur, and no further analysis of this issue is required.

Threshold (c) ***Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined by Public Resources Code section 122220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?***

Neither the Project Site nor the surrounding parcels are zoned for forestland or timberland, and there is no timber production at the Project Site. The Project Site is occupied by a building and is completely surrounded by urban uses and infrastructure. No forested lands or significant natural vegetation exist on or in the vicinity of the Project Site. Therefore, no impact related to loss or conversion of forestland or timberland would occur, and no further analysis of this issue is required.

Threshold (d) ***Would the project result in the loss of forest land or conversion of forest land to non-forest use?***

Neither the Project Site nor nearby properties are currently utilized for forestry uses, and as discussed above, the Project Site is not zoned for forestland or timberland uses. No impacts related to the loss of forest land or conversion of forestland to a non-forest use would occur as a result of the Project, and no further analysis of this issue is required.

Threshold (e) ***Would the project involve other changes in the existing environment which due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?***

Neither the Project Site nor nearby properties are currently utilized for agricultural or forestry uses, and as discussed above, the Project Site is not classified in any "Farmland" category designated by the State of California. According to the City's General Plan Conservation Element, the Project Site is not located near or in any significant farmland area (i.e., a significant commercial crop or animal producing site).

No impacts related to the conversion of farmland to a non-agricultural use or conversion of forestland to a non-forest use would occur as a result of the Project, and no further analysis of this issue is required.

b) BIOLOGICAL RESOURCES

Threshold (a) ***Would the project have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

The Project Site is located in an urbanized area of Los Angeles and is currently developed with a building and associated paving. The Project Site does not contain any landscaping, natural open spaces, act as a wildlife corridor, or possess any areas of significant biological resource value. No hydrological features are present on the Project Site, and there are likely no sensitive habitats present. Due to the lack of biotic resources, no candidate, sensitive, or special status species identified in local plans, policies, regulations, by the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), or the U.S. Fish and Wildlife Service (USFWS) would occur on the Project Site.

The Project Site does not contain any landscaping or vegetation that is rooted to the ground. Small portable planters containing some vegetation are located on the exterior paved area along the perimeter of the building on-site. No street trees are located adjacent to the Project Site (see tree evaluation included in **Appendix A** of the Draft EIR). There are no non-protected trees or protected trees on the Project Site. Due to the developed history of the Project Site and lack of native vegetation, the likelihood of a listed species being present on-site is negligible. Therefore, no impact would occur as a result of the Project, and no further analysis of this issue is required.

Threshold (b) ***Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the City or regional plans, policies, regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

The Project Site is occupied by a building. No riparian or other sensitive natural communities are located on or adjacent to the Project Site. The Project Site is devoid of vegetation other than potted plants on exterior paved areas along its perimeter. Therefore, implementation of the Project would not result in any adverse impacts to

riparian habitat or other sensitive natural communities. As such, no impact would occur, and no further analysis of this issue is required.

Threshold (c) ***Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The Project Site is developed with a building, does not contain any wetlands or natural drainage channels, and is located in an urbanized area of the Central City North Community Plan Area of the City. Therefore, the Project Site does not have the potential to support any riparian or wetland habitat. No federally protected wetlands (e.g., emergent, forested/shrub, estuarine and marine deep water, estuarine and marine, freshwater pond, lake, riverine) occur on or in the vicinity of the Project Site.[3] Therefore, the Project would not result in the direct removal, filling, or hydrological interruption of a federally protected wetland as defined by Section 404 of the Clean Water Act. As such, no impact to federally protected wetlands would occur as a result of the Project, and no further analysis of this issue is required.

Threshold (d) ***Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

The Project is located in an area that has been previously developed in a heavily urbanized area of the City. Due to the highly urbanized surroundings, there are no wildlife corridors or native wildlife nursery sites in the Project Site vicinity. Therefore, the Project would not interfere with the movement of any resident or migratory fish or wildlife species.

Due to the developed history of the Project Site and lack of native or substantial vegetation, the likelihood of a migratory species being on-site is negligible. In addition, no bodies of water exist on-site to provide habitat for fish. As such, Project implementation would neither interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors nor impede the use of native wildlife nursery sites. Therefore, no impact would occur, and no further analysis of this issue is required.

[3] *U.S. Fish and Wildlife Service, National Wetlands Inventory, Wetlands layer: http://www.fws.gov/wetlands/Data/Mapper.html, accessed November 2016.*

Threshold (e) ***Would the project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?***

The Project Site is located in an urbanized area of the City. The Project Site is completely paved and developed, and no vegetation (other than portable potted plants) exists on-site. The Project would be confined to the previously developed site. Local ordinances protecting biological resources are limited to the City's Protected Tree Ordinance, as modified by Ordinance 177,404. The amended Protected Tree and Shrub Ordinance provides guidelines for the protection of the following species:

- Oak trees, including Valley Oak (*Quercus lobate*) and California Live Oak (*Quercus agrifolia*), or any other tree of the oak genus indigenous to Southern California but excluding the Scrub Oak (*Quercus dumosa*)
- Southern California Black Walnut (*Juglans californica var. californica*)
- Western Sycamore (*Platanus racemosa*)
- California Bay (*Umbellularia californica*)
- Mexican Elderberry (*Sambucus mexicana*)
- Toyon (*Heteromeles arbutifolia*)

No protected trees or shrubs (or trees/shrubs of any kind) are located on or adjacent to the Project Site. No street trees are located on or adjacent to the Project Site. Therefore, the Project would not conflict with any tree preservation policy or ordinance. As such, no impacts would occur, and no further analysis of this issue is required.

Threshold (f) ***Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

The Project Site is located in an urbanized area of Los Angeles and is currently developed with a building and associated paving. The Project Site is not located in or adjacent to an existing City or County Significant Ecological Area.[4] Additionally, there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that applies to the Project

[4] *City of Los Angeles, Department of Public Works, Bureau of Engineering, NavigateLA, http://navigatela.lacity.org/index01.cfm, Significant Ecological Area layer, accessed November 11, 2016.*

Site. Implementation of the Project would not conflict with any habitat conservation plans. Therefore, no impact would occur, and no further analysis of this issue is required.

c) HYDROLOGY AND WATER QUALITY

Threshold (a) Would the project violate any water quality standards or waste discharge requirements?

The Project involves the development of a 12-story, mixed-use building on land that is currently fully developed with a two-story commercial building. The Project would not alter the existing surface water runoff drainage pattern, would not reduce rainfall absorption at the Project Site, and would not result in a net increase of rates of stormwater discharge which may exceed water quality standards or waste discharge requirements. During construction, groundwater dewatering is not anticipated to be required on the Project Site. However, if any groundwater is encountered during excavation work, it would be removed in compliance with the Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2013-0095 National Pollutant Discharge Elimination System [NPDES] No. CAG994004). No permanent dewatering would be required after Project buildout. However, during grading and excavation activities, stockpiled soils could be subject to erosion during precipitation events. Thus, Project-related construction activities could have the potential to impact stormwater runoff and water quality.

The Project would be required to comply with the NPDES General Permit For Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; NPDES NO**.** CAS000002) (Construction General Permit), including the preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) required to minimize soil erosion and sedimentation from entering the storm drains during the construction period. In addition, the Project would be subject to the City's Stormwater and Urban Runoff Pollution Control regulations (Ordinance No. 172,176 and No. 173,494) to ensure pollutant loads from the Project Site would be minimized for downstream receiving waters. Compliance with the NPDES and implementation of the SWPPP and BMPs, as well as with the City's discharge requirements, would ensure that construction stormwater runoff would not violate water quality and/or discharge requirements.

Stormwater runoff generated during operation of the Project has the potential to introduce small amounts of pollutants typically associated with mixed-use developments (e.g., household cleaners, landscaping pesticides, and vehicle petroleum products) into the stormwater system. Stormwater runoff from precipitation events could carry urban

pollutants into municipal storm drains. However, during operation, the Project would be required to comply with the City's Low Impact Development Ordinance (LID Ordinance). The LID Ordinance applies to all development and redevelopment in the City that requires a building permit. LID Plans are required to include a site design approach and BMPs that address runoff and pollution at the source. Further, to comply with LID Ordinance, the Project would be required to capture and treat the first 3/4-inch of rainfall in accordance with established stormwater treatment priorities. Compliance with the LID Ordinance would reduce the amount of surface water runoff leaving the Project Site as compared to current conditions. Compliance with the LID Plan and Standard Urban Stormwater Mitigation Plan (SUSMP), including the implementation of BMPs, would ensure that operation of the Project would not violate water quality standard and discharge requirements or otherwise substantially degrade water quality.

Conformance with these regulations would ensure construction and operational activities would not violate water quality standards, waste discharge requirements, or otherwise substantially degrade water quality. Therefore, Project impacts related to water quality would be less than significant, and no further analysis on this issue is required.

Threshold (b) ***Would the project 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)?***

The Project Site is fully developed with a structure. All areas of the Project Site are covered with paving or a structure, and there is no landscaping or permeable surfaces on the Project Site. During a storm event, stormwater runoff flows to the adjacent roadways where it is directed into the City's storm drain system. As such, the Project Site is not a source of groundwater recharge.

Based on a review of the *Seismic Hazard Zone Report for the Los Angeles 7.5-Minute Quadrangle*, the historical high groundwater level in the vicinity of the Project Site is at a depth of approximately 90 feet below ground surface (bgs).[5] Based on current groundwater basin management practices, it is unlikely that groundwater levels would ever exceed the historic high levels. Neither groundwater nor groundwater seepage were encountered in field explorations at the Project Site, drilled to a maximum depth of

[5] *State of California, Department of Conservation, Division of Mines and Geology, Seismic Hazard Zone Report for the Los Angeles 7.5-Minute Quadrangle, Los Angeles County, California, Seismic Hazard Zone Report 029, 1998.*

77 feet bgs. Based on the data from the borings drilled at the Project Site (see Appendix A of the Project Geotechnical Investigation included as **Appendix E-1** of the Draft EIR), the current groundwater table is greater than 77 feet below the existing ground surface and is likely as deep as 90 feet bgs.

The Project includes excavation to approximately 50 below ground surface in an area where groundwater has not been encountered in test borings drilled to 77 feet below ground surface.[6] Although unlikely, any groundwater encountered within this depth would be perched groundwater, which is isolated groundwater trapped within soil or rock. Perched groundwater is typically of poor water quality because of its inability to flow and filter. If perched groundwater is encountered at the Project Site during excavation work, it would be pumped from the ground and removed from the Project Site in accordance with applicable Los Angeles Regional Water Quality Control Board (LARWQCB) requirements, as discussed above. No permanent dewatering would be required after Project buildout. Additionally, all water consumption associated with the Project would be supplied by the Los Angeles Department of Water and Power (LADWP) and not from groundwater beneath the Project Site. Thus, there would be no impact to groundwater supplies, and no further analysis of this issue is required.

Threshold (c) ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?***

During Project construction, particularly during the excavation and grading phase, stormwater runoff from precipitation events may cause exposed and stockpiled soils to be subject to erosion and convey sediments into off-site storm drain systems. While grading and construction activities may temporarily alter the existing drainage patterns of the Project Site, BMPs would be implemented to minimize soil erosion impacts during Project grading and construction activities and to ensure compliance with the requirements of the NPDES Construction General Permit and the SWPPP.

In addition, the Project would be required to implement a LID Plan (during operation), which would reduce the amount of surface water runoff leaving the Project Site after a storm event. Specifically, the LID Plan would require the implementation of stormwater BMPs to retain or treat the runoff from a storm event producing 3/4-inch of rainfall in a 24-hour period. Therefore, the Project would not result in substantial erosion or siltation on- or off-site. As such, Project impacts related to erosion and siltation would be less than significant, and no further analysis of this issue is required.

[6] *GeoDesign, Inc., Revised Report of Geotechnical Engineering Services, Proposed Arts District Center, 1101 E. 5th Street, Los Angeles CA, August 15, 2017.*

Threshold (d) ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?***

Construction and operation of the Project would not result in a significant increase in stormwater runoff or any changes in the local drainage patterns that would result in flooding on- or off-site. The Project Applicant would be required to prepare a SWPPP and implement BMPs to reduce runoff and preserve water quality during construction of the Project. As discussed above, the Project would be required to implement a LID Plan (during operation). As part of the LID Plan, the Project would be required to capture and treat the first 3/4-inch of rainfall in accordance with established stormwater treatment priorities. Compliance with the LID Ordinance would also reduce the amount of surface water runoff leaving the Project Site as compared to the current conditions. Therefore, the Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. As such, impacts would be less than significant, and no further analysis of this issue is required.

Threshold (e) ***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?***

During Project construction, pollutants and contaminants resulting from the routine use and cleaning of construction equipment would be disposed of in compliance with the Construction General Permit. During Project operation, runoff from the Project Site would continue to be collected on the Project Site and directed towards existing storm drains in the Project Site vicinity that have adequate capacity to serve the Project Site. Under existing conditions, the building rooftop and downspouts perform this function. During Project operation and pursuant to local practice and City policy, stormwater retention would be required as part of the LID implementation features, and the Project would be required to retain or treat the first 3/4-inch of rainfall in a 24-hour period. Pollutants from the Project would be subject to the requirements and regulations of the NPDES and applicable LID Ordinance requirements. Accordingly, the Project would not create or contribute surface runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, impacts would be less than significant, and no further analysis of this issue is required.

Threshold (f) Would the project otherwise substantially degrade water quality?

As discussed under Appendix G Checklist Question (a) above, the Project would be required to comply with the NPDES Construction General Permit, including the preparation of a SWPPP and implementation of BMPs required to minimize soil erosion and prevent sediment from entering the storm drains during the construction period. In addition, the Project would be subject to the City's Stormwater and Urban Runoff Pollution Control regulations (Ordinance No. 172,176 and No. 173,494) to ensure pollutant loads from the Project Site would be minimized for downstream receiving waters. Compliance with the NPDES and implementation of the SWPPP and BMPs, as well as the City's discharge requirements, would ensure that construction stormwater runoff would not violate water quality and/or discharge requirements. Construction related impacts would be less than significant, and no further analysis of this issue is required.

As also discussed under Appendix G Checklist Question a) above, the Project would be required to comply with the City's LID Ordinance. LID Plans are required to include a site design approach and BMPs that address runoff and pollution at the source. Further, to comply with the LID Ordinance, the Project would be required to capture and treat the first 3/4-inch of rainfall in accordance with established stormwater treatment priorities. Compliance with the LID Plan, including the implementation of BMPs, would ensure that operation of the Project would not violate water quality standard and discharge requirements or otherwise substantially degrade water quality. Impacts would be less than significant, and no further evaluation of this issue is required.

Threshold (g) Would the project 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?

The Project Site is not located within an area identified by Federal Emergency Management Agency (FEMA) as potentially subject to 100-year floods or within a City-designated 100-year or 500-year flood plain.[7,8] As the Project Site is located in an area of minimal flooding, the Project would not introduce housing to a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or

[7] *City of Los Angeles, Department of Public Works, Bureau of Engineering, NavigateLA, FEMA Flood Hazard layer: http://navigatela.lacity.org/navigatela/, accessed November 20, 2016.*

[8] *City of Los Angeles, Safety Element of the General Plan, 100-Year and 500-Year Flood Plains, Exhibit F.*

other flood hazard delineation map. Therefore, no impact would occur, and no further analysis of this issue is required.

Threshold (h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The Project Site is not located within an area identified by FEMA as potentially subject to 100-year floods[9] or within a City-designated 100-year or 500-year flood plain.[10] As the Project Site is located in an area of minimal flooding, the Project would not introduce structures to a 100-year flood hazard area and would not have the potential to impede or redirect flood flows. Therefore, no impact would occur, and no further analysis of this issue is required.

Threshold (i) Would the project 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?

The Project Site is located approximately 1,500 feet west of the Los Angeles River and is within the City-designated potential inundation area of Los Angeles River flood control channel.[11] The Project Site and the surrounding areas could be inundated with floodwaters if the levees along the Los Angeles River channel were to fail. The Los Angeles River flood control channel is maintained by the U.S. Army Corps of Engineers (USACE), which is responsible for periodically analyzing its facilities for earthquake safety and potential failures. Current design and construction practices and ongoing programs of review, modification, or total reconstruction of existing channel and drainage infrastructure are intended to ensure that all such facilities are capable of withstanding the maximum credible earthquake for the site. Accordingly, based on a review of the County of Los Angeles Flood and Inundation Hazards Map, the Project Site does not lie within a mapped inundation area due to the presence of the levees along the Los Angeles River.[12] Flooding from other sources is not expected and the minimal risk of flooding from potential levee failure would not be exacerbated by the development of the Project. Thus, the failure of the Los Angeles River flood control channel is considered remote and does not present a significant risk of loss, injury, or death to people or structures. Moreover, the area surrounding the Project Site is highly

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[9] *City of Los Angeles, Department of Public Works, Bureau of Engineering, NavigateLA, FEMA Flood Hazard layer: http://navigatela.lacity.org/navigatela/, accessed November 20, 2016.*

[10] *City of Los Angeles, Safety Element of the General Plan, 100-Year and 500-Year Flood Plains, Exhibit F.*

[11] *City of Los Angeles, Safety Element, Exhibit G, Inundation & Tsunami Hazard Areas in the City of Los Angeles: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed November 20, 2016.*

[12] *Los Angeles County Department of Public Works, FEMA Flood Zone Determination Website http://dpw.lacounty.gov/wmd/floodzone/, accessed November 2016.*

urbanized, and there are no other levees or dams within the immediate vicinity of the Project Site. Therefore, the Project would not expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam. As such, no impact would occur, and no further analysis of this issue is required.

Threshold (j) ***Would the project expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?***

The Project Site is not located in a Tsunami Hazard Area, is located at least 14 miles from the Pacific Ocean, and is not near any major water bodies potentially at risk of the effects of seismically-induced tidal phenomena. Therefore, there is no impact associated with seiches or tsunamis at the Project Site. In addition, the Project Site is in an urbanized portion of the City and is relatively flat, thereby limiting the potential for inundation by mudflow. As such, no impact would occur, and no further analysis of this issue is required.

d) MINERAL RESOURCES

Threshold (a) ***Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

The Project Site is located in an urbanized area of the City. There are no known mineral resources on the Project Site or in the vicinity.[13] Thus, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Therefore, no impacts related to issue would occur, and no further analysis of this issue is required.

Threshold (b) ***Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?***

The State Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board (SMGB) map areas throughout the State of California that contain regionally significant mineral resources. Aggregate mineral resources within the state are classified by the SMGB through application of the Mineral Resource Zone (MRZ) system. The MRZ system is used to map all mineral commodities within identified jurisdictional boundaries. The MRZ system classifies lands that contain mineral deposits and identifies the presence or absence of substantial sand and gravel deposits and

[13] *City of Los Angeles General Plan, Conservation Element, Exhibit A.*

crushed rock source areas (i.e., commodities used as, or in the production of, construction materials). The Project Site is located within an area classified as MRZ-2, defined as areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.[14]

However, the Project Site is not designated as a locally important mineral resource recovery site delineated on the Los Angeles General Plan, a specific plan, or other land use plan. Should any future mineral resource be discovered on or near the Project Site, development of the Project would not alter the potential utility of any minerals located beneath the Project Site. Therefore, no impact associated with the loss of availability of a locally important mineral resource recovery site would occur.

Additionally, according to the Conservation Element of the City of Los Angeles General Plan, sites that contain potentially significant sand and gravel deposits which are to be conserved follow the Los Angeles River flood plain, coastal plain, and other water bodies and courses and lie along the flood plain from the San Fernando Valley through downtown Los Angeles. Much of the area identified, including the area in which the Project Site is located, has been developed with structures and is inaccessible for mining extraction.[15] The Project would be developed on a site that is already fully developed, and therefore, would not represent a new barrier to future mineral or sand and gravel extraction. Thus, the Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No impacts related to issue would occur, and no further analysis of this issue is required.

[14] *City of Los Angeles, Department of City Planning, Environmental and Public Facilities Maps: Areas Containing Significant Mineral Deposits in the City of Los Angeles, September 1996.*

[15] *City of Los Angeles, Conservation Element of the General Plan, September 16, 2001; pg II-57.*

IV. Environmental Impact Analysis

B. Aesthetics

1. Introduction

In 2013, the State of California enacted Senate Bill 743 (SB 743). Among other things, SB 743 adds Public Resources Code (PRC) Section 21099, which 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 (TPA) shall not be considered significant impacts on the environment." PRC Section 21099 defines a TPA as an area within one-half mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." PRC Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." PRC Section 21099 defines an infill site as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses. This state law supersedes the aesthetic impact threshold in the L.A. CEQA Thresholds Guide (Threshold Guide).

As discussed in detail in **Section II, Project Description,** of the Draft EIR, the Project includes demolition and removal of the existing 91,200-square-foot building, containing approximately 45,600 square feet of light-industrial/arts production space and 10 live/work units from the Project Site, and development of the Project Site with a single 12-story (148-foot tall) building containing 129 live/work condominium units (200,021 square feet), a 113-room hotel (97,850 square feet), and 72,469 square feet of commercial space to be used for art galleries (10,341 square feet), retail (26,979 square feet), restaurant (31,719 square feet), Artist CoLab (3,430 square feet), and associated parking.[1] Because the Project Site is located 0.5 miles south of the Metro Gold Line Little Tokyo/Arts District Station (refer to Figure II-3), which is defined as a Major Transit

[1] *"Artist CoLab" refers to a collaborative workspace for artists and business people to share ideas and transact business.*

Stop, the Project Site is situated within in a TPA as defined in PRC Section 21099.[2] Further, the Project Site is located in an urban area on a lot currently developed with an existing building.

On February 10, 2016, the City of Los Angeles (City) circulated Zoning Information File No. 2452 (ZI No. 2452) to clarify the locations of transit TPAs within the City and reaffirmed that aesthetic impacts shall not be considered a significant impact on the environment when the provisions of SB 743 apply (see **Appendix B** of the Draft EIR). Specifically, ZI No. 2452 states that visual resources, aesthetic character, shade and shadow, light and glare, and scenic vistas or any other aesthetic impact, as defined in the City's Threshold Guide, shall not be considered an impact for infill projects within TPAs pursuant to CEQA. A map of TPAs is attached to ZI No. 2452 in **Appendix B** of the Draft EIR. As shown on that map, the Project Site is within a TPA. Thus, for informational purposes only, this section includes an evaluation of Project-specific and cumulative impacts related to scenic vistas, scenic resources, visual character, light and glare, and shade/shadow.

2. Environmental Setting

a) Regulatory Framework

(1) Existing Zoning and Land Use Regulations

The Project Site is located within the Central City North Community Plan Area (CPA) and the Los Angeles River Improvement Overlay District (RIO). The Central North Community Plan (Community Plan) designates the Project Site for Heavy Industrial land uses. Chapter V, Urban Design, of the Community Plan sets forth policies and design standards for multi-family residential, commercial, and industrial development and for community design. The Citywide Design Guidelines for Residential and Commercial land uses have also been established by the Department of City Planning.

Further, the Project Site is zoned M3-1-RIO (Industrial) in the City's Planning and Zoning Code. The "1" associated with the zoning for the Project Site refers to Height District 1, which allows for a maximum floor area ratio (FAR) of 1.5:1 and has no set height limit restriction. The RIO designation references the zoning overlay, which addresses landscaping and other requirements for projects in proximity to the Los Angeles River. (The Project's consistency with the zoning and land use designations for

[2] *Each of these Metro bus routes provides service every 15 minutes (or less) during the peak commuter periods each weekday (Source: Metro LA Bus Route Maps, https://www.metro.net/riding/maps/; accessed September 27, 2017).*

the Project Site, including the height district and RIO overlay, is discussed in **Section IV.H, Land Use and Planning**, of the Draft EIR).

(a) Los Angeles Municipal Code

The Los Angeles Municipal Code (LAMC) Section 41.40 limits construction hours of operation to between 7:00 A.M. and 9:00 P.M. on weekdays and between 8:00 A.M. and 6:00 P.M. on Saturdays and national holidays, with no construction permitted on Sundays.

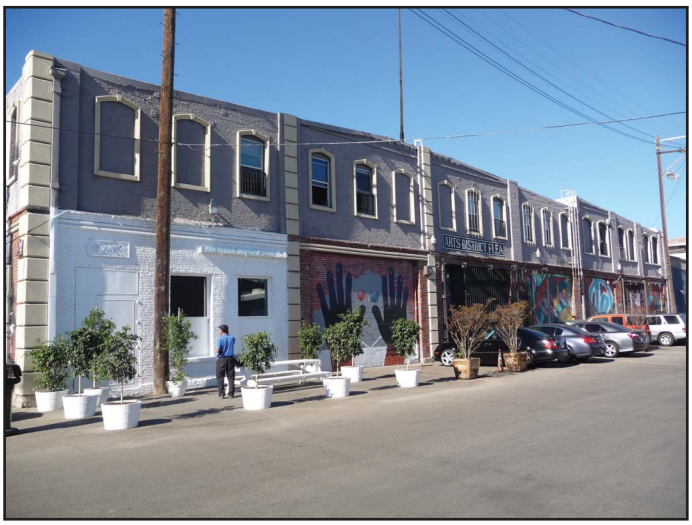
b) Existing Conditions

(1) Project Site

The approximately 1.05-acre Project Site, located on the north side of 5th Street between Seaton Street and Colyton Street, is developed with an approximately 91,200-square-foot, two-story brick building that contains approximately 45,600 square feet of light industrial arts-oriented space and 10 live/work units. The building is constructed flush with adjacent off-site buildings so that the frontages along both Colyton and Seaton Streets are unbroken. The building covers the entirety of the Project Site and is bordered on its north side by adjacent arts, industrial, and warehousing businesses. The existing building was built in approximately 1915 and is approximately 103 years old. The building contains multiple individual tenants on the lower floor, each with individual entrances and windows facing onto 5th Street, Seaton Street, and Colyton Street. The second floor, which contains the live/work units, also includes street facing windows, although several are bricked-over or otherwise non-functional. There is no vehicle parking on the Project Site, but perpendicular street parking is available on the three streets adjoining the existing structure (5th Street, Seaton Street, and Colyton Street). Figures IV.B-1 through IV.B-4 include views of the Project Site as it presently exists.

The existing building on the Project Site was constructed as an industrial property in a vernacular style. The building is rectangular in plan with exposed elevations facing west towards Seaton Street, south towards E. 5th Street, and east towards Colyton Street. Its front facade (south) is oriented toward 5th Street. The south elevation is organized into 12 bays, each consisting of varying numbers and sizes of predominantly segmental arched openings ornamented by glass fiber reinforced concrete (GFRC) surrounds and keystones. There are several entries on the first floor along the west, south, and east elevations.

There is no natural open space or landscaping on the Project Site, other than potted plants. There are no protected trees or rock outcroppings on the Project Site. The Project Site exhibits little topographic relief with no slopes or hillsides and no scenic views in the immediate vicinity.



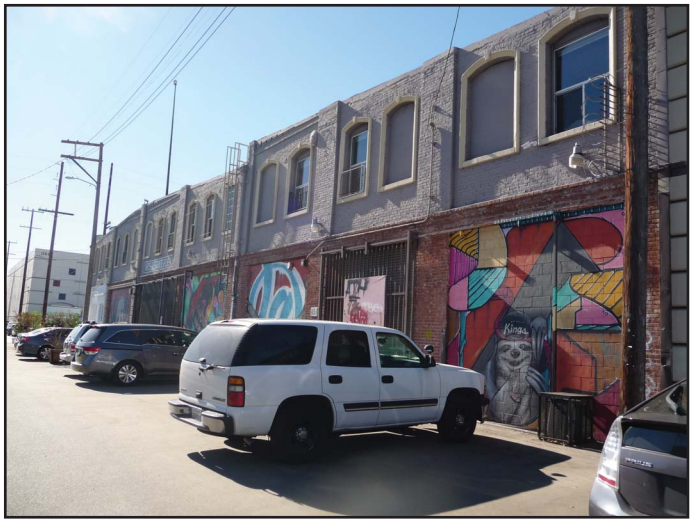
View 1: View looking north at the southeast corner of the Project Site along Colyton Street.



View 2: View looking north on Colyton Street.



View 3: View looking northwest along Colyton Street toward the northeast corner of the Project Site.



View 4: View looking south on Colyton Street toward the northeast corner of the Project Site.



View Location Map

Figure IV.B-1
Views of the Project Site, 1-4

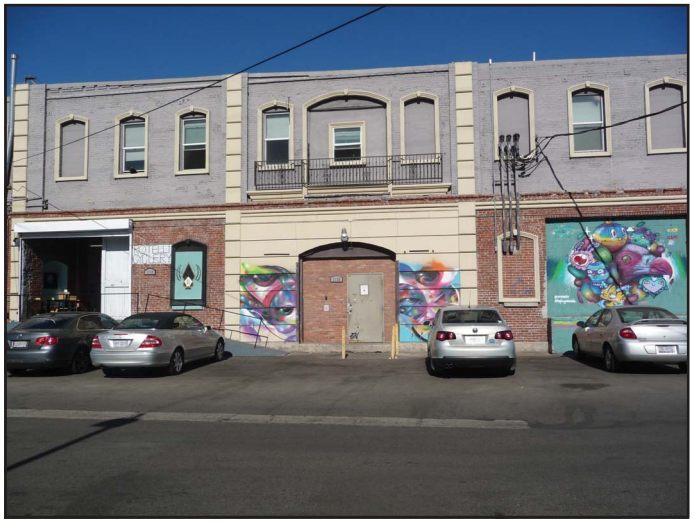
Source: CAJA Environmental Services LLC, 2016.



View 5: View looking west on 5th Street.



View 6: View looking northwest along 5th Street at the south portion of the Project Site.



View 7: View looking north on 5th Street at the south portion of the Project Site.



View 8: View looking northwest on 5th Street at the south portion of the Project Site.



View Location Map

Figure IV.B-2
Views of the Project Site, 5-8

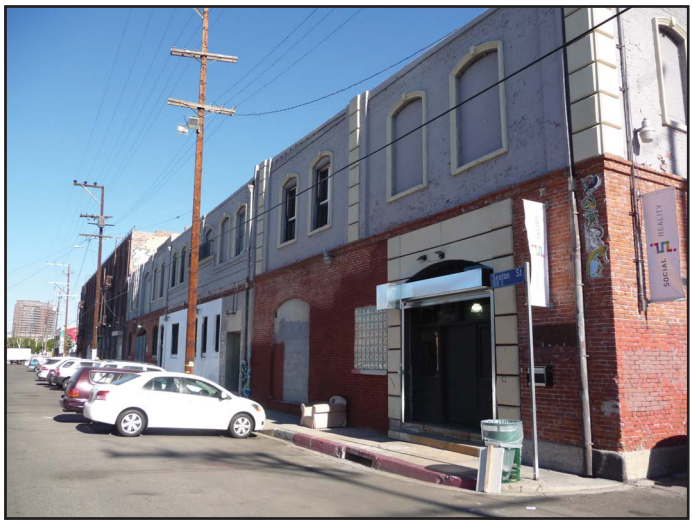
Source: CAJA Environmental Services LLC, 2016.



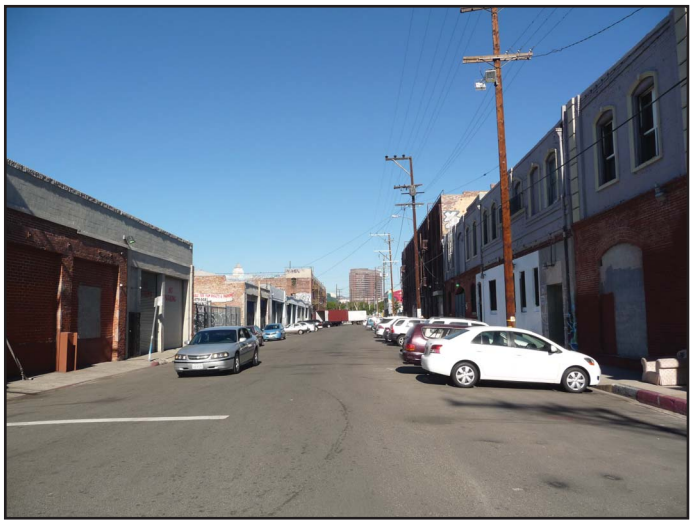
View 9: View looking northwest on 5th Street at the southwest corner of the Project Site.



View 10: View looking north on Seaton Street at the southwest corner of the Project Site.



View 11: View looking north of Seaton Street at the west portion of the Project Site.



View 12: View looking north on Seaton Street.



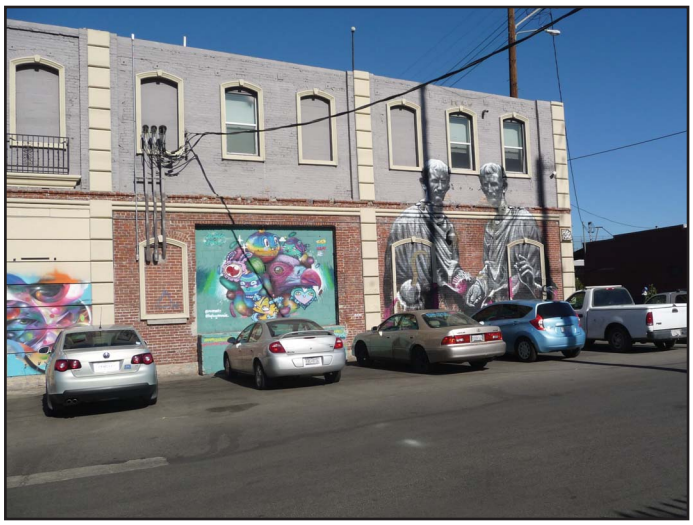
View Location Map

Figure IV.B-3
Views of the Project Site, 9-12

Source: CAJA Environmental Services LLC, 2016.



View 13: View looking southeast on Seaton Street at the west portion of the Project Site.



View 14: View looking northeast on 5th Street at the southeast corner of the Project Site.



View Location Map

Figure IV.B-4
Views of the Project Site, 13,14

Source: CAJA Environmental Services LLC, 2016.

Although the existing building is not historic in and of itself, it has been identified as contributing to the potential Downtown Los Angeles Industrial Historic District. (For a detailed discussion of this District and the historic contributions of the existing building on the Project Site, see **Section IV.D, Cultural Resources**, of this Draft EIR).

(2) Surrounding Area

The area surrounding the Project Site is generally characterized by its industrial character, with a concentration of current and former warehouse and manufacturing buildings located along 5th Street, Alameda Street, Seaton Street, and Colyton Street. Loft residential buildings, more recent in construction and some converted former industrial structures, are scattered through the neighborhood, with the nearest being located on 4th Street to the north of the site and Hewitt Street, one block to the east. The Arts District Park, an approximately half-acre passive use neighborhood park, is also located one block east of the Project Site at the southwest corner of 5th Street and Hewitt Street. The Arts District area within which the Project Site is located is currently undergoing recent and continuing construction of new residential and mixed-use developments as well as the conversion of shuttered and/or underutilized industrial or warehouse buildings to lofts and live/work flats. Although this transition has been occurring over the past two decades, it has become more pronounced within the past five years. Photographs of the land uses surrounding the Project Site are provided in Figures III-2 through III-6 in **Section III, Environmental Setting**, of the Draft EIR.

The Project Site is immediately surrounded by a mix of industrial, gas station, residential, and commercial uses contained in low-rise and mid-rise buildings of widely varying ages and are physically separated from the Project Site by streets, with the exception of the buildings located directly adjacent to the north of the Project Site. The closest recognizable residential uses to the Project Site are the five-story Beacon Lofts, located approximately one block northeast of the site at 825 E. 4th Street, and the four-story Barker Block Lofts, approximately one block east of the site at 530 Hewitt Street. However, some loft spaces as close as 50 feet to the Project Site may be used for residential purposes. To the southeast (corner of 5th Street and Hewitt Street), there is a restaurant (The Chairman), next to a tow service parking lot and the new half-acre Arts District Park. The park sits immediately north of the La Kretz Innovation Campus, a 60,000-square-foot facility. Across 5th Street to the north of the park is Urth Caffè, which includes outdoor sidewalk eating along its southern and eastern frontages.

The Project Site is immediately bordered by adjacent industrial properties to the north, Colyton Street to the east, 5th Street to the south, and Seaton Street to the west. Specifically, the adjoining parcels are developed as follows:

- North: immediately adjacent (and flush with the building on the Project Site) is a three-story warehouse hosting an event space and creative business offices, and two one-story warehouses hosting commercial uses.

- South: across 5th Street, is located, from east to west, a surface asphalt parking lot associated with a four-story warehouse/office building (fronting on Colyton Street), another gated surface paved parking lot, and a single-story stucco industrial office building at the corner of 5th Street and Seaton Street.

- East: across Colyton Street are single-story industrial and/or warehouse buildings (including one live/work unit) with associated gated surface parking and exterior shed facilities.

- West: across Seaton Street is located a single-story brick retail establishment with associated gated surface parking. Immediately to the south of this building (across 5th Street and catty-corner from the Project Site) is a commercial truck fueling station operated by Valero.

(3) Scenic Resources

No officially designated or eligible State-designated scenic highways are located adjacent to, or within view of, the Project Site.[3] The Project Site does not contain any rock outcroppings or designated historic buildings or any recognized scenic resources within the immediate area.

(4) Existing Viewsheds

Viewsheds refer to the visual extent of a geographical area that is defined by the horizon, topography, and other natural features that give an area its visual boundary and context. Viewsheds may also be defined by development that has become a prominent visual component of the area. In the area surrounding the Project Site, the existing viewsheds are defined primarily by the adjacent industrial, manufacturing, residential, and transportation-oriented (streets, rail lines) land uses along Alameda Street, 5th Street, Seaton Street, and Colyton Street.

Public views are those which can be seen 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 that can be seen from vantage points located on private property. The City's Threshold Guide emphasizes publicly accessible views.

[3] *California Scenic Highway Mapping System, Los Angeles County, website: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/, accessed September 2017.*

(5) Views from the Project Site

The Project Site and surrounding areas are characterized by dense urban development, with obstructed views of the distant San Gabriel Mountains and Elysian/Mt. Washington hills toward the north. The topography of the Project Site and surrounding area are relatively flat. As a result, the Project Site provides limited views of the surrounding low-rise industrial, commercial, and residential land uses. Views from the Project Site east to the Los Angeles River are blocked by intervening urban development, and the river itself is at the bottom of a concrete flood control channel and would thus not be visible from the site regardless.

Existing views toward the east of the Project Site across Colyton Street consist primarily of the industrial buildings on the east side of Colyton Street (see Views 3 and 4 in Figure III-2) and the more distant four-story Barker Block Lofts one block to the east, which block views to the horizon (see Views 5 and 6 in Figure III-3). Existing views toward the north of the Project Site are limited by the adjacent industrial and warehouse buildings located immediately adjacent to the building on the Project Site. Views to the north along Seaton and Colyton Streets are generally limited to the industrial properties in the remainder of the block north to 4th Street (see Figures III-2 and III-3), although the more distant high-rise tower of the Roybal Federal Building at 955 E. Temple Street is clearly visible, as is the very top of City Hall. Existing views to the south consist of the loading bays and concrete parking lot of the warehousing facility at 1168 E. 5th Street, a high fence surrounding a concrete parking lot, and the vacant single story industrial building at the southeast corner of Seaton and 5th Streets (see Figures III-3, III-5, and III-6). Finally, existing views to the west of the Project Site include views of the adjacent row of single-story industrial buildings and associated gated asphalt parking lots along the west side of Seaton Street, some of which have colorfully painted roll-up garage doors opening directly onto the street. At ground level, views west of the Downtown skyline are not generally available, although the tops of some of the tallest buildings in Downtown Los Angeles are visible from 5th Street near the southwest corner of the Project Site (see Figure III-4).

(6) Views of and Toward the Project Site

Photographs of the Project Site are provided in Figures IV.B-1 through IV.B-4. Public views of and toward the Project Site are available from 5th Street, Colyton Street, Seaton Street, Alameda Street, 4th Street, and Hewitt Street. Vehicles and pedestrians traveling along these roadways have views of the Project Site, although the views from Alameda and 4th Streets are very limited due to intervening buildings.

(7) Scenic Vistas

As described in the City's Thresholds Guide, panoramic views or vistas provide visual access to a large geographic area, for which the field of view can be wide and extend into the distance. Panoramic views are usually associated with vantage points looking out over a section of urban or natural area, which provide a geographical orientation not commonly available. Examples of panoramic views might include an urban skyline, valley, mountain range, the ocean, or other water bodies. As discussed in greater detail below, there are no scenic vistas or scenic vista viewpoints to the east, north, south, or west of the Project Site. From the northeast, the 4th Street Bridge provides a location from which a scenic vista of the Los Angeles River corridor and downtown Los Angeles skyline is available to vehicular and pedestrian traffic. However, due to intervening development, the Project Site is not visible from the 4th Street Bridge under existing conditions.

3. Project Impacts

a) Methodology

The analysis of aesthetics identifies the uses in the surrounding area as well as any views in the Project vicinity. The analysis describes the ways in which the Project would alter the existing visual character of the surrounding area, and the extent to which the Project would block any public views or scenic vistas in the vicinity. The discussion includes an analysis of the Project's height, massing, and design components.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), a project could have a significant impact related to aesthetics if it would do the following:

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

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

(c) Substantially degrade the existing visual character or quality of the site and its surroundings; or

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

(2) 2006 L.A. CEQA Thresholds Guide

The City's 2006 L.A. CEQA Thresholds Guide (Threshold Guide) identifies the following criteria to evaluate aesthetics:

(a) Aesthetics

- *The amount or relative proportion of existing features or elements that substantially contribute to the valued visual character or image of a neighborhood, community, or localized area, which would be removed, altered, or demolished;*
- *The amount of natural open space to be graded or developed;*
- *The degree to which proposed structures in natural open space areas would be effectively integrated into the aesthetics of the site, through appropriate design, etc.;*
- *The degree of contrast between proposed features and existing features that represent the area's valued aesthetic image;*
- *The degree to which a proposed zone change would result in buildings that would detract from the existing style or image of the area due to density, height, bulk, setbacks, signage, or other physical elements;*
- *The degree to which the project would contribute to the area's aesthetic value; and*
- *Applicable guidelines and regulations.*

(b) Obstruction of Views

- *The nature and quality of recognized or valued views (such as natural topography, settings, man-made or natural features of visual interest, and resources such as mountains or the ocean);*
- *Whether the project affects views from a designated scenic highway, corridor, or parkway;*
- *The extent of obstruction (e.g., total blockage, partial interruption, or minor diminishment); and*
- *The extent to which the project affects recognized views available from a length of a public roadway, bike path, or trail, as opposed to a single, fixed vantage point.*

(c) Shading

- *If shadow-sensitive uses would be shaded by project-related structures 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).*

(d) Nighttime Illumination

- *The change in ambient illumination levels as a result of project sources; and*
- *The extent to which project lighting would spill off the project site and affect adjacent light-sensitive areas.*

In assessing impacts related to aesthetics and visual character in this section, the City uses Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide are used where applicable and relevant to assist in analyzing the Appendix G thresholds.

c) Project Design Features

The following Project Design Features (PDFs) are proposed as part of the Project related to aesthetics:

AES-PDF-1 All mechanical and electrical equipment that is located on the rooftops will be screened from public view.

AES-PDF-2 Utility equipment will be placed underground, screened from public view, or incorporated into the design of the Project.

AES-PDF-3 The Project will include security lighting. Lighting associated with the Project will be directed downward or toward the interior of the Project Site. All exterior residential lighting will be designed with internal and/or external glare control and will be designed, arranged, directed, or shielded to contain direct illumination on-site, thereby preventing excessive illumination and light spillover onto adjacent land uses and/or roadways.

AES-PDF-4 The exterior of the proposed structures will be constructed of materials such as, but not limited to, high-performance and/or non-reflective tinted glass (no mirror-like tints or films), brick, and metal to minimize glare and reflected heat. The exterior artwork on the residential portion of the Project will not utilize highly reflective materials.

AES-PDF-5 Tenant signs for the ground-floor retail and restaurant uses will not include blinking, flashing, or oscillating lights.

d) Analysis of Project Impacts

Threshold (a) ***Would the project have a substantial adverse effect on a scenic vista?***

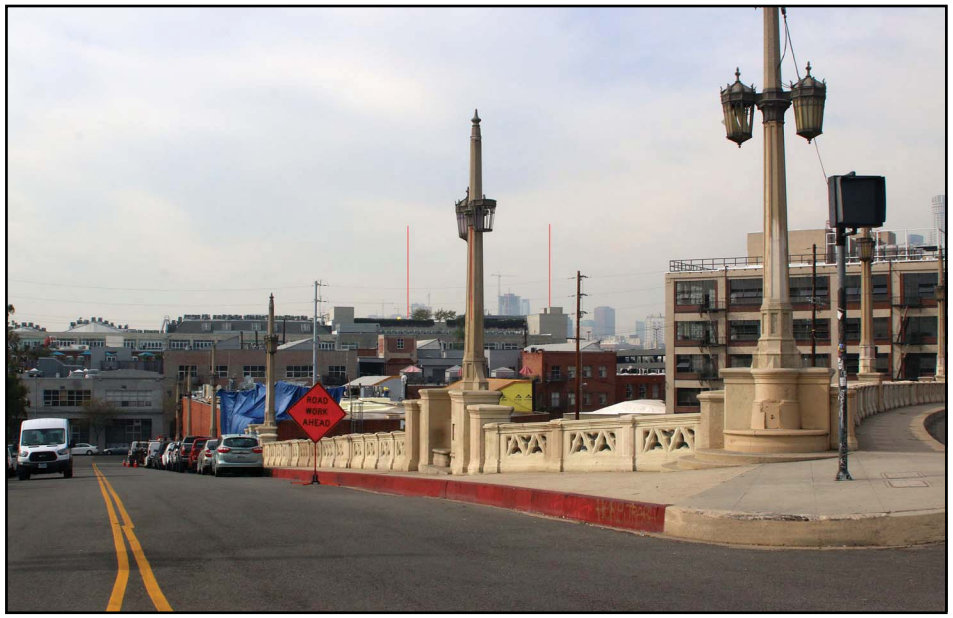
(1) Impact Analysis

(a) Construction

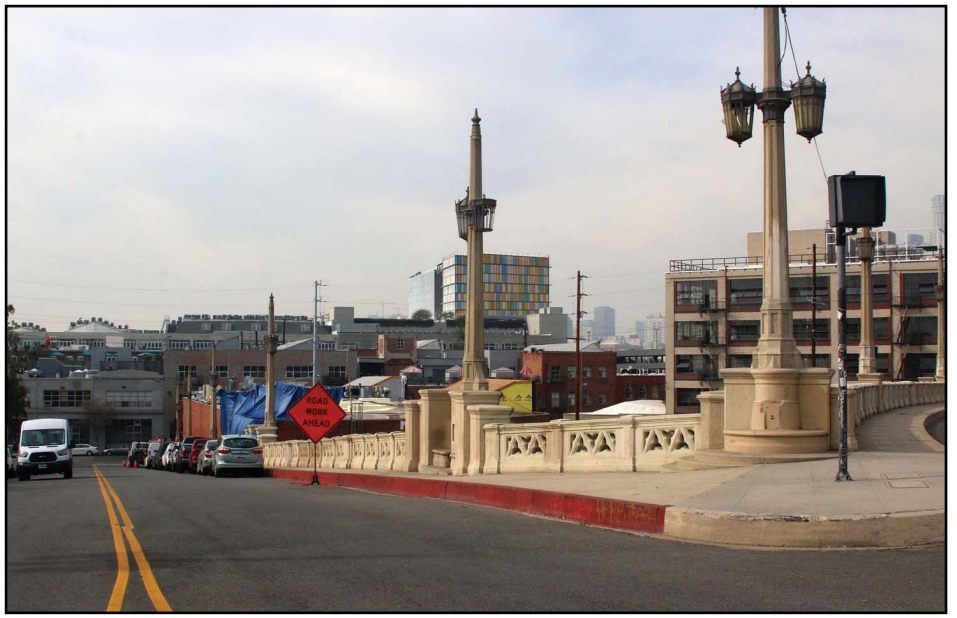
Construction activities associated with the Project would not substantially affect existing scenic vistas of the Downtown skyline because no scenic vistas are available from the Project area. The Project Site and surrounding area are characterized by dense urban development, and the construction activities associated with development of the Project would not substantially alter existing views available in the area. Impacts with respect to scenic vistas would be less than significant.

(b) Operation

The Project would increase building heights on the Project Site by approximately 110 feet when compared to existing conditions. However, it would not substantially affect existing scenic vistas of the Downtown skyline because no scenic vistas are available from the Project Site area. The elevated 4th Street Bridge over the Los Angeles River provides the most prominent location in the Project Site area from which the Downtown skyline can be seen. A comparison of current and potential future views toward the Project Site from the 4th Street bridge is shown in Figure IV.B-5. As shown, much of the Downtown skyline is obscured from view by existing development from this location, and the view from the bridge does not constitute a scenic vista. Although the Project would add additional development to the view from the bridge, because the view is not considered scenic, the Project would not result in a significant impact to the view from the bridge.



Before



After



Simulation viewshed

Figure IV.B-5
Simulation of Project from 4th Street Bridge

The Project Site and surrounding area are characterized by dense urban development. Due to the presence of existing industrial buildings, views toward the San Gabriel Mountains and Elysian Hills/Mount Washington to the north are currently largely obstructed. The Project Site is not visible from publicly accessible locations at ground level along the Los Angeles River due to intervening development, and development of the Project would not affect ground-level views from this locale. **Therefore, no significant impacts related to scenic vistas would occur with development of the Project during either construction or operation of the Project.** Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(2) Mitigation Measures

No significant impacts related to scenic vistas have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to scenic vistas would not be significant, pursuant to SB 743 and ZI 2452.

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

(1) Impact Analysis

A significant impact would occur only where scenic resources would be damaged or removed by the Project within a state-designated. The Project Site does not contain trees with scenic significance or rock outcroppings and is not located within a state scenic highway.[4] **Therefore, no significant impacts would occur with respect to scenic resources within a state scenic highway**. No mitigation measures are required. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(2) Mitigation Measures

No significant impacts related to scenic resources within a designated scenic highway have been identified. Thus, no mitigation measures are required.

[4] *California Scenic Highway Mapping System, Los Angeles County: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/.*

(3) Level of Significance After Mitigation

Impacts related to scenic resources would not be significant, pursuant to SB 743 and ZI 2452.

Threshold (c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

(1) Impact Analysis

(a) Visual Character

According to the Thresholds Guide, given the size and diversity of the City, including an extraordinary range of aesthetic characteristics and contrasts, there are no aesthetic standards that apply to all areas. Thus, the Thresholds Guide defers to LAMC, community plans, and other applicable local land use plans for specific guidelines and requirements related to aesthetics. Nonetheless, the discussion below summarizes the information contained in the Thresholds Guide with respect to aesthetics that provides guidance for evaluating changes in visual character and quality.

According to the Thresholds Guide, aesthetic impact assessments should generally address the issue of visual contrast, or the degree to which elements of the environment differ visually. Visual contrast concerns elements such as form, line, color, and texture. The introduction of contrasting features or development into aesthetically valued urban areas can overpower familiar features, eliminate context or associations with history, or create visual discord where there have been apparent efforts to maintain or promote a thematic or consistent character.

The paragraphs below discuss the changes to the visual character of the Project Site as a result of the proposed redevelopment as compared to the existing characteristics of the Project Site and the surrounding area.

(i) Construction

The visual character and quality of the Project Site would be altered during construction due to the removal of the existing building. Other construction activities, including site preparation, grading, and excavation, the staging of construction equipment and materials, and the construction of the building foundation and proposed structure, would also alter the visual character and quality of the Project Site and adjacent roadways. The Project's construction activities could be visible to pedestrians and motorists, as well as to viewers within nearby buildings. The Project would install temporary construction fencing that would screen much of the construction activity from view at street level. Overall, while the construction of the Project would alter the visual character

of the Project area on a short-term basis, construction activities would not substantially alter or degrade the existing visual character of the Project Site for the following reasons: (1) views of construction activities would be limited in duration and location; (2) the Project Site appearance would be typical of construction sites in urban areas; (3) construction would occur within an urban setting with a high level of human activity and development; and (4) impacts would be reduced through standard best management practices (BMPs) implemented during the construction period. **Therefore, aesthetic impacts during construction would be less than significant.** Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(ii) Operation

(a) Architecture and Urban Design

The Project would replace the existing industrial building and would install sidewalks along the three street frontages of the Project Site. The portion of the Arts District surrounding the Project Site can be characterized as an eclectic assortment of differing building vintages and architectural motifs. While, at one time, the area could have been characterized as largely industrial and manufacturing in orientation, this has not been true for some time, as residences, retail shops, arts-oriented businesses and facilities, and restaurants/cafes have replaced some older uses either through the renovation of original structures or their demolition and replacement with more contemporary architectural styles. The Project would continue this trend of recycling older industrial properties and replacing the existing industrial buildings in the area with contemporary structures.

At the street level, the Project is designed to be pedestrian-oriented, maintaining a strong street wall, with distinct entrances, commercial glass storefronts, and an art plaza (1,500 square feet) on the southwest corner (corner of 5th and Seaton Streets) that creates a flexible open space for pedestrians. The Project is designed to promote pedestrian activity by offering retail and restaurant opportunities at the ground level, as well as movable and fixed outdoor furniture and an outdoor dining area along the sidewalk at the southeast corner (corner of 5th and Colyton Streets).

In order to promote a human-scale building design, the first two stories of the proposed building (the "base" of the building) would be of similar height and architecture to the buildings adjacent to and near the Project Site and would be constructed with red brick and metal materials, rectilinear lines, and pilasters and awnings along the western, southern, and eastern façades. Additionally, at the third level above the street, the Project would step back, allowing space for a partially landscaped terrace surrounding the building. Glass roll-up doors would allow visitors to physically and visually access

the terrace from the gallery space. On the hotel side (i.e., eastern portion of the Project Site along Colyton Street), the building design would grant additional space for a hotel terrace (3,200 square feet) with outdoor seating furniture. Glass guardrail would surround the Project's rooftop, along with landscaping designed to create a protected rooftop deck for the pool area, the rooftop restaurant, the roof garden and the outdoor event space.

The Project incorporates traditional storefront elements and includes materials, such as durable red bricks, metal panels and metal awnings. To keep the building visually interesting and define the spaces when looking from the street, the Project would provide residential windows that visually delineate human-scale spaces. The residential part of the building would also be covered by printed panels with contemporary urban artwork (mural) on the south, west and north façades. This external skin would be designed to improve the building's appearance and to illustrate the importance of creative art expression for the neighborhood.

The Project would contribute to the community aesthetic by incorporating artistic motifs into the design of the building's exterior and interior spaces. The hotel part of the building would have a continuous window wall façade, featuring a pastel color palette. The building would also provide a large covered entrance ("porte-cochere"), opening to an entry plaza and a double-height ceiling atrium. The porte-cochere would break the building massing by providing wide façade openings on both Colyton Street and 5th Street and creating a series of spaces at the ground level. All mechanical and electrical equipment that is located on the rooftop would be screened from public view and utilities would be either placed underground or otherwise shielded from public view (included as Project Design Features AES-PDF-1 and AES-PDF-2 as presented above).

The Project would replace an aged industrial building with a contemporary live/work and boutique hotel mixed-use development with ground floor commercial retail and restaurant spaces, artist-oriented facilities, and an exterior art plaza, with publicly accessible open space amenities and enhanced landscaped features built to current codes and development standards. Due to the mix of architectural styles within the Project Site vicinity, along with the architectural design of the Project, the Project would not degrade the existing visual character or quality of the site or its surroundings due to changes in architecture or urban design. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(b) Height and Massing

The height and massing of the proposed building is illustrated in Figures II-17 through II-22 in **Section II, Project Description**, of the Draft EIR. As shown, the 12-story structure would reach a height of 148 feet above street level. The façade and massing of the

building are designed to differentiate the uses and to add interest and dimension. The bottom two levels are characterized by brick veneer, glass, and steel, reminiscent of the existing structure. The western portion of the building containing the live/work units is differentiated by height and materiality from the eastern portion of the building containing the hotel. The building's height would be constant across the Project Site.

No existing buildings in the immediate vicinity of the Project Site are of a height comparable to that being proposed for the Project, although proposals for buildings of a similar or greater height for the Arts District have been submitted to the City (see discussion under "Cumulative Impacts" below). The Project is proposing to use Type I construction.[5] The Project also complies with the guidelines for façade transparency, among other standards. Graphically cementing the concept of art as a unifying theme, the entire Project is to be wrapped in art murals that would be commissioned and executed by a known artist. This feature is intended to create a sense of place in the heart of the Arts District, particularly given the Project's 12-story height.

While the height of the Project would be greater than the current conditions, the architectural details and art mural wrapping would provide façade relief and would include landscaping to provide visual variety and relief. Visual massing is further diminished through the use of landscaped public gathering spaces and the third level terrace throughout the Project (see landscape plans in Figures II-23 through II-25).

The Project's proposed building height and massing would represent a change in the visual character of the Project Site as compared to existing conditions and would introduce new visual elements to the Project Site vicinity. However, considering the existing visual character of the Project Site and the continuing transformation of the surrounding Arts District, the architectural detail, building configuration, and design that would be constructed with development of the Project, the Project's height and massing would not be considered as detracting from the existing eclectic, creative style or image of the area.

Therefore, the Project would not substantially degrade the existing visual character or quality of the Project Site or its surroundings due to changes in height or massing. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(c) Signage

The Project's design would allow opportunities for signage to be integrated with the architecture of the building and contribute to an articulated storefront character. The Project's signage would be consistent within the Project as it relates to shape, size,

[5] *Type 1 structures are constructed of concrete and steel coated with a fire-resistant material.*

color, height, and lettering. Exterior Project and tenant signage would consist of identity, wayfinding, and commercial signs in compliance with LAMC provisions. Therefore, there would be no potential visual character impacts related to signage. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(d) Landscaping and Open Space

The Project would provide residential open space in excess of LAMC requirements. Based on the number of units and the mix of unit types, 16,275 square feet of open space is required, and a total of 22,500 square feet of open space would be provided. Additionally, a 1,500-square-foot covered "Art Plaza" would be provided at the corner of Seaton and 5th Streets. The "Art Plaza" would have interactive/kinetic paving and a sculpture/public art piece and would be designed to encourage social gathering, create an access point to the retail uses in the Project, and contribute to the comfort and character of the Project for pedestrians and visitors.

The intention of the landscape design is to create a pedestrian-friendly environment, which includes shade trees and landscaping along the street. The proposed mixed-use building would provide landscaped areas at the ground level, third level, and the roof terrace level. The landscaping for the Project Site would include both native and adaptive native plant materials, as illustrated on Figures II-23 through II-25. The Project would also provide street trees in excess of LAMC requirements. Additionally, the Project would provide sidewalk planters and sidewalk benches.

The River Improvement Overlay (RIO) District is designed to provide for preservation of tributaries and rivers in the City of Los Angeles by promoting river identity, supporting local species, and convenient access. Because the Project involves the redevelopment of the Project Site, administrative clearance from the Department of City Planning illustrating compliance with the RIO landscaping and design standards is required. The landscaping proposed for the Project has been designed to comply with the design standards identified in the RIO.

Neither the existing building on the Project Site nor the surrounding existing developments currently provide comparable amounts of landscaping and open space as would be provided by the Project. There is very little landscaping or green space within the vicinity of the Project Site, with the Arts District Park one block to the east representing a notable exception. As such, the proposed landscaping and open space would complement the visual character of the Project Site and surrounding area, and no adverse impacts would occur. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(e) Consistency with City Design Guidelines

The Project complies with the Commercial and Residential Citywide Design Guidelines. The Citywide Design Guidelines serve to implement the Urban Design Principles, a part of the Framework Element of the City's General Plan. These principles are a statement of the City's vision for the future of Los Angeles, providing guidance for new development and encouraging projects to complement existing urban form in order to enhance the built environment in Los Angeles.

(f) Views and Viewsheds

As discussed previously in this section (see "Environmental Setting"), no officially designated or eligible State- or City-designated scenic highways are located adjacent to, or within view of, the Project Site.[6] Furthermore, there are no important views available from the Project Site or its surroundings. The Project Site and the surrounding area are characterized by dense urban development. Due to existing commercial buildings, views toward the San Gabriel Mountains and Elysian Hills/Mount Washington to the north are currently partially obstructed. The Los Angeles River is not visible from the Project Site or surrounding vicinity. Therefore, the Project would not degrade the existing visual character or quality of the Project Site or its surroundings due to changes in views or viewsheds. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(g) Consistency with Applicable Policies

Section IV.H, Land Use and Planning, of the Draft EIR contains a consistency analysis of the Project with applicable land use policies and regulations that are also relevant to this analysis. As discussed in **Section IV.H**, the Project would be generally consistent with the policies contained in the Central City North Community Plan (see Table IV.H-5) and also the design policies contained in Chapter V of the Community Plan related to multi-family residential and commercial uses (see Table IV.H-6). As such, the Project would result in no impact related to applicable policies and regulations relating to aesthetics or views. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(h) Shade/Shadow

The issue of shade and shadow pertains to the blockage of direct sunlight by Project buildings, which may affect adjacent shadow-sensitive uses. Shading is an important

[6] *Citywide General Plan, Circulation System, Map A7 – Central Cornfield Arroyo Seco Subarea; Mobility Plan 2035, City of Los Angeles, 2016.*

environmental issue because the users or occupants of certain types of land uses have some reasonable expectations for direct sunlight and warmth from the sun.

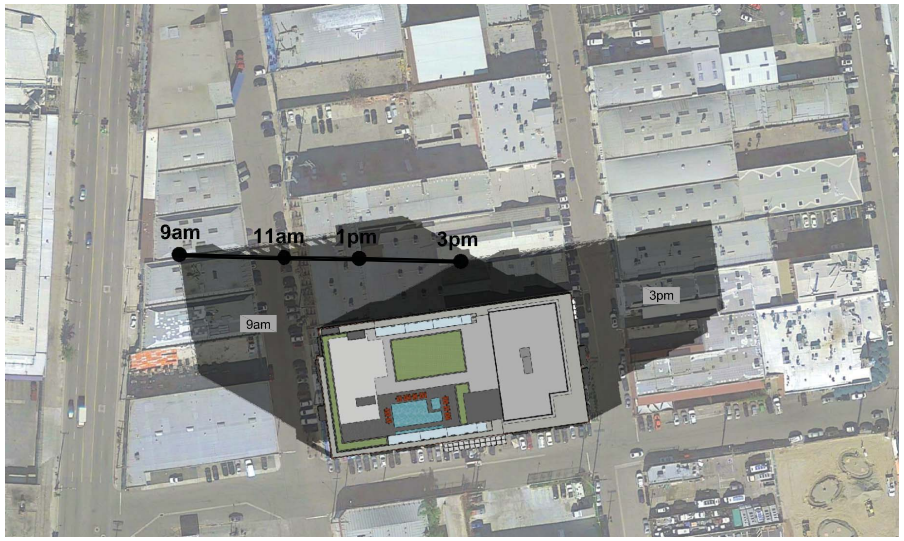
Shadow lengths are dependent on the height and size of the building from which they are cast and the angle of the sun. The angle of the sun varies with respect to the rotation of the earth (i.e., time of day) and elliptical orbit (i.e., change in seasons). The longest shadows are cast during the winter months, and the shortest shadows are cast during the summer months.

"Solstice" is defined as either of the two points on the ecliptic (i.e., the path of the earth around the sun) that lie midway between the equinoxes (separated from them by an angular distance of 90°). At the solstices, the sun's apparent position on the celestial sphere reaches its greatest distance above or below the celestial equator, about 23 1/2° of the arc. At winter solstice, about December 22nd, the sun is overhead at noon at the Tropic of Capricorn; this marks the beginning of winter in the Northern Hemisphere. At the time of summer solstice, about June 22nd, the sun is directly overhead at noon at the Tropic of Cancer. In the Northern Hemisphere, the longest day and shortest night of the year occur on this date, marking the beginning of summer. Measuring shadow lengths for the winter and summer solstices represents the extremes of the shadow patterns that occur throughout the year. Shadows cast on the summer solstice are the shortest shadows during the year, becoming progressively longer until winter solstice when the shadows are the longest they are all year.

Shadows are shown in Figure IV.B-6 for the winter solstice and summer solstice, cast from 9:00 AM to 3:00 PM (winter) and 9:00 AM to 5:00 PM (summer), as well as for the spring and autumn equinoxes, the periods that are midway between the solstices, cast from 9:00 AM to 3:00 PM.

Facilities and operations sensitive to the effects of shading include: routinely useable outdoor spaces associated with residential, recreational, or institutional (e.g., schools, convalescent homes) land uses; 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 function, physical comfort, or commerce.[7]

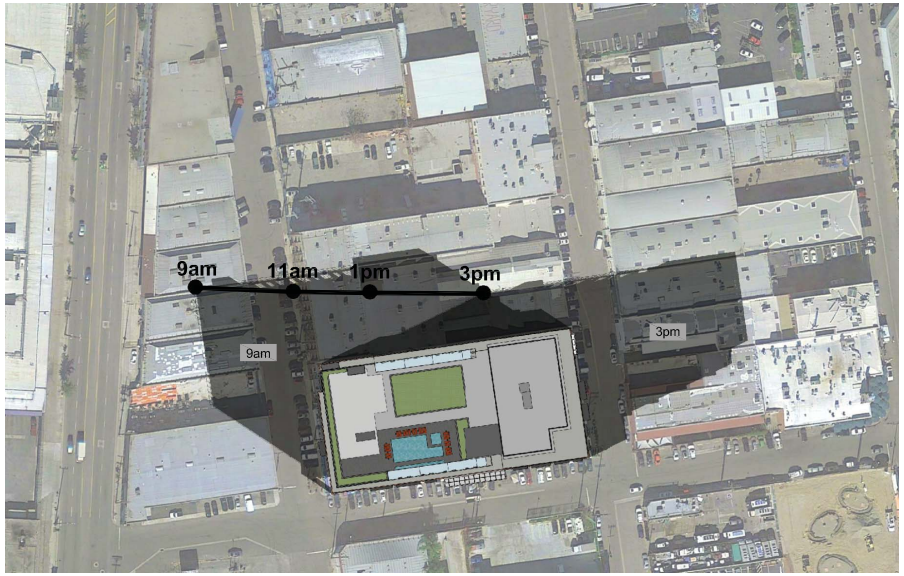
[7] *L.A. CEQA Thresholds Guide, 2006, section A.3 Shading.*



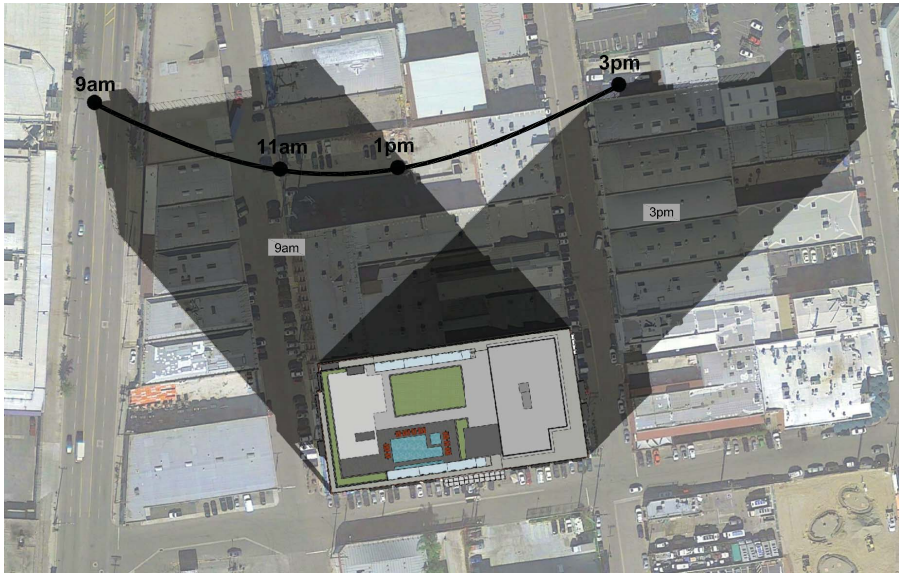
March 22 (Spring Equinox) 9am - 3pm



June 22 (Summer Solstice) 9am - 5pm



September 22 (Autumn Equinox) 9am - 3pm



December 22 (Winter Solstice) 9am - 3pm

Figure IV.B-6
Project Shadow Impacts

The closest shadow-sensitive uses to the Project Site are the outdoor spaces associated with The Chairman restaurant on the southeast corner of the intersection of 5th Street and Colyton Street (these spaces are covered by an exterior awning and umbrellas and, therefore, are normally shaded), the Arts District Park at the southwest corner of 5th Street and Hewitt Street, outdoor café seating along the sidewalks adjacent to Urth Caffè on the northwest corner of 5th Street and Hewitt Street, and exterior residential balconies and rooftop pool areas at the Beacon Lofts and Barker Block Lofts, respectively. It should also be acknowledged that there are numerous other live/work loft spaces and dwelling units in the vicinity of the Project Site that are difficult to identify because they are not outwardly recognizable or visible from exterior locations. The nearest such identifiable dwellings are located within approximately 50 feet of the Project Site. However, very few if any of these residences contain exterior private spaces that would be sensitive uses with respect to shading.

According to the Thresholds Guide, a shadow impact is considered significant if shadow-sensitive uses would be shaded by project-related structures 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).

Shadow effects are dependent on several factors, including local topography, the height and bulk of a project's structural elements, sensitivity of surrounding uses, season, and duration of shadow projection. In determining the effects of shading, the locations of sensitive uses (such as residential uses and recreational areas) in the surrounding area are identified and the shading effects are considered according to standard criteria. Impacts are determined according to the proposed building heights and the distance from the light obstructing structures to the sensitive use. Because shadows are at their most extreme lengths on the summer and winter solstices, those dates have been used in this analysis to determine the significance of Project shading impacts.

(i) Summer Project Shadows

As shown in Figure IV.B-6, the Project would cast shadows to the west at 9:00 AM on the summer solstice. These shadows would cross Seaton Street and cover the nearest portion of the industrial buildings along the west side of Seaton Street. At 12:00 PM on the summer solstice, the Project would cast very minimal shadows to the north, barely extending beyond the perimeter of the Project Site, but shadows would begin to extend to the south, across 5th Street and onto the surface parking lot at the southwest corner of Colyton Street and 5th Street. At 3:00 PM on the summer solstice, the Project would cast shadows to the southeast, shading the portion of Colyton Street from the Project's north edge south across the 5th Street intersection and into a small portion of the block

south of 5th Street. Most of 5th Street between Colyton and Hewitt Streets would also be in the Project's shadow from 4:00 PM onward.

Although most of the properties in this area consist of industrial or commercial uses, portions of identified shadow-sensitive uses namely The Chairman Restaurant, the Arts District Park, and the exterior sidewalk dining spaces at Urth Caffè would be shaded by the Project during this mid- to late-afternoon period. Although these are shade-sensitive uses, the duration of the Project's shadow impact at each location would be less than four hours between 9:00 AM and 5:00 PM. Further, Project shading would not extend to the Barker Block Lofts at any time of the day. It should also be noted that some of these spaces are currently shaded during portions of the day by existing development; the presence of the Project would simply extend the duration of such shading. Because all of the identified sensitive land uses would be shaded for less than four hours between 9:00 AM and 5:00 PM during the spring-to-fall period of each year, the Project would not substantially degrade the existing visual character or quality of the site or its surroundings due to changes in summer shadows. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(ii) Winter Project Shadows

The longest shadows of the year occur during the winter solstice, with peak shadows occurring shortly after sunrise and before sunset. As shown in Figure IV.B-6, the Project would cast shadows to the northwest at 9:00 AM on the winter solstice. These shadows would cover the entire area to the north of the Project extending along Seaton Street nearly to 4th Street, as well as across the industrial properties on the west side of Seaton Street onto the midpoint of Alameda Street. No shade-sensitive land uses are located within this area of morning wintertime shading. By 12:00 PM on the winter solstice, the Project's shadows would pull back and be cast directly to the north across the industrially-oriented properties along Seaton Street and Colyton Street and adjacent to the Project Site on the north. No shade-sensitive uses are present in this area. By 3:00 PM on the winter solstice, the Project would cast shadows to the northeast, shading Colyton Street over halfway north to 4th Street and extending across a swath of the industrial and commercial properties on the east side of Colyton and west side of Hewitt Streets. No shade-sensitive land uses are present in this part of the Project's wintertime afternoon shadow, and the Project's shading would not extend across Hewitt Street to the Barker Block Lofts. As shown, no identified sensitive land uses would be affected by the Project's winter solstice shadow. It should also be noted that some of these spaces are currently shaded during periods of the day by existing development. Therefore, the Project would not substantially degrade the existing visual character or quality of the site or its surroundings due to changes in winter shadows. Moreover, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

Thus, the Project would not create any shade/shadow impacts during either the winter or summer period.

(iii) Impact Conclusion

Considering the Project's impacts with respect to visual character, views and viewsheds, policy consistency, and shading as described above, the Project would not substantially degrade the existing visual character or quality of the Project Site and its surrounding. Therefore, Project impacts related to visual character would be less than significant. Furthermore, as discussed previously, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(2) Mitigation Measures

No significant impacts related to visual character have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to visual character or quality would not be significant, pursuant to SB 743 and ZI 2452.

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

(1) Impact Analysis

Nighttime light is common throughout the City and urbanized areas in general. Artificial light may be directly generated from sources or indirect sources of reflected light. Typical light-sensitive uses include, but are not limited to, residences, some commercial and institutional uses, and natural areas. Nighttime lighting is typically generated from interior lighting in buildings, exterior security and street lighting, and headlights from vehicles either traveling along the adjacent streets or parking on surrounding streets.

Relatively high levels of nighttime lighting exist in the Project area, generated from vehicle headlights, traffic signal lights, streetlights, architectural lighting, security lighting, and building illumination (light emanating from the interior of structures through windows) from surrounding residential and industrial uses. In addition, nighttime lighting sources on the Project Site consist of exterior security and architectural lighting as well as interior illumination visible through windows.

Daytime glare is generally caused by reflection of sunlight or artificial light by polished surfaces on buildings, particularly multi-level buildings with glass windows or other reflective lighting. Glare in the Project area is generated by reflective materials on the surrounding buildings and glare from vehicles passing along surrounding streets. In addition, glare is generated in the immediate vicinity of the Project Site by cars parked outside in the building-adjacent street parking spaces.

Spill-over of light onto adjacent properties has the potential to interfere with certain activities including vision, sleep, privacy, and general enjoyment of the natural nighttime condition. The closest light-sensitive uses to the Project Site are the multi-family residential Barker Block Lofts at 530 Hewitt Street (approximately 400 feet east of the Project Site) and the multi-family residential Beacon Lofts at 825 E. 4th Street (approximately 500 feet north of the Project Site). It should also be acknowledged that there are numerous other live/work loft spaces and dwelling units in the vicinity of the Project Site that are not easily identifiable as they are not outwardly recognizable. The nearest such residential uses are located within approximately 50 feet of the Project Site. No other properties within the immediate vicinity of the Project Site are considered to be light-sensitive.

The LAMC contains various regulations regarding light and glare. LAMC Section 91.6205.13 states that "no sign shall be arranged and illuminated in such a manner as to produce a light intensity of greater than three foot-candles above ambient lighting, as measured at the property line of the nearest residentially zoned property." In addition, LAMC Section 93.0117 states that no exterior light source may cause more than two foot-candles of lighting intensity or generate direct glare onto exterior glazed windows or glass doors; elevated habitable porch, deck, or balcony; or any ground surface intended for uses such as recreation, barbecue or lawn areas on any other property containing a residential unit or units.

(a) Nighttime Light

(i) Construction

Lighting needed during construction of the Project has the potential to generate light spillover to off-site sensitive land uses. However, construction activities would occur in accordance with the provision of LAMC Section 41.40, which limits construction hours of operation to between 7:00 A.M. and 9:00 P.M. on weekdays and between 8:00 A.M. and 6:00 P.M. on Saturdays and national holidays, with no construction permitted on Sundays. Therefore, construction activities for the Project would primarily occur during the daylight hours, and construction lighting would only be used for the duration needed if construction were to occur in the evening hours during the winter season when daylight is no longer sufficient. In addition, construction-related illumination would be

used for safety and security purposes only, in compliance with LAMC light intensity requirements. Therefore, Project construction would not significantly impact off-site light-sensitive uses, substantially alter the character of off-site areas surrounding the Project Site, adversely impact day or nighttime views in the area, or substantially interfere with the performance of an off-site activity. Furthermore, as discussed above, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(ii) Operation

The Project would include lighting designed to highlight architectural elements of the structure. Security lighting would be installed to deter criminal activity on the Project Site. The lights associated with the Project would be directed either down or toward the interior of the Project Site so as not to create impacts to surrounding land uses or motorists traveling on surrounding roadways. All exterior lighting would be designed with internal and/or external glare control and would also be designed, arranged, directed, or shielded to contain direct illumination on-site, thereby preventing excess illumination and light spillover onto adjacent land uses and/or roadways (see also Project Design Feature AES-PDF-3). Exterior tenant signage for the Proposed Project would not include blinking, flashing, or oscillating lights (see Project Design Feature AES-PDF-5). As such, the potential impact resulting from lighting associated with architectural elements, security, and signage would not affect daytime or nighttime views, and no mitigation is required.

Due to its scale in relation to existing development in the Project vicinity, light generated from the interior of the proposed building could potentially be visible at substantial distances from the Project Site. However, the increase in light that would be generated would not be out of character with the existing light sources in the Project vicinity, which is characterized by highly urban development. Furthermore, it is anticipated that the light generated from the Project would not be bright enough to affect the nearby residences, which are separated from the Project Site by both distance and intervening development. The residences located to the north and east of the Project Site (Beacon Lofts and Barker Block Lofts, respectively) are not located close enough to the Project Site to experience significant light intrusion from the Project because the streets and other buildings would act as a buffer. Additionally, the utilization of low-intensity, downward focused light fixtures in compliance with LAMC 93.0117 would minimize the amount of Project lighting visible from these locations. In addition, existing street lighting along 4th Street, Hewitt Street, and other streets in the vicinity would continue to represent the dominant nighttime lighting source as perceived from both off-site residences and the street. Individual residential units located much closer to the Project Site could experience some increase in ambient lighting as a result of the Project.

However, compliance with the requirements of LAMC 93.0117 would minimize any potential impact.

Nighttime illumination in the Project vicinity would not be significantly increased by the Project, and the Project's nighttime illumination would not adversely affect views. Furthermore, as discussed above, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(b) Daytime Glare

(i) Construction

Daytime and nighttime glare could potentially occur during construction activities if reflective construction materials were positioned in highly visible locations where the reflection of sunlight or nighttime light sources could occur. However, any glare generated within the Project Site during construction would be highly transitory and short-term given the movement of construction equipment and materials within the construction area and the temporary nature of construction activities. Furthermore, large, flat surfaces that are generally required to generate substantial glare are typically not an element of construction activities. As a result, light and glare associated with the construction of the Project would not substantially alter the character of off-site areas surrounding the Project Site or adversely impact day or nighttime views in the area and impacts would be less than significant. Furthermore, as discussed above, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(ii) Operation

As shown in Figures II-20 through II-25 (in **Section II, Project Description**, of the Draft EIR), the Project's architectural features and façades would not be constructed of highly reflective materials. Per Project Design Feature AES-PDF-4, the exterior of the proposed building would be articulated and constructed of materials, such as brick, metal, and glass with low-reflectivity, which would not be expected to produce a substantial amount of daytime glare. The exterior of the Project's upper residential portion would also be covered by printed panels with contemporary urban artwork (in the form of murals) on the southern, western, and northern façades. Under Project Design Feature AES-PDF-4, this exterior "skin" of artwork would be selected, in part, to minimize potential daytime glare. The sources of glare that would be introduced into the area by the Project would not result in hazardous conditions to motorists or result in substantial glare due to the various features designed to minimize glare-related impacts.

In summary, the Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Therefore,

Project impacts related to light and glare would be less than significant. Furthermore, as discussed above, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant.

(2) Mitigation Measures

No significant impacts related to light and glare have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to light and glare would not be significant, pursuant to SB 743 and ZI 2452.

e) Cumulative Impacts

(1) Impact Analysis

Generally, a "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects (CEQA Guidelines, §15355). An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered "cumulatively considerable" when the incremental impacts of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider that effect significant, but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

An adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence. Accordingly, the analysis below is based on a list approach to determine the Project's contributing effect on potential cumulative impacts to visual character and views.

(a) Visual Character and Views

The geographic context for the analysis of cumulative impacts related to visual character of the surrounding area and its aesthetic image would include the cumulative development projects located within view of the Project Site. Projects located in such a position that they would not be visible from the Project Site or to which the Project would not be visible will not normally have a potential to combine with the Project to create a cumulative impact on visual character.

As previously stated in **Section III, Environmental Setting**, of the Draft EIR, there are 117 cumulative development projects within the general vicinity of the Project Site. As with the Project, the cumulative projects are subject to applicable development standards and environmental review. Development of the Project in combination with the cumulative projects located within the Arts District (Cumulative Development Project Nos. 1, 7, 8, 9, 10, 12, 13, 16, 18, 21, 22, 26, 30, 31, 32, 36, 37, 39, 40, 76, 77, 78, 81, 82, 84, 86, 89, 94, 95, 99, 101, and 112 in Table III-1) would result in an intensification of land uses in an already urbanized area of the City. The Project building, as well as many of the cumulative projects, would be more visually prominent when compared to the existing development in the area and would be visible from greater distances throughout both the Arts District and the eastern and southern sides of Downtown Los Angeles. Building heights for most of the existing development in the Arts District are in the 40- to 80-foot range above street level, while several of the cumulative projects that have been proposed for the area would be considerably taller, including a few that are proposing to build 30-story and 58-story towers, as well as others that are proposing structures of a similar height as the Project. However, because the area surrounding the Project Site is already intensely urban in character and is located adjacent to the concentration of high-rise buildings in Downtown Los Angeles, the cumulative impact of these proposed cumulative projects, during both construction and operation, would not represent a significant alteration to either the existing visual character or individual views of or within the area or represent a significant adverse cumulative impact with regard to views or visual character.

In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many of the cumulative projects identified above and listed in Table III-1 in Section III, Environmental Setting, of this Draft EIR. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

It is expected that development of the cumulative projects would occur in accordance with adopted plans and regulations, which would result in individual review of the visual character of each cumulative project to ensure consistency and design standards are compatible with existing land uses. Furthermore, as discussed above, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant, and, therefore, Project impacts with respect to consistency with applicable aesthetic policies or regulations would not be cumulatively considerable and are not considered significant.

(b) Shade/Shadow

The geographic context for the analysis of cumulative impacts related to visual character of the surrounding area and its aesthetic image would include the cumulative development projects located in such a position so as to create shading of the same properties as the Proposed Project. As previously stated in **Section III, Environmental Setting**, of the Draft EIR, there are 117 cumulative development projects within the general vicinity of the Project Site. In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many of the cumulative projects identified in Table III-1. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

Four of the cumulative projects would be located close enough to the Project to potentially combine with the Project to produce cumulative shadow impacts: Projects No. 18 (400 S. Alameda Street), No. 84 (926 E. 4th Street), No. 99 (527 Colyton Street), and No. 101 (1100 E. 5th Street), listed in Table III-1.

Cumulative Project No. 18 would convert an existing three-story warehouse building into a boutique hotel approximately one block north and one block west of the Project Site. Since this cumulative project does not propose any increase in building height or change in building orientation, its shadows would not be any differently cast than at the present time, and no cumulative impact would occur.

Cumulative Project No. 84 is an 11-story commercial office building (known as the 4th & Hewitt project) approximately one block to the north and one block to the east of the Project Site. Due to its proposed height and commercial office use, this cumulative project would likely cast shadows to the east and west during the summer solstice. However, due to the location of this cumulative project to the north and east of the

Project Site, the cumulative project would cast shadows that would cover a different area than the shadows cast by the Project, and there would likely be little to no overlap between them. During the wintertime, this building would cast shadows to its north. However, due to its location to the northeast of the Project Site, would not likely shade the same area as the Project. Thus, the Project and Cumulative Project No. 84 would not combine to produce a significant shading impact.

Cumulative Project No. 99 is a 12-story mixed-use residential building proposed for a site located approximately one block to the south of the Project Site. Summertime shadows cast by this structure would extend to its east and west but would affect a different area than the shadows cast by the Project due to its location a block to the south. Wintertime shadows cast by this proposed building could extend north onto the Project Site for a small portion of the day but would otherwise generally affect a different area than the shadows cast by the Project due to its location one block to the south of the Project Site and the fact that, in this location, wintertime shadows are primarily cast to the north of the shadow-generating object. Thus, the Project and Cumulative Project No. 99 would not combine to produce a significant cumulative shading impact.

Cumulative Project No. 101 is a 110-foot-tall mixed-use residential development proposed for the property across the street from the Project Site to the south. Summertime shadows cast by this structure would extend to its east and west but would largely affect a different area than the shadows cast by the Project due to its location to the south of the Project Site. Due to its proximity to the Project Site, wintertime shadows cast by this cumulative project and the Project could impact many of the same areas. Although no shade sensitive land uses are present to the west of either site, to the east, the Arts District Park and the outdoor dining areas associated with The Chairman restaurant and the Urth Caffè could experience shading from Cumulative Project No. 101 (the Project would not shade any of these properties during the winter solstice period). However, because the Project would not contribute to any shading of these sensitive uses during the wintertime, the two developments would not combine to produce a significant cumulative shadow impact.

Therefore, the Project would not combine with any of the cumulative projects to create any significant shade/shadow impacts during either the winter or summer period. No mitigation measures are required. Furthermore, as discussed above, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant, and, therefore, Project impacts with respect to shade/shadow would not be cumulatively considerable and are not considered significant.

(c) Light and Glare

The geographic context for the analysis of cumulative impacts related to visual character of the surrounding area and its aesthetic image would include the cumulative development projects located in such a position so as to combine with the Project to illuminate or produce glare visible from the same off-site locations. As previously stated in **Section III, Environmental Setting**, of the Draft EIR, there are 117 cumulative development projects within the general vicinity of the Project Site. In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many of the cumulative projects identified in Table III-1. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

Four of the cumulative projects would be located close enough to the Project Site to potentially combine with the Project to produce illumination and/or glare visible from the immediate vicinity of each development during either construction and/or operation: Projects No. 18 (400 S. Alameda Street), No. 84 (926 E. 4th Street), No. 99 (527 Colyton Street), and No. 101 (1100 E. 5th Street) in Table 3-1. Cumulative Project No. 18 would convert an existing three-story warehouse building into a boutique hotel approximately one block north and one block west of the Project Site. While this cumulative project would produce some additional nighttime lighting as compared to its existing use, the cumulative project would not generate a large amount of additional light, as no increase in building height or change in building orientation is being proposed. Both this cumulative project and the Project would be directly visible from the five-story Beacon Lofts located 200 feet to the east on 4th Street.

Cumulative Project No. 84 is an 11-story commercial office building (known as the 4th & Hewitt project) approximately one block to the north and one block to the east of the Project Site. Due to its proposed height and commercial office use, it is likely that at least moderate levels of illumination would be visible in this building from the nearby Beacon Lofts residences, as well as from the Barker Block Residences. However, compliance with LAMC lighting requirements by both this cumulative project and the Project, it is expected that the two developments would not combine to produce a significant cumulative nighttime lighting or glare impact at light-sensitive properties in the vicinity.

Cumulative Project No. 99 is a 12-story mixed-use residential building proposed for a site located approximately one block to the south of the Project Site. Nighttime illumination from this building would be visible from the Barker Block Residences and to a much lesser degree, given the blocking presence of the Project, from the Beacon Lofts. However, compliance with LAMC lighting requirements by both this cumulative project and the Project, it is expected that the two developments would not combine to produce a significant cumulative nighttime lighting or glare impact at light-sensitive properties in the vicinity.

Cumulative Project No. 101 is a 110-foot-tall mixed-use residential development proposed for the property across the street from the Project Site to the south. Nighttime illumination from this building would be visible from the Barker Block Residences to the east and to a much lesser degree, given the blocking presence of the Project, from the Beacon Lofts. However, compliance with City Code lighting requirements by both this cumulative project and the Project, it is expected that the two developments would not to combine to produce a significant cumulative nighttime lighting or glare impact at light-sensitive properties in the vicinity.

From a more general standpoint, development of the Project, in combination with the cumulative projects, would result in an intensification of land uses in an already urbanized area of the City that currently maintains an elevated level of ambient light and glare. Due to its scale in relation to existing development in the area, light generated from the interior of the Project could potentially be seen from more distant areas around the Project Site. As such, the Project and cumulative projects would contribute to ambient light levels within the surrounding area. However, as discussed above, this is a heavily urbanized area and the presence of additional nighttime illumination resulting from construction and operation of the Project and cumulative projects would not represent an alteration to the existing nighttime visual environment. Additionally, the potential increase in nighttime light resulting from the Project would not be bright enough to substantially and directly affect nearby sensitive uses. Therefore, the contribution of the Project to this potential cumulative impact would not be considerable.

As discussed above, the Project's architectural features and facades would not be constructed of highly reflective materials. Furthermore, the Project's sources of glare that would be introduced into the Project area would not result in hazardous conditions due to the various features designed to minimize glare-related impacts. Also, as discussed previously, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant, and therefore Project impacts with respect to glare would not be cumulatively considerable and are not considered significant.

(d) Cumulative Impact Conclusion

Considering the analysis above concerning the Project's contribution to cumulative levels of shading, light/glare, and changes to views and/or the existing visual character of the Project Site and its surroundings, the Project would not have a considerable contribution to the cumulative aesthetic impacts resulting from proposed development within the area. Furthermore, as discussed above, pursuant to SB 743 and ZI 2452, the Project's aesthetics impacts would not be considered significant. Therefore, Project impacts related to aesthetics would not be cumulatively considerable and are not considered significant.

(2) Mitigation Measures

No significant cumulative impacts related to aesthetics have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative aesthetics impacts would be less than significant.

IV. Environmental Impact Analysis

C. Air Quality

1. Introduction

This section examines the direct and indirect air quality impacts of the Project and is based on the following analysis, which is included in **Appendix C** of the Draft EIR:

C. *Arts District Center Project, Air Quality and Greenhouse Gases Analysis, DKA Planning, December 2017.*

Both short-term impacts occurring during construction (e.g., site grading, haul truck trips) and long-term effects related to the ongoing operation of the Project are discussed in this section. This analysis focuses on two levels of impacts: pollutant emissions and pollutant concentrations. "Emissions" refer to the quantity of pollutants released into the air. "Concentrations" refer to the amount of pollutant material per volumetric unit of air, as measured in parts per million (ppm) or micrograms per cubic meter ($\mu g/m^3$).

2. Environmental Setting

a) Pollutants and Effects

(1) Criteria Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations. The federal and state standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), particulate matter ten microns or less in diameter (PM_{10}), and lead (Pb). These pollutants are discussed below.

- Carbon Monoxide (CO) is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. It is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of emissions. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient concentrations

generally follow the spatial and temporal distributions of vehicular traffic. Concentrations are influenced by local meteorological conditions, primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. Inversions are an atmospheric condition in which a layer of warm air traps cooler air near the surface of the earth, preventing the normal rising of surface air. The highest concentrations occur during the colder months of the year when inversion conditions are more frequent. CO is a health concern because it competes with oxygen, often replacing it in the blood and reducing the blood's ability to transport oxygen to vital organs. Excess CO exposure can lead to dizziness, fatigue, and impair central nervous system functions.

- Ozone (O_3) is a colorless gas that is formed in the atmosphere when volatile organic compounds (VOC) and nitrogen oxides (NO_X) react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; rather, it is a secondary pollutant formed by complex interactions of these two pollutants directly emitted into the atmosphere. The primary sources of VOC and NO_X, the components of O_3, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation. Ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. The greatest source of smog-producing gases is the automobile. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

- Nitrogen Dioxide (NO_2) like O_3, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_X and are major contributors to O_3 formation. NO_2 also contributes to the formation of PM_{10}. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (2 to 3 years old) has been observed at concentrations below 0.3 ppm.

- Sulfur Dioxide (SO_2) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Main sources of SO_2 are coal and oil used in power plants and industries. Generally, the highest levels of SO_2 are

found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

- Particulate Matter (PM) consists of small liquid and solid particles floating in the air, including smoke, soot, dust, salts, acids, and metals and can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair and results from fuel combustion (e.g. motor vehicles, power generation, industrial facilities), residential fireplaces, and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as SO_2, NO_X, and VOC. Inhalable particulate matter, or PM_{10}, is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

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

- Lead (Pb) in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturers of batteries, paint, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the inventory of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery

recycling, and manufacturing facilities have become emission sources of greater concern.

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

(2) Toxic Air Contaminants

There are also pollutants of concern for which there are no health-based standards. Toxic Air Contaminants (TACs) are airborne pollutants that may increase a person's risk of developing cancer or other serious health effects. TACs include over 700 chemical compounds that are identified by State and federal agencies based on a review of available scientific evidence. In California, TACs are identified through a two-step process established in 1983 that includes risk identification and risk management.

b) Regulatory Framework

(1) Federal

The United States Environmental Protection Agency (USEPA) is responsible for enforcing the Federal Clean Air Act (CAA), the legislation that governs air quality in the United States. USEPA is also responsible for establishing the National Ambient Air Quality Standards (NAAQS). The NAAQS are required under the 1977 CAA and subsequent amendments. The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. It has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes emission standards, including those for vehicles sold in states other than California, where automobiles must meet stricter emission standards set by the state.

As required by the CAA, the NAAQS have been established for seven major air pollutants: CO, NO_2, O_3, $PM_{2.5}$, PM_{10}, SO_2, and Pb. The CAA requires the USEPA to designate areas as attainment, nonattainment, or maintenance for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are summarized in Table IV.C-1. The USEPA has classified the Los Angeles County portion of the South Coast Air Basin (Basin) as nonattainment for O_3, $PM_{2.5}$, and Pb, attainment for PM_{10}, and attainment/unclassified for CO and NO_2.

Table IV.C-1
State and National Ambient Air Quality Standards
and Attainment Status for the South Coast Air Basin

Pollutant	Averaging Period	California		Federal	
		Standards	Attainment Status	Standards	Attainment Status
Ozone (O_3)	1-hour	0.09 ppm (180 µg/m^3)	Nonattainment	--	--
	8-hour	0.070 ppm (137 µg/m^3)	/a/	0.070 ppm (137 µg/m^3)	Nonattainment (Extreme)
Respirable Particulate Matter (PM_{10})	24-hour	50 µg/m^3	Nonattainment	150 µg/m^3	Attainment
	Annual Arithmetic Mean	20 µg/m^3	Nonattainment	--	--
Fine Particulate Matter ($PM_{2.5}$)	24-hour	--	--	35 µg/m^3	Nonattainment
	Annual Arithmetic Mean	12 µg/m^3	Nonattainment	12 µg/m^3	Nonattainment
Carbon Monoxide (CO)	8-hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Unclassified/Attainment
	1-hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Attainment	53 ppb (100 µg/m^3)	Unclassified/Attainment
	1-hour	0.18 ppm (338 µg/m^3)	Attainment	100 ppb (188 µg/m^3)	Unclassified/Attainment
Sulfur Dioxide (SO_2)	24-hour	0.04 ppm (105 µg/m^3)	Attainment	--	Attainment
	1-hour	0.25 ppm (655 µg/m^3)	Attainment	75 ppb (196 µg/m^3)	Attainment
Lead (Pb)	30-day average	1.5 µg/m^3	Attainment	--	--
	Calendar Quarter	--	--	0.15 µg/m^3	Nonattainment

/a/ CARB has not determined 8-hour O_3 attainment status.
SOURCE: CARB, Ambient Air Quality Standards, and attainment status (www.arb.ca.gov/design/adm/adm.htm), 2018.

(2) State

In addition to being subject to the requirements of the CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). The California Air Resources Board (CARB), which became part of the California Environmental Protection Agency in 1991, is responsible for administering the CCAA and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the state to achieve and maintain the CAAQS, which are generally more stringent than the federal standards and incorporate

additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

CARB has broad authority to regulate mobile air pollution sources, such as motor vehicles. It is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications, which became effective in March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels. The state standards are summarized in Table IV.C-1.

The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment.

Under the CCAA, the Los Angeles County portion of the Basin is designated as a nonattainment area for O_3, $PM_{2.5}$, and PM_{10}, and is designated as an attainment area for CO, NO_2, Pb and SO_2.[1]

(3) Regional and Local

(a) South Coast Air Quality Management District

The 1977 Lewis Air Quality Management Act merged four air pollution control districts to create the South Coast Air Quality Management District (SCAQMD) to coordinate air quality planning efforts throughout Southern California. It is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards. Programs include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. The SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

The SCAQMD monitors air quality over its jurisdiction of 10,743 square miles, including the Basin, which covers 6,745 square miles and is bounded by the Pacific Ocean to the

[1] *CARB, Area Designation Maps, available at http://www.arb.ca.gov/desig/adm/adm.htm, accessed December 15, 2016.*

west, the San Gabriel, San Bernardino and San Jacinto mountains to the north and east, and San Diego County to the south. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SCAQMD also regulates the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin.

All areas designated as nonattainment under the CCAA are required to prepare plans showing how they will meet the air quality standards. The SCAQMD regularly prepares an Air Quality Management Plan (AQMP) to address CAA and CCAA requirements by identifying policies and control measures. On March 3, 2017, the SCAQMD adopted the 2016 AQMP, which includes strategies to meet the NAAQS for the 8-hour ozone standard by 2032, the annual $PM_{2.5}$ standard by 2021-2025, the 1-hour ozone standard by 2023, and the 24-hour $PM_{2.5}$ standard by 2019.

The Southern California Association of Governments (SCAG) assists in air quality planning efforts by preparing the transportation portion of the AQMP through the adoption of its Regional Transportation Plan (RTP). This includes the preparation of a Sustainable Communities Strategy (SCS) that responds to planning requirements of Senate Bill (SB) 375 and demonstrates the region's ability to attain greenhouse gas reduction targets set forth in State law. In April 2016, SCAG adopted its 2016-2040 RTP/SCS, a plan to invest $556.5 billion in transportation systems over a six-county region.

In its role as the local air quality regulatory agency, the SCAQMD also provides guidance on how environmental analyses should be prepared. This includes recommended thresholds of significance for evaluating air quality impacts.

(b) City of Los Angeles

The City's General Plan includes an Air Quality Element that provides a policy framework governing air quality planning within the City of Los Angeles (City). Adopted in November 1992, the Plan includes six goals, 15 objectives, and 30 policies that help define how the City will achieve its clean air vision. The six goals established in the Air Quality Element are as follows:

- Good air quality in an environment of continued population growth and healthy economic structure.
- Less reliance on single-occupant vehicles with fewer commute and non-work trips.

- Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand management techniques.

- Minimize impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.

- Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting.

- Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

In its role as a lead agency pursuant to CEQA, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

c) Existing Conditions

(1) Air Pollutant Climatology

The Project Site is located within the Los Angeles County non-desert portion of the Basin. The Basin is in an area of high air pollution potential due to its climate and topography. The region lies in the semi-permanent high pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The Basin experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of its perimeter. The mountains and hills within the area contribute to the variation of rainfall, temperature, and winds throughout the region.

The Basin experiences frequent temperature inversions that contribute to the formation of smog. While temperature typically decreases with height, it actually increases under inversion conditions as altitude increases, thereby preventing air close to the ground from mixing with the air above. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the

ocean surface and the lower layer of the atmosphere. This interaction creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and NO_2 react under strong sunlight, creating smog. Light daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland toward the mountains.

Air quality problems also occur during the fall and winter, when CO and NO_2 emissions tend to be higher. CO concentrations are generally worse in the morning and late evening (around 10:00 p.m.) when temperatures are cooler. High CO levels during the late evenings result from stagnant atmospheric conditions trapping CO. Since CO emissions are produced almost entirely from automobiles; the highest CO concentrations in the Basin are associated with heavy traffic. NO_2 concentrations are also generally higher during fall and winter days.

(2) Air Monitoring Data

The SCAQMD monitors air quality conditions at 38 locations throughout the Basin. The Project Site is located in the SCAQMD's Central Los Angeles receptor area. Historical data from the area were used to characterize existing conditions in the vicinity of the Project area. Table IV.C-2 shows pollutant levels, state and federal standards, and the number of exceedances recorded in the area from 2014 through 2016. The one-hour state standard for O_3 was exceeded seven times during this three-year period, the daily state standard for PM_{10} was exceeded 47 times, and the daily federal standard for $PM_{2.5}$ was exceeded nine times. CO and NO_2 levels did not exceed the CAAQS from 2014 to 2016.

(3) Toxic Air Pollution

According to the SCAQMD's Multiple Air Toxics Exposure Study IV (MATES IV), the incidence of cancer over a lifetime in the US population is about 1 in 3, which translates into a risk of about 300,000 in 1 million. One study, the *Harvard Report on Cancer Prevention*, estimated that, of cancers associated with known risk factors, about 30 percent were related to tobacco, 30 percent were related to diet and obesity, and about two percent were associated with environmental pollution related exposures. The potential cancer risk for a given substance is expressed as the incremental number of potential excess cancer cases per million people over a 70-year lifetime exposure at a constant annual average pollutant concentration. The risks are usually presented in chances per million. For example, if the cancer risks were estimated to be 100 per million, this would predict an additional 100 excess cases of cancer in a population of 1 million people over a 70-year lifetime.

Table IV.C-2
2014-2016 Ambient Air Quality Data in Project Site Vicinity

Pollutant	Pollutant Concentration & Standards	Central Los Angeles		
		2014	2015	2016
Ozone	Maximum 1-hour Concentration (ppm)	0.113	0.104	0.103
	Days > 0.09 ppm (State 1-hour standard)	3	2	2
	Maximum 8-hour Concentration (ppm)	0.094	0.074	0.078
	Days > 0.070 ppm (Federal 8-hour standard)	6	6	4
Carbon Monoxide	Maximum 1-hour Concentration (ppm)	3.0	3.2	1.9
	Days > 20 ppm (State 1-hour standard)	0	0	0
	Maximum 8-hour Concentration (ppm)	2.0	1.8	1.4
	Days > 9.0 ppm (State 8-hour standard)	0	0	0
Nitrogen Dioxide	Maximum 1-hour Concentration (ppb)	82.1	79.1	64.7
	Days > 0.18 ppm (State 1-hour standard)	0	0	0
PM_{10}	Maximum 24-hour Concentration ($\mu g/m^3$)	87	88	67
	Days > 50 $\mu g/m^3$ (State 24-hour standard)	32	26	18
$PM_{2.5}$	Maximum 24-hour Concentration ($\mu g/m^3$)	59.9	56.4	44.4
	Days > 35 $\mu g/m^3$ (Federal 24-hour standard)	6	7	2
Sulfur Dioxide	Maximum 24-hour Concentration (ppb)	5.4	12.6	13.4
	Days > 0.04 ppm (State 24-hour standard)	0	0	0

Source: SCAQMD annual monitoring data (http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year) accessed June 5, 2018.

In late 1997, the SCAQMD undertook a series of air toxics studies (i.e., MATES studies) for the Basin, the most recent of which is the MATES IV study, adopted in May 2015. The MATES IV study was based on monitored data throughout the Basin and included a monitoring program, an updated emissions inventory of TACs, and a modeling effort to characterize carcinogenic risk across the Basin from exposure to TACs. The study concluded that the average of the modeled air toxics concentrations measured at monitoring stations in the Basin equates to a background cancer risk of approximately 897 in one million primarily due to diesel exhaust particulate matter (DPM). The Project Site itself has an estimated ambient background risk of 1,854.11 in one million.[2]

Using the MATES IV methodology, about 94 percent of cancer risk is attributed to emissions associated with mobile sources, and about six percent of risk is attributed to toxics emitted from stationary sources, (e.g., industries, dry cleaners and chrome plating operations). The MATES IV study found lower ambient concentrations of most of the measured air toxics, as compared to the levels measured in the previous MATES III study finalized in September 2008.

[2] *South Coast Air Quality Management District, MATES IV Carcinogenic Risk Interactive Map, http://www3.aqmd.gov/webappl/OI.Web/OI.aspx?jurisdictionID=AQMD.gov&shareID=73f55d6b-82cc-4c41-b779-4c48c9a8b15b, accessed December 8, 2017.*

(4) Existing Project Site Emissions

The Project Site includes 91,200 square feet of commercial and residential space that generates on- and off-site emissions. On-site emissions are generated by area sources (e.g., architectural coatings, consumer products) and natural gas use. The bulk of emissions from the existing development come from mobile sources that generate off-site emissions. These mobile sources largely consist of daily vehicle trips to and from the existing residences and businesses on the Project Site. Table IV.C-3 summarizes existing emissions from the Project Site.

Table IV.C-3
Existing Daily Operations Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Sources	1	<1	1	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	2	6	18	<1	4	1
Total Operations	**3**	**6**	**19**	**<1**	**4**	**1**

All units are pounds per day.

Source: DKA Planning, 2017, based on CalEEMod 2016.3.1 model runs.

(5) Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following typical groups who are most likely to be affected by air pollution: children under 14 years of age; the elderly over 65 years of age; athletes; and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The Project Site is located in the Arts District, a neighborhood largely made up of industrial, manufacturing, and art-related uses. There are existing or reasonably foreseeable sensitive receptors near the Project Site including the following:

- Live/work dwelling at 1201 East 5th Street, 60 feet east of the Project Site.
- Barker Block Lofts, multi-family residences at 530 Hewitt Street; 400 feet east of the Project Site.
- Beacon Lofts, multi-family residences at 825 East 4th Street; 500 feet north of the Project Site.

- Arts District Park – 210 feet southeast of the Project Site.

3. Project Impacts

a) Methodology

(1) Construction

The analysis of construction-related air quality impacts utilizes guidance from SCAQMD's CEQA Air Quality Handbook (1993 edition), as well as updated guidance provided on SCAQMD's website, including guidance related to the SCAQMD Localized Significance Thresholds Methodology (LST).[3] Regional and localized construction emissions were calculated using SCAQMD's California Emissions Estimator Model (CalEEMod), version 2016.3.1. This analysis assumes completion of Project construction activities in 2021 and assumes a 30-month construction period.

(2) Operations

This study used the SCAQMD's CalEEMod model to calculate operational mobile, energy and area source emissions. CalEEMod uses the CARB's EMFAC2014 emissions model to estimate motor vehicle emissions. The operations assessment is based on an estimated opening year of 2021 for the Project.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), a project would have a significant impact related to air quality if the project would do the following:

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

(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

(c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including release in emissions which exceed quantitative thresholds for ozone precursors).

[3] *South Coast Air Quality Management District, http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook accessed March 2, 2018. Significance thresholds were referenced for this analysis.*

(d) Expose sensitive receptors to substantial pollutant concentrations.

(e) Create objectionable odors affecting a substantial number of people.

(2) 2006 L.A. CEQA Thresholds Guide

To assist in answering Appendix G threshold questions and thresholds provided by the SCAQMD, this analysis uses factors identified below from the 2006 L.A. CEQA Thresholds Guide (Threshold Guide), as appropriate:

(a) Air Quality Construction Emissions

- Combustion Emissions from Construction Equipment;
    - Type, number of pieces and usage for each type of construction equipment;
    - Estimated fuel usage and type of fuel (diesel, natural gas) for each type of equipment; and
- Emission factors for each type of equipment.
- Fugitive Dust
- Grading, excavation, and hauling;
    - Amount of soil to be disturbed on-site or moved off-site;
    - Emission factors for disturbed soil;
    - Duration of grading, excavation and hauling activities;
    - Type and number of pieces of equipment to be used; and
    - Projected haul route.
- Heavy-Duty Equipment Travel on Unpaved Roads;
    - Length and type of road;
    - Type, number of pieces, weight and usage of equipment; and
    - Type of soil.
- Other Mobile Source Emissions

- Number and average length of construction worker trips to project site, per day; and
- Duration of construction activities.

(b) Air Quality Operational Emissions

- Operational emissions exceed 10 tons per year of volatile organic gases or any of the daily thresholds presented below (as reprinted from the CEQA Air Quality Handbook):

Pollutant	Significance Threshold (lbs/day)
VOC	55
NO_x	55
CO	550
PM_{10}	150
SO_x	150

- Either of the following conditions would occur at an intersection or roadway within one-quarter mile of a sensitive receptor:
  - The proposed project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 parts per million (ppm), respectively; or
  - The incremental increase due to the project is equal to or greater than 1.0 ppm for the California 1-hour CO standard, or 0.45 ppm for the 8-hour CO standard.
- The project creates an objectionable odor at the nearest sensitive receptor.

(c) Toxic Air Contaminants

The determination of significance shall be made on a case-by-case basis, considering the following factors:

- The regulatory framework for the toxic material(s) and process(es) involved;
- The proximity of the toxic air contaminants to sensitive receptors;
- The quantity, volume and toxicity of the contaminants expected to be emitted;
- The likelihood and potential level of exposure; and

- The degree to which project design will reduce the risk of exposure.

(3) SCAQMD's CEQA Air Quality Handbook

To assist with addressing the Appendix G threshold questions and threshold provided by the SCAQMD, the City uses the SCAQMD's CEQA Air Quality Handbook and the thresholds of significance below to guide the environmental review of projects under CEQA. Table IV.C-4 summarizes currently recommended thresholds that are intended to translate CEQA Guidelines thresholds into numerical values or performance standards.

(a) Construction Emissions

Based on guidance from the SCAQMD, a project could have a significant impact, if the project would result in any of the following:

- Generation of daily regional construction emissions that exceed SCAQMD construction emissions thresholds for VOC, NO_x, CO, SO_x, $PM_{2.5}$, or PM_{10}, as presented in Table IV.C-4;
- Generation of on-site localized construction emissions that exceed SCAQMD LSTs that could exceed the most stringent ambient air quality standards for CO (20 ppm [23,000 µg/m3] over a 1-hour period or 9.0 ppm [10,350 µg/m3] averaged over an 8-hour period) and NO2 (0.18 ppm [338.4 µg/m3] over a 1-hour period, 0.1 ppm [188 µg/m3] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [56.4 µg/m3] average over an annual period); or
- Generation of (maximum) on-site localized $PM_{2.5}$ or PM_{10} emissions during construction that exceed the applicable LSTs that could exceed ambient concentrations in the vicinity of the Project that exceed the incremental 24-hour threshold of 10.4 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.

(b) Operational Emissions

Based on SCAQMD guidance, a project could have a significant impact if the project would result in the following:

- Generation of daily regional operational emissions that exceed SCAQMD operational thresholds as presented in Table IV.C-4;

Table IV.C-4
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds		
Criteria Pollutant	**Construction**	**Operation**
Volatile Organic Compounds (VOC)	75 lb/day	55 lb/day
Nitrogen Oxides (NO_X)	100 lb/day	55 lb/day
Carbon Monoxide (CO)	550 lb/day	550 lb/day
Sulfur Oxides (SO_X)	150 lb/day	150 lb/day
Fine Particulates ($PM_{2.5}$)	55 lb/day	55 lb/day
Particulates (PM_{10})	150 lb/day	150 lb/day
Lead	3 lb/day	3 lb/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk $\geq$ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas $\geq$ 1 in 1 million) Chronic and Acute Hazard Index $\geq$ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants		
NO_2 1-Hour Average Annual Arithmetic Mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (State) 0.03 ppm (State) and 0.0534 ppm (federal)	
PM_{10} 24-Hour Average Annual Average	 10 µg/m^3 (construction) and 2.5 µg/m^3 (operation) 1.0 µg/m^3	
$PM_{2.5}$ 24-Hour Average	 10 µg/m^3 (construction) and 2.5 µg/m^3 (operation)	
SO_2 1-Hour Average 24-Hour Average	 0.25 ppm (State) and 0.075 ppm (federal-99th percentile) 0.04 (State)	
Sulfate (24-Hour Average)	25 µg/m^3 (State)	
CO 1-Hour Average 8-Hour Average	SCAQMD in attainment; project is significant if it causes or contributes to an exceedance of the following: 20 ppm (State) and 35 pm (federal) 9 ppm (State/federal)	
Lead 30-Day Average Rolling 3-Month Average	 1.5 µg/m^3 (State) 0.15 µg/m^3 (federal)	

Source: SCAQMD 2015 http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf

- Generation of daily localized operational emissions that exceed SCAQMD LSTs that could lead to exceedances near the Project Site of AAQS for CO (20 ppm over a 1-hour period or 9 ppm over an 8-hour period) and NO_2 (0.18 ppm over a

1-hour period, 0.1 ppm over a 3-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm averaged over an annual period);

- Generation of (maximum) on-site localized $PM_{2.5}$ or PM_{10} emissions during operations that exceed the applicable LSTs that could exceed ambient concentrations in the vicinity of the Project of 2.5 $\mu g/m^3$ or 1.0 $\mu g/m^3$ PM_{10} averaged over an annual period;
- Causing or contributing to an exceedance of the California 1-hour or 8-hour CO standards of 20 ppm and 9.0 ppm, respectively; or
- Creating an odor nuisance pursuant to SCAQMD Rule 402.

(c) Toxic Air Contaminants

Based on the criteria set forth in the SCAQMD's CEQA Air Quality Handbook, the Project may have a significant impact on toxic air pollution if the project emits carcinogenic or toxic air contaminants that exceed the maximum, incremental cancer risk listed in Table IV.C-4.

(d) Air Quality Plan Consistency

Section 15125 of the CEQA Guidelines requires an analysis of project consistency with applicable plans and policies, including plans applicable to air quality and attainment. The following criteria were used to evaluate the Project's consistency with SCAQMD and SCAG AQMP:

- Criterion 1: Will the Project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations;
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP?
- Criterion 2: Will the Project exceed the assumptions utilized in preparing the AQMP?
  - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
  - Does the Project include air quality mitigation measures; or
- To what extent is Project development consistent with the AQMP land use policies?

In assessing impacts related to air quality in this section, the City will use Appendix G and the SCAQMD emissions thresholds shown in Table IV.C-4 as the thresholds of significance.

c) Project Design Features

No specific Project Design Features (PDFs) are proposed with regard to air quality. The Project would incorporate Project Design Features to support and promote environmental sustainability, as discussed in **Section IV.F, Greenhouse Gas Emissions**, of the Draft EIR. While these features are designed primarily to reduce GHG emissions, the Project Design Features would also serve to reduce criteria air pollutant emissions discussed herein.

d) Analysis of Project Impacts

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

(1) Impact Analysis

(a) SCAQMD Air Quality Management Plan

The discussion below addresses the Project's consistency with applicable SCAQMD and SCAG policies, including the SCAQMD's 2016 AQMP and growth projections within the SCAG 2016–2040 RTP/SCS. In accordance with the procedures established in the SCAQMD's *CEQA Air Quality Handbook*, the following criteria are required to be addressed in order to determine the Project's consistency with applicable SCAQMD and SCAG policies:

- Criterion 1: Would the project result in any of the following:
    - An increase in the frequency or severity of existing air quality violations; or
    - Cause or contribute to new air quality violations; or
    - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Criterion 2: Would the project exceed the assumptions utilized in preparing the AQMP?
    - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
    - Does the Project include air quality mitigation measures; or

- To what extent is Project development consistent with the AQMP land use policies?

(i) Criterion 1

With respect to the first criterion, the proposed residential, hotel, retail, restaurant, and Artist CoLab land uses would neither conflict with the SCAQMD's 2016 AQMP nor jeopardize the region's attainment of air quality standards.

As discussed in this section, the Project would not exceed the SCAQMD's screening thresholds for criteria pollutants (NO_2 as NO_x, CO, PM_{10} and $PM_{2.5}$), which are an indicator of potential exceedances of ambient air quality standards. Since VOCs are not a criteria pollutant, there is no ambient air quality standard or localized threshold for them.

Because particulate matter is the primary pollutant of concern during the construction phase, the analysis evaluated PM_{10} and $PM_{2.5}$ emissions to assess potential effects on localized concentrations and determine if there is potential to cause an exceedance of ambient air quality standards. As shown in Table IV.C-5 presented later in this section, **increases in PM_{10} and $PM_{2.5}$ emissions would not exceed the SCAQMD's significance thresholds at sensitive receptors near the Project Site**.

Similarly, construction emissions of NO_x and CO would not exceed the SCAQMD's significance thresholds and would not impact the region's ability to meet ambient air quality standards. As a result, construction activities would not exceed the regional or localized significance thresholds for any criteria pollutants and no mitigation measures are required. **As such, the Project's localized construction emissions impact would be less than significant.**

Similarly, Project operations would not produce regional or localized emissions that exceed the SCAQMD's screening thresholds for criteria pollutants, largely because of the absence of major on-site stationary sources. As for off-site impacts, Project-related traffic would not result in CO hotspots where ambient air quality standards could be exceeded near roadways affected by Project traffic. As noted in the analysis of Threshold (d) below, CO hotspots are extremely rare and only occur in the presence of unusual atmospheric conditions and extremely cold conditions, neither of which applies to the Project Site area. In addition, auto-related emissions of CO continue to decline, because of advances in fuel combustion technology in the vehicle fleet.

Thus, the Project would not increase the frequency or severity of any existing violation or cause or contribute to new violations for criteria pollutants. As such, the Project meets this AQMP consistency criterion.

As shown in Table IV.C-6 presented later in this section, operational impacts would be less than significant. **Thus, the Project would not increase the frequency or severity of any existing violation or cause or contribute to new violations for criteria pollutants. As the Project would not exceed any State and federal standards, the Project would not delay attainment of air quality standards or interim emission reductions specified in the AQMP.**

(ii) Criterion 2

With respect to the second criterion, determining whether or not a project exceeds the assumptions reflected in the AQMP (based on assumptions in SCAG's 2016-2040 RTP/SCS for population, housing, and employment growth) involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) Project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these criteria.

- Is the project consistent with the population, housing, and employment growth projections upon which AQMP forecasted emission levels are based?

A Project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions used in the development of the AQMP. Regarding the 2016 AQMP, two sources form the basis for the projections: City of Los Angeles General Plan and SCAG's 2016 RTP/SCS.

The Project would also not exceed the growth assumptions used in the 2016 AQMP. The AQMP focuses on achieving clean air standards while accommodating population growth forecasts by the SCAG. Specifically, SCAG's growth forecasts from the 2016-2040 RTP/SCS are largely built off local growth forecasts from local governments, such as the City. The 2016-2040 RTP/SCS provides a projection of 4,609,400 persons; 1,690,300 households; and 2,169,100 jobs in the City by 2040. Based on an interpolation of SCAG's growth projections, the City would grow by 109,100 persons; 67,500 jobs; and 52,100 households from 2017 through the Project's operational date of 2021 (refer to Table IV.J-1 in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR).

The Project would demolish ten existing live/work units and develop 129 live/work units in the City. The Project could add 289 net new residents to the Project Site, based on the City's projected household density for the City, though this is a very conservative estimate as live/work spaces tend to house smaller households.[4] Assuming that the 289 residents do not already live within the Los Angeles region, the Project's residential

[4] *American Community Survey, 5-year (2013-2016) Average Estimates.*

population would represent 0.22 percent of the anticipated City population growth between 2017 and the anticipated buildout year of 2021. Further, compared to the anticipated housing growth in the City between the 2017 baseline year and the Project's anticipated buildout year of 2021, the Project's residential housing would represent 0.26 percent of the anticipated growth.

Implementation of the Project also would result in approximately 211 employment positions on-site.[5] Compared to the anticipated employment growth in the City between the 2017 baseline year and the Project's anticipated buildout year of 2021, the Project's employment would represent 0.7 percent of the anticipated growth.

As a result, the Project's population would be consistent with the growth assumptions for the City in the AQMP. Because the AQMP accommodates growth forecasts for local jurisdictions, such as the City, the emissions associated with the Project have been accounted for and mitigated in the 2016 AQMP. As such, the Project would not obstruct implementation of the AQMP.

- Does the project implement feasible air quality mitigation measures?

As the Project would not result in any significant air quality impacts, mitigation measures would not be required. As such, the Project meets this AQMP consistency criterion.

- To what extent is project development consistent with the land use policies set forth in the AQMP?

With regard to land use developments, such as the Project, the AQMP's air quality policies focus on the reduction of vehicle trips and vehicle miles traveled (VMT). The Project would be designed and constructed to support and promote environmental sustainability. The Project represents an infill development within an existing urbanized area that would concentrate new residential, restaurant, hotel, retail, and Artist CoLab uses within a High-Quality Transit Area (HQTA), as designated by SCAG.[6]

The Project also incorporates smart growth principles and sustainability features, as evidenced in its mixed-use nature, the accessibility to public transit (e.g., Metro Gold Line and Rapid Bus), and the availability of existing infrastructure to service the proposed uses. The Project would also provide bicycle storage areas for Project residents and visitors.

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[5] *Refer to **Section IV.J, Population, Housing, and Employment**, of the Draft EIR.*

[6] *SCAG defines an HQTA as generally a walkable transit village or corridor, consistent with the adopted RTP/SCS, that has a minimum density of 20 dwelling units per acre and is within a ½ mile of a well-serviced transit stop with 15-minute or less service frequency during peak commute hours.*

The Project is also consistent with the California Air Pollution Control Officers Association (CAPCOA) guidance document "Quantifying Greenhouse Gas Mitigation Measures," which identifies VMT and vehicle trip reductions relative to the standard trip and VMT rates in CalEEMod, which corresponds to reducing GHG emissions. Measures applicable to the Project include the following:

- **Increase Density (CAPCOA Measure LUT-1):** Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies, such as enhanced transit services. The Project would increase the Project Site's density from 10 live/work units and 45,600 industrial uses (employing approximately 50 people [approximately 50 employees per acre]) to 129 live/work condominium units, 113 hotel rooms and 72,469 square feet of commercial space, employing approximately 211 employees per acre.

- **Increase Diversity of Urban and Suburban Developments (Mixed-Uses) (CAPCOA Measure LUT-3)**: The Project would introduce new uses on the Project Site, including new residential, hospitality and commercial uses. The Project would co-locate complementary residential, hospitality, and commercial uses in proximity to other existing off site residential and commercial uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation (i.e., walking and biking), which would result in corresponding reductions in transportation-related emissions.

- **Increase Destination Accessibility (CAPCOA Measure LUT-4):** The Project Site is located within Downtown Los Angeles, a primary job center, also easily accessible by public transportation. Access to multiple destinations, and other commercial and retail uses in proximity to the Project Site would reduce vehicle trips and VMT compared to the statewide average and encourage walking and non-automotive forms of transportation and would result in corresponding reductions in transportation-related emissions as a result of the Project.

- **Increase Transit Accessibility (CAPCOA Measure LUT-5):** The Project would be located approximately 0.5 miles south of the Metro Little Tokyo/Arts District Station and 0.25 miles from the Metro Rapid 720 bus stop at Alameda Street and 6th Street and along 25 Metro transit and two DASH routes. The Project would also provide bicycle parking spaces for resident and commercial uses to encourage utilization of alternative modes of transportation.

- **Improve Design of Development (CAPCOA Measure LUT-9):** The Project would enhance the pedestrian environment by developing ground floor retail and restaurant land uses and improved streetscape, which would enhance walkability in the Project Site vicinity. The Project would also locate a development with a high level of street access, which improves street accessibility and connectivity.

- **Traffic Calming Measures (CAPCOA Measure SDT-2):** Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift results in a decrease in VMT. Streets within a half mile of the Project Site are equipped with sidewalks, and several of the intersections include marked crosswalks and/or count-down signal timers that calm traffic.

In sum, the Project would be consistent with the AQMP, including its population, housing, and employment growth projections and land use policies.

(b) City of Los Angeles Policies

The City's General Plan includes an Air Quality Element. The 1992 revision to the Air Quality Element serves to aid the City in attaining the state and federal ambient air quality standards at the earliest feasible date, while still maintaining economic growth and improving the quality of life. The Air Quality Element and the accompanying Clean Air Program acknowledge the inter-relationships between transportation and land use planning in meeting the City's mobility and clean air goals. With the adoption of the Air Quality Element and the Clean Air Program, the City seeks to achieve consistency with regional air quality growth management, mobility, and congestion management plans.

To achieve these goals, performance-based standards have been adopted to provide flexibility in implementing the policies and objectives of the Air Quality Element. The following Air Quality Element goals, objectives, and policies are relevant to the Project:

- Goal 2. Less reliance on single-occupant vehicles with fewer commute and non-work trips.
    - Objective 2.1. It is the objective of the City of Los Angeles to reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals.
        - Policy 2.1.1. Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce Vehicle Trips and/or Vehicle Miles Traveled (VMT) as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion.

- Goal 4. Minimize impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.
    - Objective 4.1. It is the objective of the City of Los Angeles to include regional attainment of ambient air quality standards as a primary consideration in land use planning.
        - Policy 4.1.1. Coordinate with all appropriate regional agencies in the implementation of strategies for the integration of land use, transportation, and air quality policies.
    - Objective 4.2. It is the objective of the City of Los Angeles to reduce vehicle trips and vehicle miles traveled associated with land use patterns.
        - Policy 4.2.2. Improve accessibility for the City's residents to places of employment, shopping centers, and other establishments.
        - Policy 4.2.3. Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.
        - Policy 4.2.4. Require that air quality impacts be a consideration in the review and approval of all discretionary projects.
        - Policy 4.2.5. Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.

The Project would support these goals, objectives, and policies. The Project includes on-site bicycle parking spaces, is located in a dense urban environment with varying public transit options that would reduce vehicle trip making, VMT, and air quality emissions. Further, the Project would be consistent with the existing land use pattern in downtown Los Angeles that concentrates density near major transportation infrastructure. The Project also includes access for pedestrians and bicyclists to the off-site active transportation network, which includes bike lanes on 3rd Street and sharrowed bicycle routes on 2nd and 1st Street.[7] As such, the Project would implement applicable policies in the City's General Plan Air Quality Element.

(c) Impact Conclusion

In conclusion, analysis of Threshold (a) was based on the Project's consistency with the 2016 AQMP, as well as City policies. The determination of the Project's 2016 AQMP

[7] *City of Los Angeles Central/Westside Bicycle Network map. June 2015*

consistency was primarily concerned with the long-term influence of the Project on air quality in the Basin. As discussed previously, the Project would not increase the frequency or severity of an existing air quality violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project also would not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP. In addition, because the Project includes similar projections that form the basis of the 2016 AQMP, it can be concluded that the Project would be consistent with the projections in the 2016 AQMP. Additionally, as the Project would support the City and SCAQMD's objectives of reducing VMT and associated with vehicular air emissions, the Project would be consistent with 2016 AQMP land use policies. Thus, the Project would not conflict with or obstruct implementation of the AQMP. With regard to City policies, as discussed previously, the Project would serve to implement applicable policies of the City pertaining to air quality. Based on the above, **Project impacts related to consistency with the 2016 AQMP would be less than significant.**

(2) Mitigation Measures

No significant impacts related to air quality plan consistency have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to air quality plan consistency would be less than.

Threshold (b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

(1) Impact Analysis

(a) Construction

(i) Regional Air Quality Impacts

Construction of the Project would generate pollutant emissions through the use of heavy-duty construction equipment on- and off-site, heavy-duty trucks hauling material to and from the Project Site, as well as vehicle trips generated by construction workers traveling to and from the site. Construction emissions can vary substantially from day to day, depending on the level of activity, the type of operation, and technology employed in the equipment used.

Construction-related emissions were estimated using the SCAQMD's CalEEMod 2016.3.1 model using assumptions from the Project Applicant regarding the phasing and duration of anticipated construction activities and based on the Project's overall

construction schedule of approximately 30 months.[8] As shown in Table IV.C-5, estimated daily Project construction emissions would not exceed any of the SCAQMD regional pollutant thresholds during the construction process. **Thus, the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Therefore, construction-related regional air quality impacts would be less than significant.**

Table IV.C-5
Estimated Project Daily Construction Emissions

	Pounds Per Day					
Construction Phase Year	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2018	5	74	34	<1	11	6
2019	4	30	31	<1	5	2
2020	69	28	30	<1	5	2
2021	69	2	4	<1	1	<1
Maximum Regional Total	69	74	34	<1	11	6
Regional Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	No	No	No	No	No	No
Maximum Localized Total	68	24	16	<1	3	2
LST Screening Threshold	**--**	**74**	**680**	**--**	**5**	**3**
Exceed Threshold?	N/A	No	No	N/A	No	No

Note: PM_{10} and $PM_{2.5}$ emissions assume compliance with the SCAQMD's Rule 403.

*Source: DKA Planning, 2017 (see **Appendix C** of the Draft EIR). Based on CalEEMod 2016.3.2 model runs. LST analysis based on one-acre site with 25-meter distances to receptors in Central LA source receptor area.*

(ii) Local Air Quality Impacts

At a local level, the construction of the Project would produce emissions that could impact air quality near the Project Site. For example, fugitive dust emissions would result from demolition and site preparation (e.g., grading) activities. Other pollutants can impact human health near the Project without affecting regional air quality.

In terms of local air quality, as shown on Table IV.C-5, construction of the Project would not produce emissions that exceed the SCAQMD's recommended localized standards of significance for any of the pollutant emissions during the construction phase. **Thus, the Project would not violate any air quality standard or contribute substantially**

[8] *Assumptions include a one-month demolition period (with debris from 91,200 square feet of existing development hauled 40 miles off-site; a three-month grading/excavation period (with 60,000 cubic yards of soil export hauled 40 miles off-site at 10 cubic yards per truck); a two-year building construction period; a one-month paving/landscaping period; and a two-month period for applying architectural coatings.*

to an existing or projected air quality violation. Therefore, the Project's construction-related localized air quality impacts would be less than significant.

(b) Operation

(i) Regional Air Quality Impacts

Once constructed and in operation, the Project would also produce long-term pollutant emissions in the region, primarily from motor vehicles associated with the Project. The Project could add up to approximately 4,713 net vehicle trips to and from the Project Site on a peak weekday at the start of operations in 2021.[9] As shown in Table IV.C-6, operational emissions would not exceed SCAQMD's regional significance thresholds for VOC, NO_X, CO, PM_{10}, or $PM_{2.5}$. **Thus, the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Therefore, the Project's operational impacts on regional air quality would be less than significant.**

Table IV.C-6
Estimated Project Daily Operations Emissions

	Pounds per Day					
Emission Source	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	8	<1	11	<1	<1	<1
Energy Sources	<1	3	3	<1	<1	<1
Mobile Sources	8	36	89	<1	22	6
Total Operations	**17**	**40**	**103**	**<1**	**23**	**6**
Existing Operations	-3	-6	-19	-<1	-4	-1
Net Regional Operations	**14**	**34**	**84**	**<1**	**19**	**6**
Regional Significance Threshold	55	55	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Net Localized Operations	**8**	**3**	**14**	**<1**	**<1**	**<1**
LST Screening Threshold	--	74	680	--	2	1
Exceed Threshold?	N/A	No	No	N/A	No	No

*Source: DKA Planning, 2017 (see **Appendix C** of the Draft EIR). Based on CalEEMod 2016.3.2 model runs. LST analyses based on one-acre site with 25-meter distances to receptors in Central LA source receptor area. While the LST analysis is only required when there are major stationary sources, the analysis was conducted for the Project, and the results are summarized for full-disclosure purposes.*

(c) Local Air Quality Impacts

With regard to localized air quality impacts, the Project would emit minimal quantities of NO_2, CO, PM_{10}, and $PM_{2.5}$ from area and energy sources on-site. As shown in Table IV.C-6, these localized emissions would not exceed the SCAQMD's localized significance thresholds that signal when there could be human health impacts at nearby

[9] *Fehr & Peers, Trip Generation Table for The Arts District Center, December 2017.*

sensitive receptors during long-term operations. **Thus, the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Therefore, the Project's operational impacts on localized air quality would be less than significant.**

(2) Mitigation Measures

No significant impacts related to air quality standards or violation have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to air quality standards or violation would be less than significant.

Threshold (c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including release in emissions which exceed quantitative thresholds for ozone precursors)?

(1) Impact Analysis

SCAQMD recommends that any construction-related emissions and operational emissions from individual development projects that exceed the project-specific mass daily emissions thresholds identified above can also be considered cumulatively considerable.[10] Individual projects that generate emissions below SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to be used to assess the impacts associated with these emissions.

(a) Construction

A project's construction impacts could be considered cumulatively considerable if the project would substantially contribute to cumulative air quality violations when considering other projects in the surrounding area that may undertake concurrent construction activities.

[10] *White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions, SCAQMD Board Meeting, September 5, 2003, Agenda No. 29, Appendix D, p. D-3.*

(i) Regional Air Quality Impacts

As discussed previously, for regional ozone precursors, the Project would not exceed SCAQMD mass emission thresholds for ozone precursors during construction. Similarly, regional emissions of PM_{10} and $PM_{2.5}$ would not exceed mass thresholds established by the SCAQMD. Construction of the Project would not contribute significantly to cumulative emissions of any non-attainment regional pollutants. **Thus, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard. Therefore, the Project's construction emissions impacts on regional criteria pollutant emissions would be less than significant.**

(ii) Local Air Quality Impacts

When considering local impacts, cumulative construction emissions are considered when projects are within close proximity of each other that could result in larger impacts on local sensitive receptors. Construction of the Project itself would not produce cumulatively considerable emissions of localized nonattainment pollutants PM_{10} and $PM_{2.5}$, as the anticipated emissions would exceed LST screening thresholds set by the SCAQMD. This is considered a less-than-significant impact on cumulative air pollution related to nonattainment pollutants.

If any other proposed cumulative projects within the immediate vicinity of the Project Site (most notably Cumulative Project Nos. 99 or 101 located approximately one block to the south and directly across 5th Street to the south of the Project Site, respectively; see Table III-1) were to undertake construction concurrently with the Project, localized CO, $PM_{2.5}$, PM_{10}, and NO_2 concentrations would be further increased. However, the application of LSTs to each cumulative project in the local area would help ensure that each project does not produce localized hotspots of CO, $PM_{2.5}$, PM_{10}, and NO_2. Any project that would exceed LSTs would be required to conduct dispersion modeling to confirm whether health-based air quality standards would be violated. Given the proximity of the Cumulative Project No. 101 at 1100 East 5th Street, any concurrent construction at that site could elevate cumulative concentrations of PM_{10} and $PM_{2.5}$ for the live/work receptor near these two potential construction sites. The SCAQMD's LSTs recognize the influence of a receptor's proximity, setting mass emissions thresholds for PM_{10} and $PM_{2.5}$ that generally double with every doubling of distance. However, the City's required compliance with SCAQMD Rule 403 would result in the implementation of good housekeeping measures that substantially reduce PM_{10} and $PM_{2.5}$ emissions during on-site construction activities. Cumulative projects in the surrounding area would also be required to comply with the applicable portions of SCAQMD Rule 403, and each project would also be required to implement appropriate additional mitigation

commensurate with its estimated construction emission quantities. **Thus, construction of the Project would not produce a cumulatively considerable contribution to cumulative pollutant concentrations at nearby sensitive receptors. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, and impacts would be considered less than significant.**

(b) Operation

The Project would not produce cumulatively considerable emissions of nonattainment pollutants at either the regional or local level (see Table IV.C-8). Because the Project's pollutant emissions would not exceed the SCAQMD's operational thresholds of significance, the Project's contribution to cumulative emissions of non-attainment pollutants would be **less than significant**. The Project is a mixed-use live/work, hotel, and commercial development that would not include major sources of combustion or fugitive dust. As a result, its localized emissions of PM_{10} and $PM_{2.5}$ would be minimal. Likewise, existing land uses in the area include land uses that do not produce substantial emissions of localized nonattainment pollutants. **Thus, long-term operation of the Project would not result in a cumulatively considerable net increase of any non-attainment criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard. Therefore, impacts would be less than significant.**

(2) Mitigation Measures

No significant impacts related to the cumulative increase in pollutant emissions have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to the cumulative increase in pollutant emissions would be less than significant.

Threshold (d) Would the project expose sensitive receptors to substantial pollutant concentrations?

(1) Impact Analysis

(a) Construction

Construction of the Project could produce pollutant emissions that impact several existing sensitive receptors near the Project Site, including the following:

- Live/work dwelling at 1201 East 5th Street, 60 feet east of the Project Site.
- Multi-family residences, 530 Hewitt Street; 640 feet east of the Project Site.
- Multi-family residences, 825 East 4th Street; 420 feet west of the Project Site.
- Arts District Park, 210 feet southeast of the Project Site.

Given the presence of a live/work space in the immediate Project Site vicinity, the analysis of impacts to residential receptors assumes the presence of residences within 25 meters (i.e., 82 feet) of the Project Site.

As illustrated in Table IV.C-7, these nearby receptors would not be exposed to substantial concentrations of localized pollutants PM_{10} and $PM_{2.5}$ from construction of the Proposed Project. **Specifically, construction activities would not exceed SCAQMD LST screening thresholds. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.**

The Project would not result in any substantial emissions of TACs during the construction phase. During construction, the primary TAC emissions would be associated with the combustion of diesel fuels, which produce exhaust-related particulate matter that is considered a TAC by CARB based on chronic exposure to these emissions.[11] Based on SCAQMD guidance, health effects from TACs are usually described in terms of individual cancer risk, which is the likelihood that a person exposed to TACs over a 70-year lifetime will contract cancer. Because of the relatively short period of time that diesel-fueled construction equipment would operate, the Project would not result in a substantial, long-term (70-year) source of TACs. It should be noted that SCAQMD CEQA *Air Quality* Handbook and supplemental online guidance/information do not require an HRA for short-term construction activities.

[11] *California Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust, http://oehha.ca.gov/public_info/facts/dieselfacts.html.*

Thus, it is not required or meaningful to evaluate long-term cancer impacts from construction activities that occur over relatively short durations. However, construction activities would not result in chronic, long-term exposure to DPM. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations, and impacts associated with TACs would be less than significant.

(b) Operation

The Project would generate long-term emissions on-site from area and energy sources that would generate negligible pollutant concentrations of CO, NO_2, $PM_{2.5}$, and PM_{10} at nearby sensitive receptors (see Table IV.B-8). While long-term operation of the Project would generate traffic that produces off-site emissions, these emissions would not result in exceedances of CO air quality standards at roadways in the area due to two key factors. First, CO hotspots are extremely rare and only occur in the presence of unusual atmospheric conditions and extremely cold conditions, neither of which applies to this Project area. Second, auto-related emissions of CO continue to decline because of advances in fuel combustion technology in the vehicle fleet as well as the availability and planned expansion of the local mass transit network within the vicinity of the Project Site.

With regard to TAC emissions on-site, the Project would not include typical sources of acutely and chronically hazardous TACs such as industrial manufacturing processes or automotive servicing facilities. As a result, the Project would not create substantial concentrations of TACs during its normal operation. The SCAQMD recommends that health risk assessments be conducted for substantial sources of diesel particulate emissions (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.[12] However, the uses proposed within the Project would not generate a substantial number of truck trips. In addition, the CARB-mandated regulations limit diesel-fueled commercial vehicles to idle no more than five minutes at any given time, further limiting diesel particulate emissions.

Therefore, the Project would not expose sensitive receptors to substantial air pollutant concentrations, and Project impacts would be less than significant.

(2) Mitigation Measures

No significant impacts related to the exposure of sensitive receptors to substantial air pollutant concentrations have been identified. Thus, no mitigation measures are required.

[12] *SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.*

(3) Level of Significance After Mitigation

Impacts related to the exposure of sensitive receptors to substantial air pollutant concentrations would be less than significant.

Threshold (e) Would the project create objectionable odors affecting a substantial number of people?

As discussed in the Initial Study (see **Appendix A** of the Draft EIR), the Project would not result in activities that are known to create objectionable odors. **Therefore, the Project would have a less-than-significant impact with respect to Threshold (e). No further analysis is required.**

e) Cumulative Impacts

(1) Impact Analysis

(a) Construction

With respect to the Project's construction-period air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies (e.g., SCAQMD Rule 403) to reduce criteria pollutant emissions outlined in the AQMP pursuant to Federal CAA mandates. As such, the Project would comply with regulatory requirements, including SCAQMD Rule 403 requirements, as discussed above. In addition, the Project would comply with adopted AQMP emissions control measures. Per SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, all construction projects Basin-wide would comply with these same requirements (i.e., SCAQMD Rule 403 compliance) and would also implement all feasible mitigation measures when significant impacts are identified.

Cumulative construction air quality impacts are also discussed above under Threshold (c). Based on SCAQMD guidance, construction projects that exceed its recommended daily thresholds would cause a cumulatively considerable increase in emissions. However, as discussed therein, construction of the Project would not produce a cumulatively considerable contribution to pollutant concentrations. Further, the greatest potential for TACs for other cumulative projects would involve diesel-fueled construction equipment activities. Because of the relatively short period of time that diesel-fueled construction equipment would operate, the Project would not result in a substantial, long-term (70-year) source of TACs. It should be noted that SCAQMD CEQA *Air Quality* Handbook and supplemental online guidance/information do not require an HRA for short-term construction activities. Thus, it is not required or meaningful to evaluate long-term cancer impacts from short-term construction activities, which occur over a period of months.

As a result, the Project's construction activities would not contribute substantially to cumulative impacts. Therefore, cumulative impacts related to construction emissions would be less than significant.

(b) Operation

Cumulative operational air quality impacts are discussed above under Threshold (c). Based on SCAQMD guidance, projects that produce emissions exceeding its daily thresholds of significance would result in a cumulatively considerable increase. **However, as noted earlier, the Project would not result in operational emissions that exceed the SCAQMD's regional or localized significance thresholds.**

With regard to TAC emissions, neither the Project nor any related projects would represent a substantial source of TACs, which are generally associated with large-scale industrial uses that involve combustion of diesel fuel and produce toxic compounds. The Project and related projects would be consistent with recommended screen-level siting distances for TAC sources pursuant to CARB's Land Use Guidelines. Thus, neither the Project nor cumulative projects would result in a cumulative impact requiring further evaluation. **Therefore, cumulative TAC emissions during long-term operation would be less than significant.**

The Project would not produce cumulatively considerable emissions of nonattainment pollutants at either the regional or local level (see Table IV.C-8). Because the Project's pollutant emissions would not exceed the SCAQMD's operational thresholds of significance, the Project's contribution to cumulative emissions of non-attainment pollutants would not be considerable. Therefore, cumulative impacts related to this issue would be less than significant.

(2) Mitigation Measures

No significant cumulative air quality impacts have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative air quality impacts would be less than significant.

IV. Environmental Impact Analysis

D. Cultural Resources

1. Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts on cultural resources, including historical, archaeological, and paleontological resources. This section is based in part on the following reports and records searches, included in **Appendix D** of the Draft EIR:

D-1. *Arts District Center, Historic Resources Technical Report, GPA Consulting (GPA), March 2018.*

D-2. *Archaeological Resources Assessment for the Arts District Center Project, City of Los Angeles, California, SWCA Environmental Consultants, February 2019.*

D-3. *Paleontological Resources Records Search Report, Dr. Samuel A. McLeod, Natural History Museum of Los Angeles County, May 28, 2015.*

D-4. *Sacred Lands File Search, Dr. Gayle Totton, California Native American Heritage Commission, July 11, 2017.*

2. Environmental Setting

a) Regulatory Framework

(1) Historical Resources

Historical resources fall within the jurisdiction of several levels of government. The framework for the identification and, in certain instances, protection of historical resources is established at the federal level, while the identification, documentation, and protection of such resources are often undertaken by state and local governments. As described below, the principal federal, state, and local laws governing and influencing the preservation of historical resources of national, state, regional, and local significance include the California Environmental Quality Act (CEQA); National Historic Preservation Act (NHPA) of 1966, as amended; the California Register of Historical Resources (California Register); and the City of Los Angeles (City) Cultural Heritage Ordinance

(Los Angeles Administrative Code, Section 22.120 *et seq.*), all of which are summarized below.

(a) National Register of Historic Places

The National Register of Historic Places (National Register) was established by the NHPA as "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment."[1] The National Register recognizes properties that are significant at the national, state, and/or local levels.

(i) Criteria

To be eligible for listing in the National Register, a property must be significant in American history, architecture, archaeology, engineering, or culture. Four criteria for evaluation have been established to determine the potential significance of a property.

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

B. It is associated with the lives of persons significant in our past; or

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

D. It yields, or may be likely to yield, information important in prehistory or history.[2]

(ii) Context

To be eligible for listing in the National Register, a property must be significant within a historic context. *National Register Bulletin #15* states that the significance of a historic property can be judged only when it is evaluated within its historic context. Historic contexts are "those patterns, themes, or trends in history by which a specific...property or site is understood and its meaning...is made clear."[3] A property must represent an important aspect of the area's history or prehistory and possess the requisite integrity to qualify for the National Register.

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1 *Title 36 Code of Federal Regulations 60, Part 60.2.*

2 *Title 36 Code of Federal Regulations 60, Part 60.4.*

3 *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation (Washington D.C.: National Park Service, Department of the Interior, 1997), 7-8.*

(iii) Integrity

In addition to possessing significance within a historic context, to be eligible for listing in the National Register, a property must have integrity. Integrity is defined in *National Register Bulletin #15* as "the ability of a property to convey its significance."[4] Within the concept of integrity, the National Register recognizes the following seven aspects or qualities that in various combinations define integrity: feeling, association, workmanship, location, design, setting, and materials. Integrity is based on significance: why, where, and when a property is important. Thus, the significance of the property must be fully established before the integrity is analyzed.

(iv) Historic Districts

The National Register includes significant properties, which are classified as buildings, sites, districts, structures, or objects. A historic district "derives its importance from being a unified entity, even though it is often composed of a variety of resources. The identity of a district results from the interrelationship of its resources, which can be an arrangement of historically or functionally related properties."[5]

A district is defined as a geographically definable area of land containing a significant concentration of buildings, sites, structures, or objects united by past events or aesthetically by plan or physical development.[6] A district's significance and historic integrity should help determine the boundaries. Other factors include the following:

- Visual barriers that mark a change in the historic character of the area or that break the continuity of the district, such as new construction, highways, or development of a different character;
- Visual changes in the character of the area due to different architectural styles, types, or periods, or to a decline in the concentration of contributing resources;
- Boundaries at a specific time in history, such as the original city limits or the legally recorded boundaries of a housing subdivision, estate, or ranch; and
- Clearly differentiated patterns of historical development, such as commercial versus residential or industrial.[7]

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4 *National Register Bulletin #15, 44-45.*

5 *Id., p. 5.*

6 *Title 36 Code of Federal Regulations Part 60.3(d).*

7 *National Register Bulletin #21: Defining Boundaries for National Register Properties Form (Washington D.C.: U.S. Department of the Interior, 1997), 12.*

Within historic districts, properties are identified as contributing and noncontributing. A contributing building, site, structure, or object adds to the historic associations, historic architectural qualities, or archeological values for which a district is significant because of the following:

- It was present during the period of significance, relates to the significance of the district, and retains its physical integrity; or
- It independently meets the criterion for listing in the National Register.[8]

(b) California Register

The California Register is similar to the National Register program. The California Register was enacted in 1992, and its regulations became official on January 1, 1998. The California Register is administered by the California Office of Historic Preservation.

The California Register is an authoritative guide used by state and local agencies, private groups, and citizens to identify historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.[9]

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

- California properties listed in the National Register and those formally Determined Eligible for the National Register;
- State Historical Landmarks from No. 0770 onward; and
- Those California Points of Historical Interest that have been evaluated by the State Office of Historic Preservation (SOHP) and have been recommended to the State Historical Resources Commission for inclusion on the California Register.[10]

(i) Criteria and Integrity

For those properties not automatically listed, the criteria for eligibility of listing in the California Register are based upon National Register criteria but are identified as 1-4 instead of A-D. To be eligible for listing in the California Register, a property generally

[8] *National Register Bulletin #16: How to Complete the National Register Registration Form (Washington D.C.: U.S. Department of the Interior, 1997), 16.*

[9] *California Public Resources Code, Section 5024.1(a).*

[10] *California Public Resources Code, Section 5024.1(d).*

must be at least 50 years of age and must possess significance at the local, state, and national level, under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States; or

2. It is associated with the lives of persons important to local, California, or national history; or

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or,

4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Properties eligible for listing in the California Register may include buildings, sites, structures, objects, and historic districts. A property that is less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand its historical importance. While the enabling legislation for the California Register is less rigorous with regard to the issue of integrity, there is the expectation that properties reflect their appearance during their period of significance.[11]

The California Register may also include properties identified during historical resource surveys. However, the survey must meet all of the following criteria:[12]

1. The survey has been or will be included in the State Historic Resources Inventory;

2. The survey and the survey documentation were prepared in accordance with office [SOHP] procedures and requirements;

3. The resource is evaluated and determined by the office [SOHP] to have a significance rating of Category 1 to 5 on a DPR Form 523; and

4. If the survey is five or more years old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historical resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource.

[11] *California Public Resources Code, Section 4852.*

[12] *California Public Resources Code, Section 5024.1.*

(c) California Environmental Quality Act

For purposes of CEQA, Public Resources Code Section 21084.1 defines a historical resource as the following:

> *[A] resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 shall not preclude a lead agency from determining whether the resource may be an historical resource.*

CEQA Guidelines Section 15064.5(a)(3) also provides the following additional guidance on this subject:

> *[A]ny object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources.*

CEQA Guidelines specify that a "substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines, Section 15064.5). Material impairment occurs when a project alters in an adverse manner or demolishes "those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion" or eligibility for inclusion in the National Register, California, or local register. In addition, pursuant to CEQA Guidelines Section 15126.2, the "direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."

The following guides and requirements are of particular relevance to analysis of indirect impacts to historical resources. Pursuant to CEQA Guidelines (Section 15378), study of a project under CEQA requires consideration of "the whole of an action, which has the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." CEQA Guidelines (Section 15064[d]) further define direct and indirect impacts as follows:

(1) A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project.

(2) An indirect physical change in the environment is a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment.

(3) An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project.

(d) City of Los Angeles Cultural Heritage Ordinance

The City's Cultural Heritage Ordinance, originally adopted by the Los Angeles City Council in 1962 and amended in 2007 (Sections 22.120 *et seq*. of the Los Angeles Administrative Code), created the City's Cultural Heritage Commission and established criteria for designating Historic-Cultural Monuments (HCM). The four criteria for HCM designation are stated as follows:

1. Reflects the broad cultural, economic, or social history of the nation, state, or community; or

2. Is identified with historic personages or with important events in the main currents of national, state, or local history; or

3. Embodies the characteristics of an architectural-type specimen, inherently valuable for a study of a period, style, or method of construction; or

4. Is the notable work of a master builder, designer, or architect whose individual genius influenced his or her age.[13]

Unlike the National and California Registers, the City's Cultural Heritage Ordinance makes no mention of concepts, such as physical integrity or period of significance.

[13] *Los Angeles Administrative Code, Section 22.171.7.*

Moreover, properties do not have to reach a minimum age requirement, such as 50 years, to be designated as HCMs.

(e) City of Los Angeles Historic Preservation Overlay Zone Ordinance

In 1979, the Los Angeles City Council adopted the Historic Preservation Overlay Zone Ordinance enabling the creation of Historic Preservation Overlay Zones (HPOZs). The City also recognizes historic districts as Historic Preservation Overlay Zones (HPOZ). An HPOZ is a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. According to Section 12.20.3 of the Los Angeles Municipal Code (LAMC), the criteria for the designation of contributing buildings in an HPOZ are as follows:

1. Adds to the historic architectural qualities or historic associations for which a property is significant because it was present during the period of significance, and possesses historic integrity reflecting its character at that time; or

2. Owing to its unique location or singular physical characteristics, represents an established feature of the neighborhood, community or city; or

3. Retaining the building, structure, landscaping, or natural feature, would contribute to the preservation and protection of a historic place or area of historic interest in the City.

(f) City of Los Angeles Historic Resources Survey (SurveyLA)

The Los Angeles Historic Resources Survey, or SurveyLA, is conducted under City Planning's Office of Historic Resources (OHR). SurveyLA is the City's comprehensive program to identify and document significant historical resources.

Surveys conducted under SurveyLA cover the period from approximately 1865 to 1980 and include individual resources, such as buildings, structures, objects, natural features, and cultural landscapes, as well as areas and districts. Significant resources reflect important themes in the City's growth and development in various areas, including architecture, city planning, social history, ethnic heritage, politics, industry, transportation, commerce, entertainment, and others. Field surveys commenced in 2010, were undertaken in phases by Community Plan Area, and were completed in 2017. The survey results are compiled in report format and posted on OHR's website.

As described in detail in the SurveyLA Field Survey Results Master Report, the surveys identify and evaluate properties according to standardized criteria for listing in the National Register, California Register, and for local designation as HCMs and HPOZs. SurveyLA findings are subject to change over time as properties age, additional

information is uncovered, and more detailed analyses are completed. Resources identified through SurveyLA are not designated resources. Designation by the City and nominations to the California or National Registers are separate processes that include property owner notification and public hearings. SurveyLA utilizes the Los Angeles Citywide Historic Context Statement (HCS) to provide a framework for identifying and evaluating the City's historical resources. Development of the HCS is also ongoing with oversight by OHR.

(g) City of Los Angeles General Plan

The City's General Plan includes a Conservation Element. Section 5 of the Conservation Element recognizes the City's responsibility for identifying and protecting its cultural and historical heritage. The Conservation Element establishes a policy to continue to protect historic and cultural sites and/or resources potentially affected by proposed land development, demolition, or property modification activities, with the related objective to protect important cultural and historical sites and resources for historical, cultural, research, and community educational purposes.[14]

The City's General Plan also includes 35 Community Plans that compose a part of the General Plan's Land Use Element. As discussed in **Section IV.H, Land Use**, of the Draft EIR, the Project Site is located within the Central City North Community Plan (Community Plan) Area. The Community Plan, adopted on December 15, 2000, includes the following objectives and policies that are relevant to cultural resources:

- **Objective 17-1:** To ensure that the Community's historically significant resources are protected, preserved, and/or enhanced.
    - **Policy 17-1.1:** Encourage the preservation, maintenance, enhancement, and reuse of existing buildings and the restoration of original facades.
- **Objective 17-2:** To encourage private owners of historic properties/resources to conserve the integrity of such resources.
    - **Policy 17-2.1:** Assist private owners of historic resources to maintain and/or enhance their properties in a manner that will preserve the integrity of such resources in the best possible condition.
- **Objective 18-1:** To enhance and capitalize on the contribution of existing cultural and historical resources in the community.
    - **Policy 18-1.1:** Support the existing artists community in Central City North as a cultural resource for the community.

[14] *City of Los Angeles General Plan, Conservation Element. September 2001; pages II-4, II-5, and II-8.*

(2) Archaeological and Paleontological Resources

Federal, state, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The National Environmental Policy Act (NEPA), National Historic Preservation Act, and CEQA are the basic federal and state laws governing the preservation of historic and archaeological resources of national, regional, state, and local significance. As archaeological resources are also considered historical resources, regulations applicable to historical resources are also applicable to archaeological resources. Whereas federal agencies must follow federal archaeological regulations, most projects by private developers and landowners do not require this level of compliance. Thus, as the Project would not require a federal permit and would not use federal money, federal archaeological regulations are not applicable to the Project.

(a) California Environmental Quality Act

State archaeological regulations affecting the Project include the statutes and guidelines contained in CEQA (Public Resources Code (PRC) Section 21083.2 and Section 21084.1) and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, Section 15064.5). CEQA requires lead agencies to carefully consider the potential effects of a project on archaeological resources. Several agency publications, such as the series produced by the Governor's Office of Planning and Research (OPR), provide guidance regarding procedures to identify such resources, evaluate their importance, and estimate potential effects.

CEQA recognizes that archaeological resources are part of the environment, and a project that "may cause a substantial adverse change in the significance of a historical resource [including archaeological resources] is a project that may have a significant effect on the environment" (PRC Section 21084.1). For purposes of CEQA, a historical resource is any object, building, structure, site, area, place, record, or manuscript listed in or eligible for listing in the California Register (PRC Section 21084.1). Please refer to the previous discussion in this section regarding the California Register for a list of the criteria used to determine whether a resource is eligible for listing in the California Register and thus, is considered a historical resource under CEQA.

Archaeologists assess sites based on all four criteria but usually focus on the fourth criterion previously provided, which is whether the resource "[h]as yielded, or may be likely to yield, information important in prehistory or history." The CCR also provides that cultural resources of local significance are eligible for listing in the California Register (CCR, Title 14, Section 4852).

In addition to historical resources, CEQA considers project impacts to unique archaeological resources, defined as an archaeological artifact, object, or site about

which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2(g)).

In addition to having significance in accordance with the applicable criteria, resources must have integrity for the period of significance. The period of significance is the date or span of time within which notable events transpired at a site, or the period that notable individuals made their important contributions to a site. Integrity is the ability of that property to convey its significance.

With regard to human remains, CEQA Guidelines Section 15064.5 addresses consultation requirements if an initial study identifies the existence of, or the probable likelihood of Native American human remains within the project site. This section of the CEQA Guidelines as well as Health and Safety Code Section 7050.5 and PRC Section 5097.9 also address treatment of human remains in the event of accidental discovery.

Paleontological resources are also afforded protection under CEQA. Appendix G of the CEQA Guidelines provides guidance relative to significant impacts on paleontological resources, which states that a project could have a potentially significant impact on the environment if it could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

(b) Los Angeles General Plan Conservation Element

Section 3 of the Los Angeles General Plan Conservation Element, adopted in September 2001, includes policies for the protection of archaeological and paleontological resources. As stated therein, it is the City's policy that archaeological resources be protected for research and/or educational purposes. It is also the City's policy that paleontological resources be protected for historical and cultural research and/or educational purposes. Section 3 sets as an objective the identification and protection of significant paleontological sites and/or resources known to exist or that are identified during the "land development, demolition, or property modification activities." Section 5 of the Conservation Element recognizes the City's responsibility for identifying and protecting its cultural and historical heritage. The Conservation Element establishes the policy to continue to protect historic and cultural sites and/or resources potentially

affected by proposed land development, demolition, or property modification activities, with the related objective to protect important cultural and historical sites and resources for historical, cultural, research, and community educational purposes.[15]

(3) Treatment of Human Remains

The disposition of burials falls under the general prohibition on disturbing or removing human remains under California Health and Safety Code (CHSC) Section 7050.5. More specifically, remains suspected to be Native American are treated under CEQA at CCR Section 15064.5. PRC Section 5097.98 illustrates the process to be followed if remains are discovered. If human remains are discovered during excavation activities, the following procedure shall be observed:

- Stop immediately and contact the County Coroner.
- If the remains are determined to be of Native American descent, the Coroner has 24 hours to notify the Native American Heritage Commission (NAHC).
- The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the deceased Native American.
- The MLD has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.
- If the owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC.

b) Existing Conditions

(1) Historical Resources

(a) History of Project Site

The Project Site was part of the F.P. Howard and Co.'s Subdivision of the Bliss Tract that was first subdivided into parcels in 1886. The six parcels that comprise the present-day Project Site were developed with two warehouses and two dwellings by 1906. The two dwellings were both one story in height and located at 447 and 449 Colyton Street until 1907 when the two dwellings were relocated. The two warehouses were both occupied by the F.O. Engstrum Company, a major contractor in Los Angeles that supervised the construction of many of the largest buildings in the city. Notable projects include the 12-story Citizens National Bank at 5th and Spring Streets, the 13-story

[15] *Ibid.*

Rosslyn Hotel at 5th and Main Streets, and the 10-story Bryson apartment building at Wilshire Boulevard and Rampart Street. The F.O. Engstrum Company warehouse located on Seaton Street was one story in height. The other F.O. Engstrum Company warehouse was located on the corner of E. 5th and Colyton Streets and was two stories in height. The F.O. Engstrum Company occupied these two warehouses until the Weber Showcase & Fixtures Company likely purchased the property around 1915 or 1916.

The Weber Showcase & Fixtures Company, a wood working fixture business, owned and occupied the property from approximately 1915 to 1924. Its first factory was located at 440 Seaton Street, immediately north of the Project Site. It consisted of a one-story factory building constructed in 1902, several one-story ancillary buildings to the north of the factory building, and a lumber storage yard. In 1913, the Weber Company demolished the one-story warehouse and constructed the existing three-story red brick building at 440 Seaton Street. Sometime around 1915, the Weber Company likely demolished the former F.O. Engstrum Company warehouse on Seaton Street, but maintained the second warehouse on the corner of E. 5th Street and Colyton Street. When the Weber Company constructed the existing building on the Project site, it incorporated the two-story F.O. Engstrum Company warehouse into the new building, likely altering the elevations facing E. 5th Street and Colyton Street to match the design of the new building. By 1924, the Weber Company had expanded to occupy almost the whole block. Its factory complex consisted of the two-story warehouse building on the Project Site, two one-story warehouses and a two-story warehouse on Colyton Street, the three-story factory buildings at 421 Colyton Street and 440 Seaton Street, as well as a lumber storage yard to the north of 440 Seaton Street.

The Weber Company moved its manufacturing facilities to a new factory complex on a 14-acre site on the northeast corner of South Park and Slauson Avenue in 1924. The Jennings-Nibley Warehouse Co., a subsidiary of the Weber Company, occupied the former Weber Company factory complex until 1970, and used the buildings for general storage. In 1970, the Weber Showcase and Fixture Company, at that time owned by Walter Kidde & Co., Inc. halted all operations. The building was most likely sold soon after. Between 1970 and the present, the first floor has been occupied by a number of different commercial and industrial tenants. The second floor was illegally occupied by residential tenants beginning sometime in the early 1980s and was officially converted into Artist-in-Residence lofts in 1992.

(b) Description of the Project Site

The Project Site is developed with a two-story vernacular warehouse building constructed in approximately 1915. The building is rectangular in plan with exposed elevations facing west towards Seaton Street, south towards E. 5th Street, and east towards Colyton Street. The wood post and brick wall structure has concrete floors. The

south elevation is organized into 12 bays, each consisting of varying numbers and sizes of predominantly segmental arched openings ornamented by glass fiber reinforced concrete (GFRC) surrounds and keystones. There are several entries on the first floor along the west, south, and east elevations. The ceilings are wood truss, and the saw-tooth and paneled skylights on the roof provide additional natural light.

According to a review of the full building permit history for the property, the building has been altered since its construction. Few alterations to the building appear to have occurred during the period of significance from 1900 to 1940 for the potential Downtown Los Angeles Industrial Historic District, which is further described below. Notable alterations before 1940 included alterations to the exterior of the southeast corner. This portion of the building was likely constructed prior to 1906 by the F.O. Engstrum Company as a two-story warehouse. When the existing building was constructed around 1915, the F.O. Engstrum Company warehouse appears to have been altered in order to match its elevations to the design of the new construction.

Alterations to the two-story F.O. Engstrum Company warehouse include the infilling of four window openings on the first floor of the 5th Street elevation and the possible build out of the first floor and second-floor columns in new red brick. The majority of alterations are known to have occurred or appear to have occurred after 1940. In 1965, the original parapet was removed from the street-facing elevations. In the early 1980s, the building was seismically upgraded. During this seismic upgrade, many of the original openings on the first and second floors were infilled with concrete block. In 2009, the majority of the original wood sashes were removed from the remaining window openings on the second floor and replaced with vinyl sashes. Only two original wood windows remain on the E. 5th Street elevation. In 2010, portions of the building were sandblasted, which eroded the surface of the exterior red brick. At an unknown date, all of the original entry doors and garage doors were removed. Additionally, several of the remaining original window, door, and garage openings that were not infilled with concrete block were resized and new doors, windows, or storefronts were inserted into the resized openings. Also at an unknown date, portions of the exterior were painted and GFRC quoins and window surrounds were added to the first and second floors. A decorative GFRC belt course was also added between the first and second floors. The building's interior has also been altered over time. Significant alterations to the building's interior include a change in the building's interior partitions due to changing commercial and industrial tenants as well as the building's second floor conversion into Artist-in-Residence lofts in 1992.

A records search from the South Central Coastal Information Center was requested to determine whether or not the Project Site is currently listed under national, state, or local landmark or historic district programs and whether or not it has been previously identified or evaluated as a potential historical resource. This involved a review of the

California Historic Resources Inventory System (CHRIS), which includes data on properties listed and determined eligible for listing in the National Register of Historic Places, listed and determined eligible for listing in the California Register of Historical Resources, California Registered Historical Landmarks, Points of Historical Interest, as well as properties that have been evaluated in historical resources surveys and other planning activities. This research revealed that the building on the Project Site is not included in CHRIS and is, therefore, not currently listed under national, state, or local landmark or historic district programs.

(c) Description and History of the Study Area

(i) Potential Historic District

SurveyLA has identified the Project Site as within the boundaries of the potential Downtown Los Angeles Industrial Historic District (Potential Historic District). According to SurveyLA, the Potential Historic District appears eligible for listing in National Register of Historic Places and the California Register of Historical Resources, as well as local designation for its association with the industrial development of Los Angeles. The building on the Project site was identified by SurveyLA as a contributor to the Potential Historic District and was assigned Status Codes of 3D, 3CD, and 5D3, which are defined as follows:

- **3D** Appears eligible for National Register as a contributor to a National Register eligible district through survey evaluation.
- **3CD** Appears eligible for California Register as a contributor to a California Register eligible district through a survey evaluation.
- **5D3** Appears to be a contributor to a district that appears eligible for local listing or designation through survey evaluation.

The Project Site is centrally located within and along the western boundary of the Potential Historic District.

The Potential Historic District is located between the Alameda Street Corridor and the Los Angeles River and is generally organized within a gridded street pattern, except E. 4th Street, which runs diagonally northwest-southeast. It has an irregular boundary but is essentially bound by E. 1st Street to the north, Santa Fe Avenue and Mateo Street to the east, E. 7th Street to the south, and S. Alameda Street to the west. It is described as a predominantly industrial area, with buildings that range between modest and block-spanning footprints. Original buildings within the Potential Historic District are typically vernacular or utilitarian in style and were constructed between 1900 and 1940. The Potential Historic District contains 196 buildings, of which 104 (approximately 53

percent) have been evaluated by SurveyLA to be contributors; the remaining 92 buildings were evaluated as non-contributors due to alterations or construction outside the period of significance (1900-1940).

The Potential Historic District is potentially eligible at the local level for its association with the industrial development history of Los Angeles. This area was the city's primary industrial hub beginning in the late nineteenth century and through World War II. The presence of the railroad west of the Alameda Street corridor and introduction of the transcontinental railroad to Los Angeles with the opening of the Southern Pacific Railroad (SFR) line in 1876 initiated motivation to develop industrially within the Potential Historic District. By the beginning of the twentieth century, manufacturers, processing companies, and warehouses were becoming established - capitalizing on the convenience of rail line proximity.

Along with the natural push for industrial use over the area's previous uses oriented toward agriculture and single-family residences, the City's 1922 re-zoning regulation went further to accommodate the construction of industrial facilities by eliminating residential use in the Downtown area. By the 1920s, the area now identified as the Potential Historic District was fully established as an industrial hub. Industrial uses evolved over time with a shift toward automotive manufacturing and transport as well as manufacturing of furniture, paint, chemical, paper, and plastic products in the 1950s, for example. Beginning in the 1960s, the area's identity as an industrial hub was fading due to the struggle to adapt new preferred technologies in manufacturing and transport, especially containerization. This was evinced by the growing number of vacant buildings in the area. During the 1970s, artists began moving into the Potential Historic District as it provided an abundance of available and affordable space to live and work.

With the implementation of the Artist-in-Residence Program in 1981 by the City, residential use of previously defined industrial buildings was legitimized for artists. Since the official designation of the area as the Arts District in the mid-1990s and the passage of the Adaptive Reuse Ordinance in 1999 - allowing the conversion of pre-1974 commercial and industrial buildings into residences, there have been numerous proposals for development within the area to address needs of the growing community.

(ii) Contributing Buildings to the Potential Historic District within the Study Area

As shown in Figure IV.D-1, the study area for the historic evaluation conducted for the Project Site was defined as the area within a one-half block radius of the Project Site to determine impacts on historical resources in the Project vicinity. Of the 17 properties in the study area, 14 are located within the boundary of the Potential Historic District. SurveyLA identified 10 of these 14 properties, including the Project Site, as contributors to the Potential Historic District. The four non-contributing buildings and the three properties in the study area located outside the boundary of the Potential Historic District were excluded from further analysis as potential historical resources. Based upon the field inspection and research performed as part of the historic evaluation of the Project Site, these properties do not appear to meet the eligibility standards for the Early Industrial Development Theme formulated for the *Los Angeles Citywide Historic Context Statement* due to a lack of age, architectural character, and/or physical integrity. None are currently listed under national, state, or local landmark or historic district programs, nor are any included as significant in any historical resource surveys of the area, including SurveyLA.

In addition to the Project Site, nine additional properties within the study area were identified by SurveyLA as contributors to the Potential Historic District: 430 S. Alameda Street, 436 S. Alameda Street, 440 S. Alameda Street, 440 Seaton Street, 428 Colyton Street, 436 Colyton Street, 1201 E. 5th Street, and 1200 E. 5th Street (see Figure IV.D-2). In order to provide a conservative analysis of the Project's potential indirect impacts, these properties are presumed to meet the definition of contributing buildings (i.e., they relate to the significance of the Potential Historic District, date from the period of significance, and retain integrity). However, the historic evaluation did not include studying any of the properties to independently confirm the SurveyLA findings. All nine properties have Status Codes of 3D, 3CD, and 5D3, which are the same as those for the Project Site. A detailed description of these properties is included in the Historic Resources Technical Report in **Appendix D-1** of the Draft EIR.

(d) Evaluation of Potential Historical Eligibility

Buildings that contribute to the significance of the Potential Historic District are buildings that relate to the significance of the Potential Historic District (industrial history), date from the period of significance (1900-1940), and retain physical integrity. Buildings that do not contribute were not occupied by industrial uses, were constructed after 1940 or were constructed before 1900, and no longer retain physical integrity.



Figure 4.D-1
Location of Project Site and Study Area within the Potential Historic District

Source: GPA Consulting, 2019.

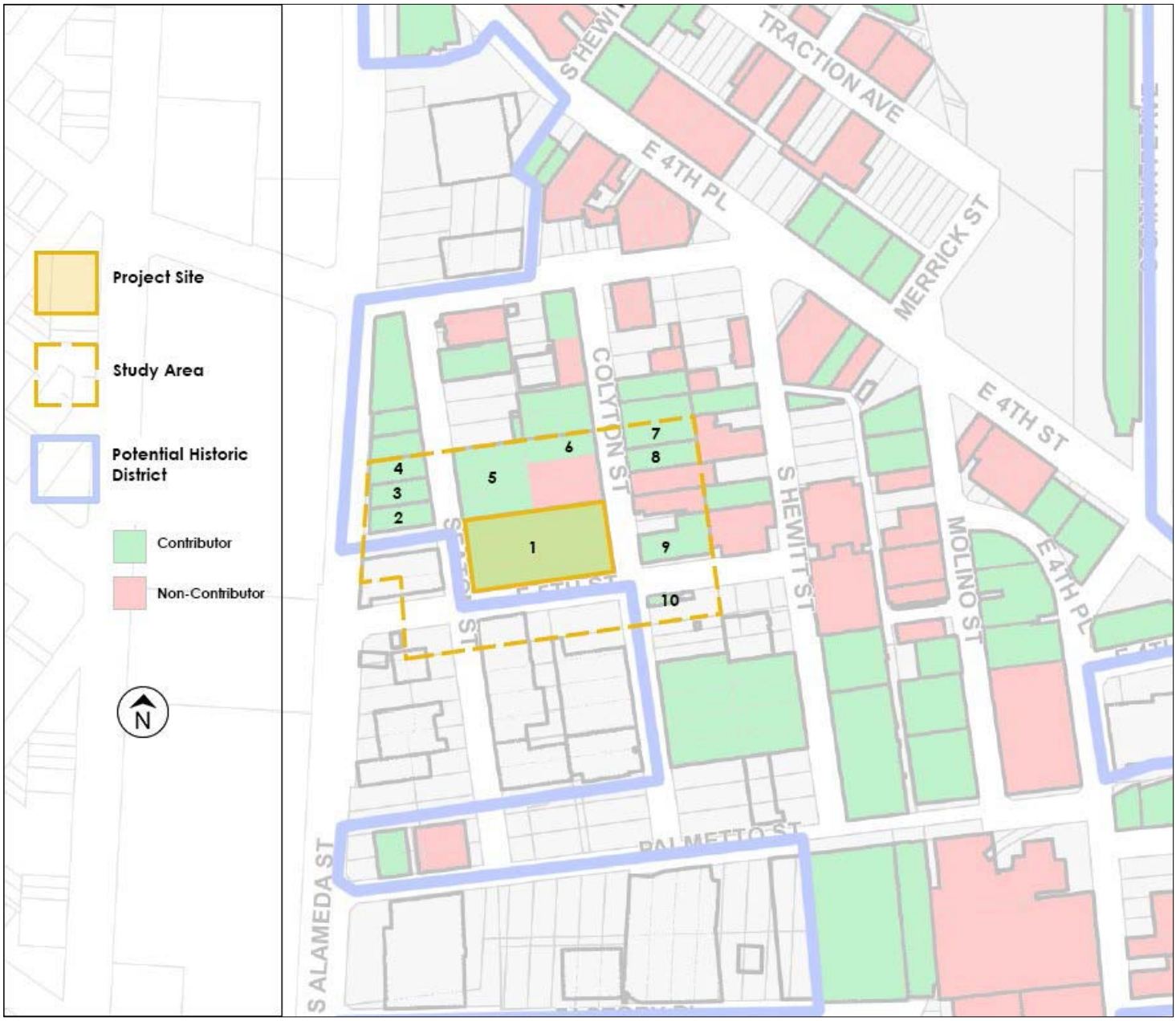


Figure 4.D-2
Potential Historical Resources within Study Area

Source: GPA Consulting, 2019.

SurveyLA identified the building on the Project Site as contributing to the significance of the Potential Historic District. Based on the field inspection and research, field study conducted by OHR, and approval by OHR of the findings of the historic evaluation conducted for the Project Site, the building has been significantly altered since its construction in approximately 1915. Thus, the building is re-evaluated below to determine whether it retains sufficient physical integrity to contribute to the Potential Historic District.

(e) Evaluation of Eligibility as a Contributor to the Potential Historic District

As a vernacular industrial warehouse from the early twentieth century, the essential physical features of the structure occupying the Project Site were its low-scale massing, brick exterior, arched window and door openings, large ground floor openings for the movement of goods, and applied details such as the decorative brick belt course between the first and second floors as well as the parapet. The majority of these essential physical features have been impacted by the following alterations to the building undertaken after 1940, the end date for the Potential Historic District's period of significance:

- The building's massing remains overall but has been slightly diminished by the loss of its original parapet.
- Portions of the brick exterior have been significantly damaged by sandblasting.
- Many of the original arched window and door openings have been infilled with concrete block to the degree that the fenestration pattern is no longer evident. Of the remaining original window openings, the majority has been altered by the insertion of vinyl sashes. Other original openings have been resized, and new doors, windows, and storefronts inserted.
- Some original large ground floor openings have also been infilled with concrete block.
- The building's applied detail, the GFRC quoins and window surrounds, are a recent alteration. The majority of the building's original applied detailing has been removed, most notably the original parapet; although, portions of the original decorative brick belt course between the first and second floor remain.

Therefore, as a result of these alterations, the building's essential physical features have mostly been removed or altered since the end of the Potential Historic District's period of significance.

Contributing buildings to the Potential Historic District that possess similar essential physical features include 900 E. 1st Street, 440 Seaton Street, 1617 E. 7th Street, 421 Colyton Street, 1800 E. Industrial Street, 1820 E. Industrial Street, 544 S. Mateo Street, and 255 S. Santa Fe Avenue. In comparison to these contributing buildings, the building on the Project Site has been more extensively altered. The extent of alterations is more comparable to buildings identified by SurveyLA as non-contributing buildings that were constructed during the Potential Historic District's period of significance, such as 451 S. Hewitt Street, 804 E. 3rd Street, 1247 E. 6th Street, and 1261 E. 6th Street. These buildings do not retain sufficient physical integrity to contribute to the significance of the Potential Historic District.

The Potential Historic District retains its integrity of location between the Alameda Street Corridor and the Los Angeles River, its integrity of setting of mostly industrial buildings of varying types and sizes sited on a generally orthogonal grid, and its integrity of feeling and association as an early twentieth century industrial center. Therefore, the buildings that contribute to the Potential Historic District should also retain these aspects of integrity. The SurveyLA findings for the Potential Historic District note that "due to the inherent flexibility of their design, industrial buildings are often subject to a greater degree of modification over time." Because a majority of the contributing buildings within the Potential Historic District have been altered to some extent, some buildings likely do not retain integrity of materials or workmanship. However, in order to retain integrity of feeling and association, a building must retain integrity of design, which directly relates to the building's historic industrial use and therefore, the Potential Historic District's integrity of feeling and association as an early twentieth century industrial center.

The building on the Project Site has not been moved, so it retains its integrity of location. The immediate setting of the building is intact, but the surrounding setting has been diminished by the later construction of new industrial buildings located to the south, outside the boundary of the Potential Historic District. Because the building does not retain the majority of its essential physical features, the overall integrity of materials, design, and workmanship has been lost. Also, due to the cumulative effect of later alterations, the building no longer conveys its integrity of feeling and association as an early twentieth century industrial building. The building on the Project Site does not retain integrity of materials, design, workmanship, feeling, or association due to an accumulation of alterations undertaken after the Potential Historic District's period of significance. Therefore, it does not appear to contribute to the Potential Historic District.

(f) Evaluation of Individual Eligibility

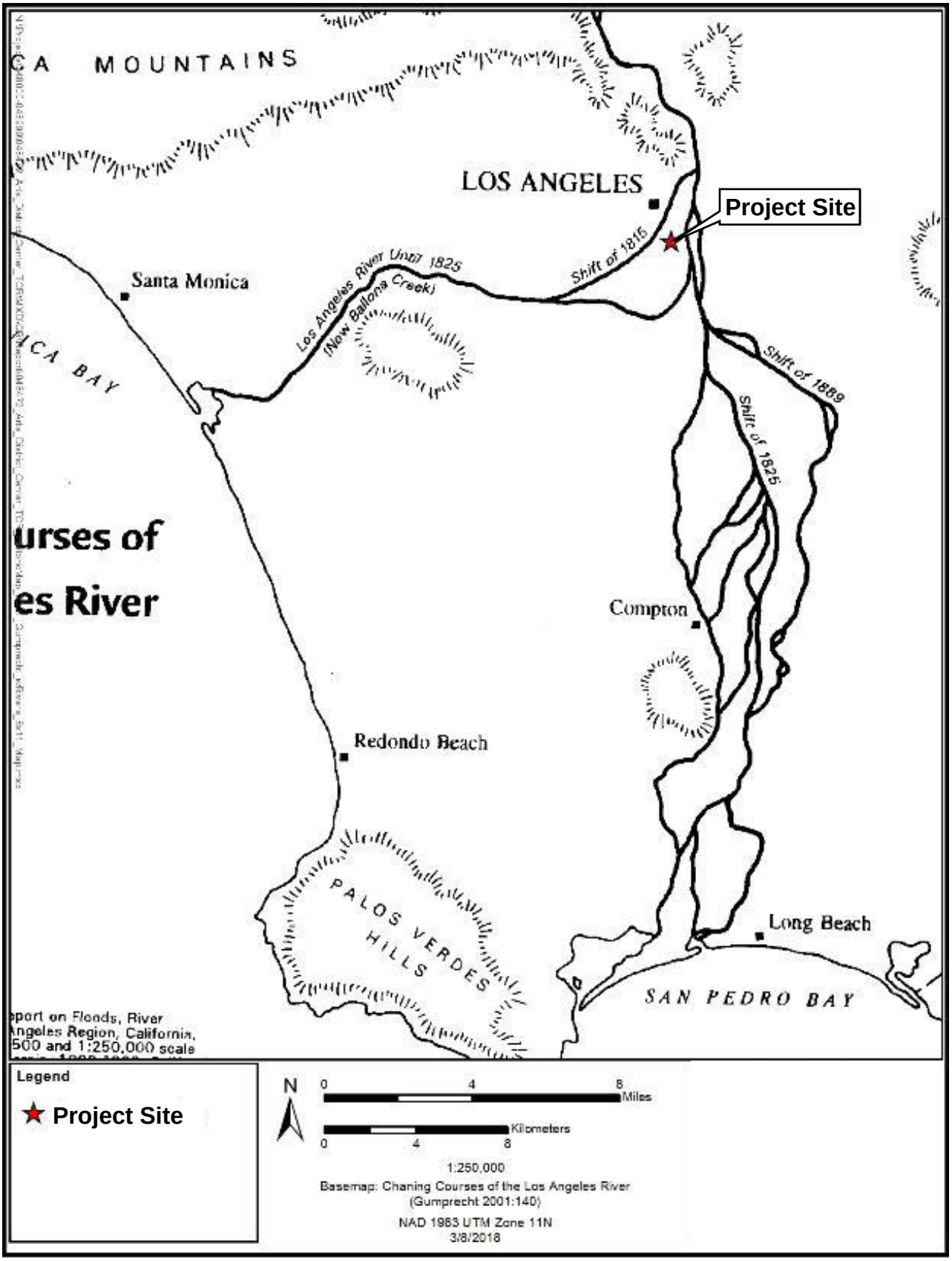
Based upon the information outlined above, the building on the Project Site also does not meet the eligibility standards for the Early Industrial Development Theme.

Therefore, it does not appear to be eligible for individual listing under national, state, or local landmark programs. In addition to its loss of integrity, the building is neither a rare surviving example nor a representative of a very early phase of industrial development in this area. The building is a vernacular brick building that does not demonstrate any innovative, important, or outstating design features. Early Industrial Development was the only relevant theme identified within the *Los Angeles Citywide Historic Context Statement*. However, based on the historic evaluation conducted for the building on the Project Site, it does not qualify as a contributing building because it lacks integrity as a result of substantial alterations.

(2) Archaeological Resources

The Project Site is located in the Los Angeles Basin, a broad, level plain defined by the Pacific Ocean to the west, the Santa Monica Mountains and Puente Hills to the north, and the Santa Ana Mountains and San Joaquin Hills to the south. This extensive basin is filled with predominantly alluvial sediments and is drained by several major watercourses, including the Los Angeles, Rio Hondo, San Gabriel, and Santa Ana rivers. The Project Site is currently set within a complete urbanize environment since the site was developed in the middle nineteenth century.

The south-flowing Los Angeles River is currently located approximately 0.6 kilometers (0.4 miles) east of the Project Site. However, historically the channel has shifted courses several times during flood events, with the main channel shifting its location relative to the Project Site twice in the last 100 years (see Figure IV.D-3). The first recorded shift of the river occurred in 1815 when floodwaters overflowed the former channel, shifting the course, previously located to the east of the Project Site, at least 0.8 kilometers (0.5 miles) to the southwest, near the present route of North Spring Street, now west of the Project Site. That flood destroyed structures built as part of the original Los Angeles Pueblo and is presumed to have also destroyed a Native American village site (Yaanga) also located north of the Project Site. At that time and before 1825, the river flowed west within the Los Angeles Basin, discharging into the Ballona Wetlands along what is now Ballona Creek, near Santa Monica. Flooding in 1825 then produced the most dramatic shift historically observed in the river's course as the newly formed channel overflowed its banks and shifted its course again, relocating the channel back east of the Project Site, now flowing fully south and emptying into the bay near San Pedro. Subsequent shifts occurred along the braided streams within the broader, south-flowing flood plain.



Multiple courses of the Los Angeles River channel as depicted by Gumprecht (2001:140).

Figure IV.D-3
Los Angeles River Courses

Source: SWCA Environmental Consultants, 2019.

The Los Angeles River flooded multiple times, including a catastrophic flood in 1938. Flood events such as these can produce substantial deposits of alluvial sediments within the respective floodplains. Alluvial terraces formed where flooding water eroded into adjacent hillsides. In the downtown Los Angeles area, the backslopes in the location of Bunker Hill delineate the edge of the historical floodplain.

Before the last decades of the nineteenth century, the Project Site was subject to ranching and farming, followed by industrialization during the early twentieth century. Disturbances to the physical setting from these historical developments are represented in the sediment profiles presented in the geotechnical report prepared for the Project (see **Appendix E-1** of the Draft EIR). Bore samples drilled at four locations within the Project Site identified artificial fill extending up to 12 feet below the modern concrete surface and containing pieces of bricks and construction debris. Below these fill soils, Quaternary-age alluvium extends to a depth of at least 50 feet. These sediments form strata consisting of sand, sand with gravels, cobbles, and potentially larger boulders, and intermittent lenses of silty sand, which are consistent with high-energy depositional trends near rivers with shifting courses and flooding events.

(a) Cultural Setting

(i) Prehistory

As discussed in the Archaeological Resources Assessment (AR Assessment), in the past several decades, researchers have devised numerous prehistoric chronological sequences to aid in understanding cultural changes in Southern California. Building on early studies and focusing on data synthesis, Wallace developed a prehistoric chronology for the Southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas. Four horizons are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although Wallace's 1955 synthesis initially lacked chronological precision due to a paucity of absolute dates, this situation has been alleviated by the availability of thousands of radiocarbon dates that have been obtained by Southern California researchers in the last three decades. As such, several revisions were subsequently made to Wallace's 1955 synthesis using radiocarbon dates and projectile point assemblages. The summary of prehistoric chronological sequences for Southern California coastal and near-coastal areas presented below is a composite of information in Wallace and Warren, as well as more recent studies, including Koerper and Drover.

Horizon I: Early Man (CA. 10,000–6,000 BC)

The earliest accepted dates for archaeological sites on the Southern California coast are from two of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this

area approximately 10,000 years ago. On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago. Present-day Orange and San Diego counties contain several sites dating from 9,000 to 10,000 years ago. Although the dating of these finds remains controversial, several sets of human remains from the Los Angeles Basin (e.g., "Los Angeles Man," "La Brea Woman," and the Haverty skeletons) apparently date to the middle Holocene, if not earlier.

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas, and a greater emphasis on large-game hunting inland.

Horizon II: Milling Stone (6,000–3,000 BC)

Set during a drier climatic regime than the previous horizon, the Milling Stone horizon is characterized by subsistence strategies centered on collecting plant foods and small animals. The importance of the seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages, namely milling stones (metates) and handstones (manos). Recent research indicates that Milling Stone horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions.

Horizon III: Intermediate (3,000 BC–AD 500)

The Intermediate horizon is characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. An increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites from this horizon along the California coast. Related chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment and signaling a shift away from the processing and consuming of hard seed resources to the increasing importance of the acorn.

Horizon IV: Late Prehistoric (AD 500–Historic Contact)

In the Late Prehistoric horizon, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric horizon, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points suggests increased use of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Steatite cooking vessels and containers are also present in sites from this time, and there is an increased presence

of smaller bone and shell circular fishhooks; perforated stones; arrow shaft straighteners made of steatite; a variety of bone tools; and personal ornaments such as beads made from shell, bone, and stone. There was also an increased use of asphalt for waterproofing and as an adhesive. Late Prehistoric burial practices are discussed in the Ethnographic Overview section, below.

By AD 1000, fired clay smoking pipes and ceramic vessels were being used at some sites. The scarcity of pottery in coastal and near-coastal sites implies that ceramic technology was not well developed in that area, or that ceramics were obtained by trade with neighboring groups to the south and east. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels.

During this period, there was an increase in population size accompanied by the advent of larger, more permanent villages. Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally.

In Warren's cultural ecological scheme, the period between AD 500 and European contact, which occurred as early as 1542, is divided into three regional patterns: Chumash (Santa Barbara and Ventura counties), Takic/Numic (Los Angeles, Orange, and western Riverside counties), and Yuman (San Diego County). The seemingly abrupt introduction of cremation, pottery, and small triangular arrow points in parts of modern-day Los Angeles, Orange, and western Riverside counties at the beginning of the Late Prehistoric period is thought to be the result of a Takic migration to the coast from inland desert regions. Modern Gabrielino/Tongva, Juaneño, and Luiseño people in this region are considered to be the descendants of the Uto-Aztecan, Takic-speaking populations that settled along the California coast in this period.

(ii) Ethnographic Overview

The Project Site is in an area historically occupied by the Gabrielino/Tongva. Surrounding native groups included the Chumash and Tatataviam/Alliklik to the north, the Serrano to the east, and the Luiseño/Juaneño to the south. There is well-documented interaction between the Gabrielino and many of their neighbors in the form of intermarriage and trade.

The name Gabrielino (sometimes spelled Gabrieleno or Gabrieleño) denotes those people who were administered by the Spanish from Mission San Gabriel. This group is now considered to be a regional dialect of the Gabrielino language, along with the Santa Catalina Island and San Nicolas Island dialects. In the post-European contact period,

Mission San Gabriel included natives of the greater Los Angeles area, as well as members of surrounding groups such as Kitanemuk, Serrano, and Cahuilla. There is little evidence that the people we call Gabrielino had a broad term for their group; rather, they identified themselves as an inhabitant of a specific community through the use of locational suffixes (e.g., a resident of Yaanga was called a Yabit, much the same way that a resident of New York is called a New Yorker).

Native words that have been suggested as labels for the broader group of Native Americans in the Los Angeles region include Tongva (or Tong-v) and Kizh (Kij or Kichereno, although there is evidence that these terms originally referred to local places or smaller groups of people within the larger group that we now call Gabrielino. Nevertheless, many present-day descendants of these people have taken on Tongva as a preferred group name because it has a native rather than Spanish origin . Thus, the term Gabrielino/Tongva is used in the remainder of this section to designate native people of the Los Angeles Basin and their descendants.

The Gabrielino/Tongva subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal eco-niches. Like that of most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate period). Inhabitants supplemented acorns with the roots, leaves, seeds, and fruits of a variety of flora (e.g., islay, cactus, yucca, sages, and agave). Freshwater and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed.

The Gabrielino/Tongva used a variety of tools and implements to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Groups residing near the ocean used oceangoing plank canoes and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands. Gabrielino/Tongva people processed food with a variety of tools, including hammer stones and anvils, mortars and pestles, manos and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks. Food was consumed from a variety of vessels. Catalina Island steatite was used to make ollas and cooking vessels.

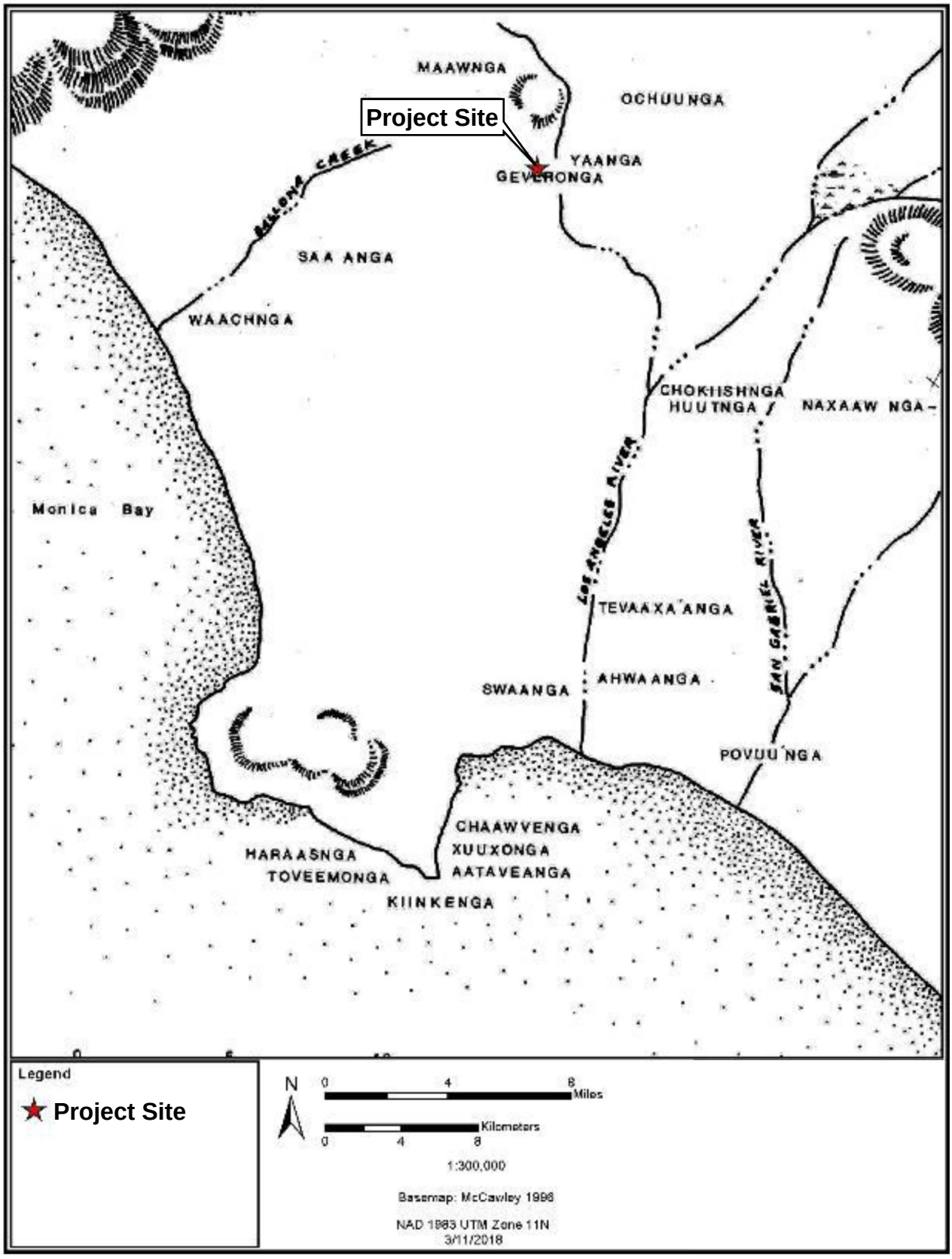
At the time of Spanish contact, the basis of Gabrielino/Tongva religious life was the Chinigchinich cult, centered on the last of a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions, and also taught the people how to dance, the primary religious act for this society. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws. The Chinigchinich religion seems to have been relatively new when the Spanish arrived. It was spreading

south into the southern Takic groups even as Christian missions were being built and may represent a mixture of native and Christian belief and practices.

Deceased Gabrielino/Tongva were either buried or cremated, with inhumation more common on the Channel Islands and the neighboring mainland coast, and cremation predominating on the remainder of the coast and in the interior. Remains were buried in distinct burial areas, either associated with villages or without apparent village association. Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes, as well as scattered among broken ground stone implements. Archaeological data such as these correspond with ethnographic descriptions of an elaborate mourning ceremony that included a variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wood tools, shell beads, bone and shell ornaments, and projectile points and knives. Offerings varied with the sex and status of the deceased.

Yaanga and Other Native American Communities in Los Angeles

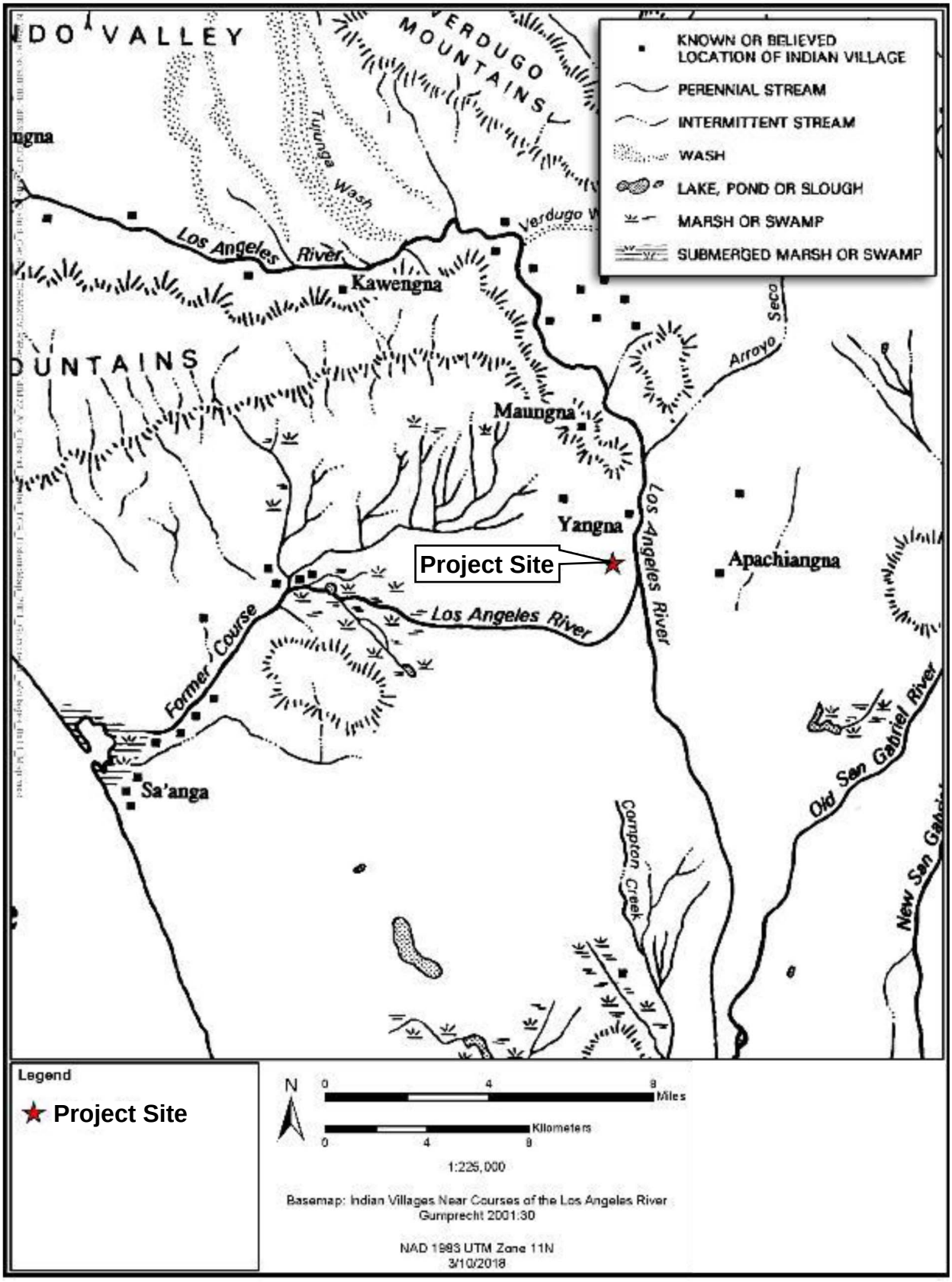
The Project Site is situated within traditional territory of the Gabrielino/Tongva. The closest ethnographically documented village to the Project Site is Yaanga (alternative spellings and names include Yang-na, Yangna, and Yabit). Though the actual location is disputed, generally Yaanga is believed to have been located near present-day Union Station, approximately 1.4 kilometers (0.86 miles) north of the Project Site (see Figure IV.D-4 through Figure IV.D-8). In general, it has proven very difficult or impossible to establish definitively the precise location of Native American villages occupied in the Ethnohistoric period. Native American place names referred to at the time of Spanish contact did not necessarily represent a continually occupied settlement within a discrete location. Instead, in at least some cases, the communities were represented by several smaller camps scattered throughout an approximate geography, shaped by natural features that were subject to change over generations. Many of the villages had long since been abandoned by the time ethnographers, anthropologists, and historians attempted to document any of their locations, at which point the former village sites were affected by urban and agricultural development, and Native American lifeways had been irrevocably changed. Alternative names and spellings for communities, and conflicting reports on their meaning or locational reference, further confound efforts at relocation. McCawley quotes Kroeber for his remarks on the subject, writing “the opportunity to prepare a true map of village locations ‘passed away 50 years ago.’” Thus, even with archaeological evidence, it can be difficult to conclusively establish whether any given assemblage represents the remains of the former village site.



Project Site and 0.5-mile radius plotted on McCawley's (1996:36) map showing the approximate location of villages cited in Gabrielieno ethnographic sources.

Figure IV.D-4
Location of Villages

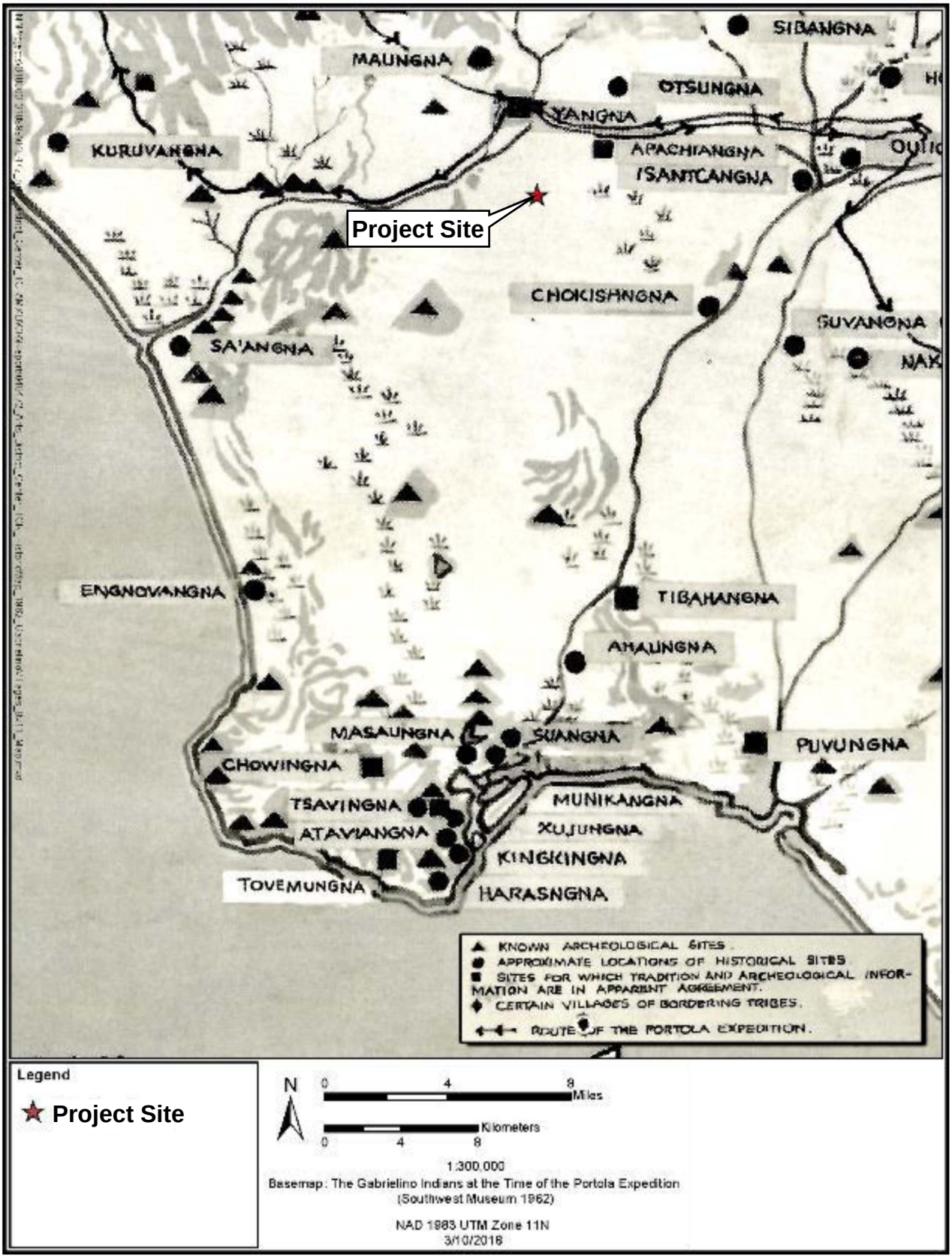
Source: SWCA Environmental Consultants, 2019.



Project Site plotted on Gumprecht's (2001:30) map showing hypothetical locations of Native American villages along the Los Angeles River and other waterways in the Los Angeles Basin.

Figure IV.D-5
Hypothetical Locations of Native American Villages

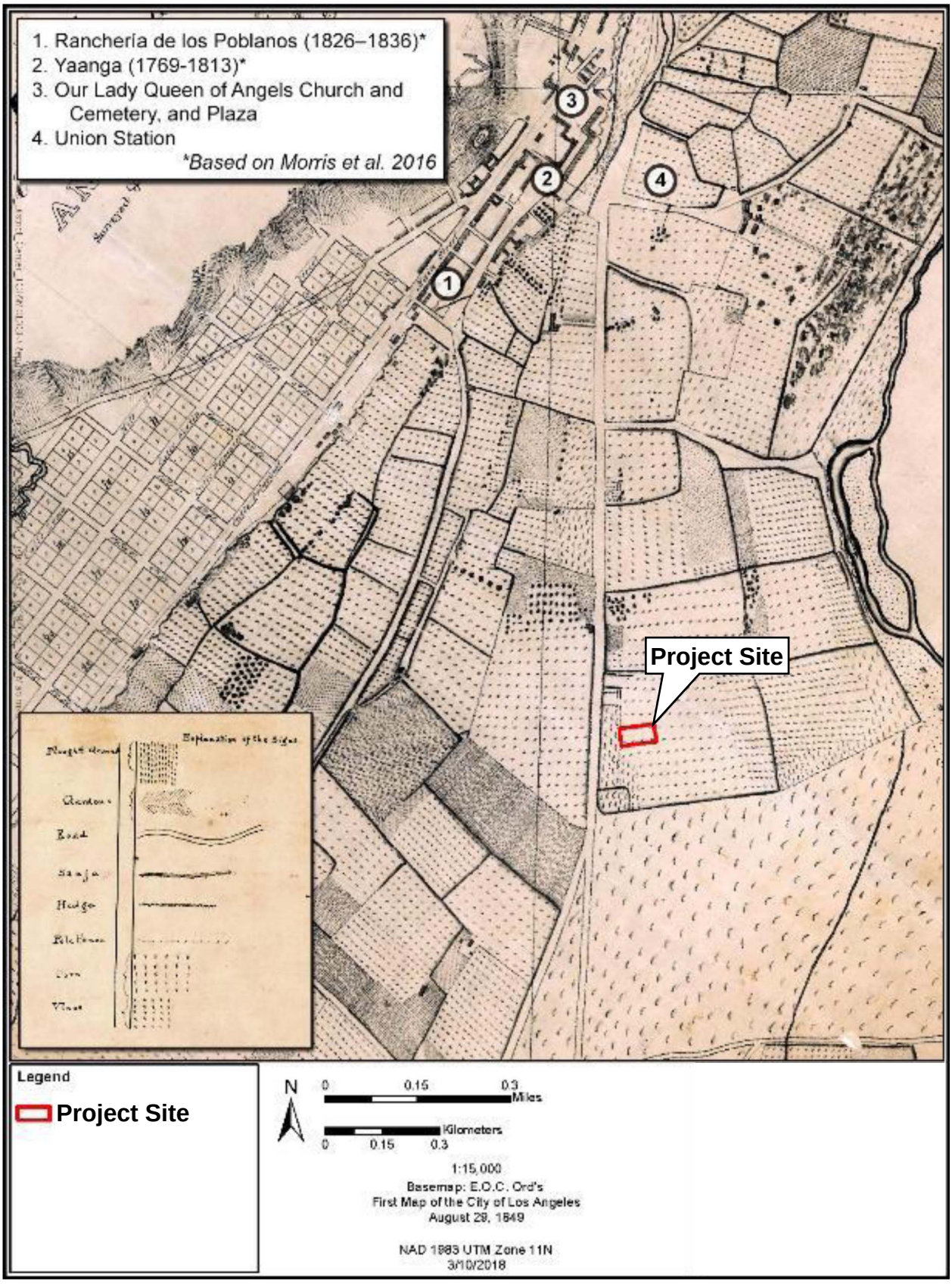
Source: SWCA Environmental Consultants, 2019.



Project Site plotted on map of alleged Native American village locations and historical features in the Los Angeles Basin published by the Southwest Museum (1962) and re-printed in Johnston (1962).

Figure IV.D-6
Alleged Native American Village Locations and Features

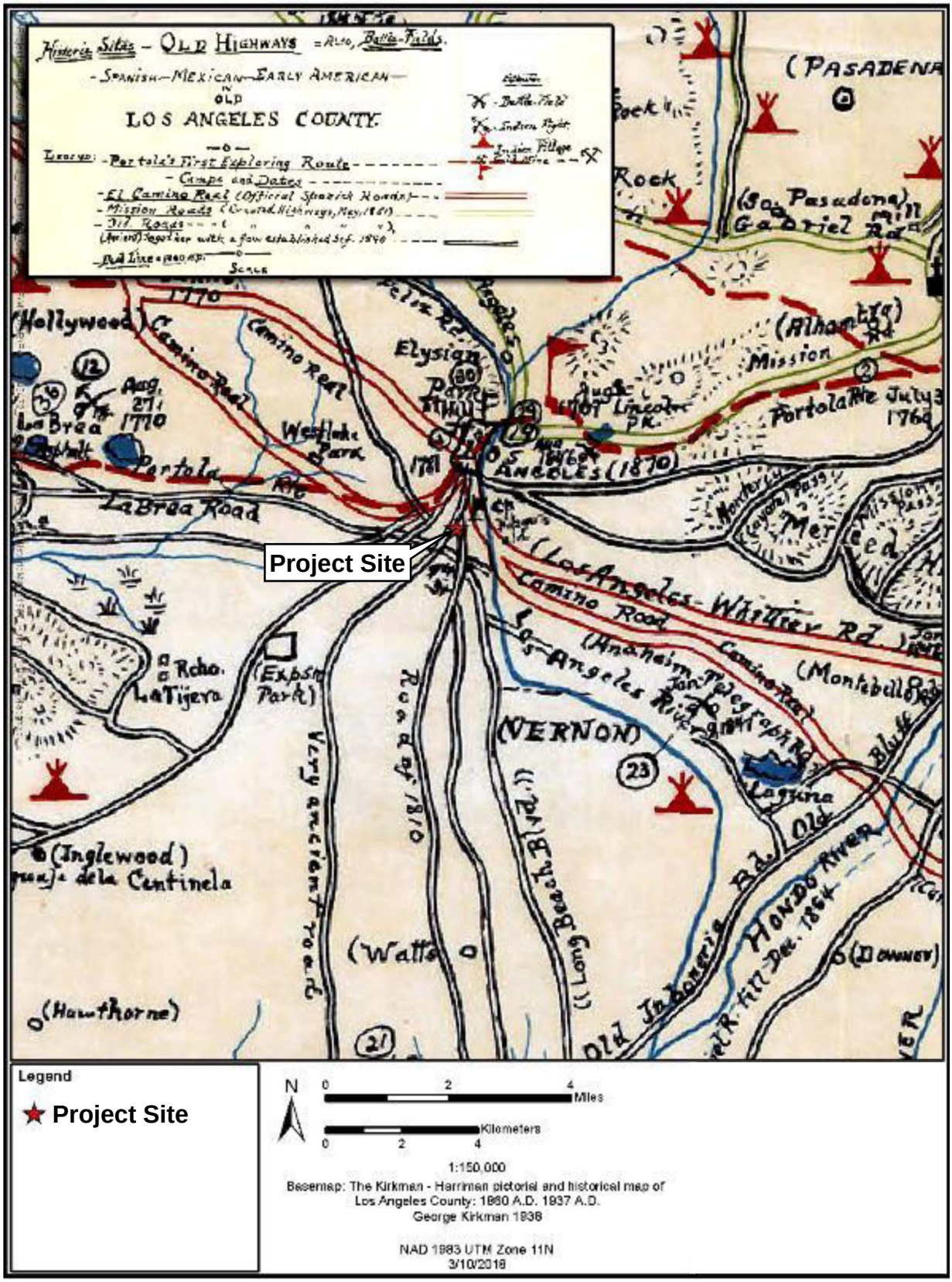
Source: SWCA Environmental Consultants, 2019.



Project Site shown on Ord's 1849 survey map appended with prominent historical landmarks and the location of Yaanga reported by Morris et al. (2016).

Figure IV.D-7
Ord's 1849 Survey Map

Source: SWCA Environmental Consultants, 2019.



Kirkman-Harriman's pictorial and historical map of Los Angeles County, 1860–1937. Historical sites and features are depicted with symbols to indicate representational rather than explicit geographic locations. (Courtesy of Los Angeles Public Library. Call Number 91.7941 L88Ki.)

Figure IV.D-8
Kirkman-Harriman's Pictorial and Historical Map

Source: SWCA Environmental Consultants, 2019.

Historical records place Yaanga in the vicinity of Los Angeles's original plaza, located near present-day Union Station. Historians and archaeologists have presented multiple possible village locations in this general area. However, as with the pueblo itself, it is likely that the village was relocated from time to time due to major shifts of the Los Angeles River during years of intense flooding. Dillon presented an exhaustive review of the potential locations, most within several blocks of the pueblo plaza. Johnston concluded that "in all probability *Yangna* lay scattered in a fairly wide zone along the whole arc [from the base of Fort Moore Hill to Union Station], and its bailiwick included as well seed-gathering grounds and oak groves where seasonal camps were set up." A second village, known as Geveronga, has also been described in ethnographic accounts as immediately adjoining the Pueblo of Los Angeles, though much like Yaangna, its location can only be inferred from ethnographic information.

Aside from the ethnographic evidence suggesting the location of these villages, little direct, indisputable archaeological evidence for the location of either village has been produced to date. Archaeological materials reportedly were unearthed during the construction of Union Station in 1939 and "considerably more" during the rebuilding of the Bella Union Hotel in 1970, on the 300 block of North Main Street. The preponderance of the available evidence indicates that one or more early historic Native American communities were situated west of the Los Angeles River in the vicinity of the original plaza site. This assumption is supported through several lines of ethnographic evidence including the expedition journal of Fr. Juan Crespi and engineer Miguel Costansó, both of whom were associated with the 1769 Portolá expedition. The notes from these sources indicate the village was located between 2.0 and 2.4 kilometers (1.3 and 1.5 miles) west-southwest from the Los Angeles River on high-level ground. The Pueblo of Los Angeles was documented to have been founded directly adjacent to this village. The location of Yaanga was also referenced by long-time Los Angeles resident Narciso Botello and Gabrielino consultant José María Zalvidea, who indicated that Yaanga was originally located adjacent to the original site of the Los Angeles plaza.

After the settlement of Los Angeles in 1781, Yaanga faced many new challenges because of its proximity to the new city. The last recorded birth at Yaanga is believed to have been in 1813, after which the village was forced to relocate south of the original site. This new village, known as Ranchería de los Poblanos by the Angelenos, is believed to have been located at the intersection of Main Street and First Street (see Figure IV.D-7).

Although the precise location of any given village is subject to much speculation, it is clear that the banks of the Los Angeles River were home to many Gabrielino/Tongva villages throughout the greater Los Angeles area, and several maps have been produced throughout the twentieth century depicting this settlement pattern. This pattern of settlements concentrated along the Los Angeles River appears in Gumprecht (see

Figure IV.D-5), as well as Johnston (see Figure IV.D-6), and George Kirkman's (1938) map of historical sites ca. 1860–1937 (see Figure IV.D-8). These maps convey a general sense of significant historical areas and were created using the best available evidence at respective times. However, these documents are intended as a representational depiction of these locations rather than explicit geographic points.

(iii) History

Post-contact history for the state of California is generally divided into three periods: the Spanish period (1769–1822), Mexican period (1822–1848), and American period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American period, when California became a territory of the United States.

Spanish Period (1769-1822)

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

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Juan Crespí, a member of the expedition, named "the campsite by the river *Nuestra Señora la Reina de los Angeles de la Porciúncula*" or "Our Lady the Queen of the Angeles of the Porciúncula." Two years later, Fr. Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771. In 1781, a group of 11 Mexican families traveled from Mission San Gabriel Arcángel to establish a new pueblo called El Pueblo de la Reyna de Los Angeles (the Pueblo of the Queen of the Angels). This settlement consisted of a small group of adobe-brick houses and streets and would eventually be known as the Ciudad de Los Angeles (City of Angels).

Mexican Period (1822-1848)

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

Extensive land grants were established in the interior during the Mexican period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos.

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period (1848-Present)

War in 1846 between Mexico and the United States began at the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. This battle was a defeat for the Americans and bolstered the Calfiornios' resolve against American rule, emboldening them to continue the offensive in later battles at Dominguez Field and in San Gabriel. However, this early skirmish was not a sign of things to come and the Americans were ultimately the victors of this two-year war. The Mexican–American War officially ended with the Treaty of Guadalupe Hidalgo in 1848, which resulted in the annexation of California and much of the present-day southwest, ushering California into its American period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. territories. Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity.

On April 4, 1850, only two years after the Mexican–American War and five months prior to California's achieving statehood, Los Angeles was officially incorporated as an American city. Settlement of the Los Angeles region continued steadily throughout the early American period. Los Angeles County was established on February 18, 1850, one of 27 counties established in the months prior to California's acquiring official statehood in the United States. The city at this time was bordered on the north by the Los Felis and the San Rafael Land Grant and on the south by the San Antonio Luge-Land Grant. Many of the ranchos in the area now known as Los Angeles County remained intact after the United States took possession of California. However, a severe drought in the 1860s resulted in many of the ranchos being sold or otherwise acquired by Americans. Most of these ranchos were subdivided into agricultural parcels or towns.

Ranching retained its importance through the mid-nineteenth century, and by the late 1860s, Los Angeles was one of the top dairy production centers in the country. By 1876, the county had a population of 30,000. Los Angeles maintained its role as a regional business center, and the development of citriculture in the late 1800s and early 1900s

further strengthened this status. These factors, combined with the expansion of port facilities and railroads throughout the region, contributed to the impact of the real estate boom of the 1880s on Los Angeles. By the late 1800s, government leaders recognized the need for water to sustain the growing population in the Los Angeles area. Irish immigrant William Mulholland personified the city's efforts for a stable water supply. By 1913, the City had purchased large tracts of land in the Owens Valley, and Mulholland planned and completed the construction of the 240-mile aqueduct that brought the valley's water to the city.

Los Angeles continued to grow in the twentieth century, in part due to the discovery of oil in the area and its strategic location as a wartime port. The county's mild climate and successful economy continued to draw new residents in the late 1900s, with much of the county transformed from ranches and farms into residential subdivisions surrounding commercial and industrial centers. Hollywood's development into the entertainment capital of the world and southern California's booming aerospace industry were key factors in the county's growth in the twentieth century.

Los Angeles: From Pueblo to City

On September 4, 1781, 44 settlers from Sonora, Mexico, accompanied by the governor, soldiers, mission priests, and several Native Americans, arrived at a site alongside the Rio de Porciúncula (later renamed the Los Angeles River), which was officially declared El Pueblo de Nuestra Señora de los Angeles de Porciúncula, or the Town of Our Lady of the Angels of Porciúncula. The site chosen for the new pueblo was elevated on a broad terrace 0.8 kilometers (0.5 miles) west of the river. By 1786, the area's abundant resources allowed the pueblo to attain self-sufficiency, and funding by the Spanish government ceased.

Efforts to develop ecclesiastical property in the pueblo began as early as 1784 with the construction of a small chapel northwest of the plaza. Though little is known about this building, it was located at the pueblo's original central square near the corner of present-day Cesar Chavez Avenue and North Broadway. However, following continued flooding, the pueblo was relocated to its current location on higher ground, and the new town plaza soon emerged.

Alta California became a state in 1821, and the town slowly grew in size as the removal of economic restrictions attracted settlers to Los Angeles. The population continued to expand throughout the Mexican period and on April 4, 1850, only 2 years after the Mexican–American War and 5 months prior to California earning statehood, the Cityes was formally incorporated. Los Angeles maintained its role as a regional business center in the early American period and the transition of many former rancho lands to agriculture, as well as the development of citriculture in the late 1800s, further

strengthened this status. These factors, combined with the expansion of port facilities and railroads throughout the region, contributed to the real estate boom of the 1880s in Los Angeles.

The Zanjas of Los Angeles: A Brief History

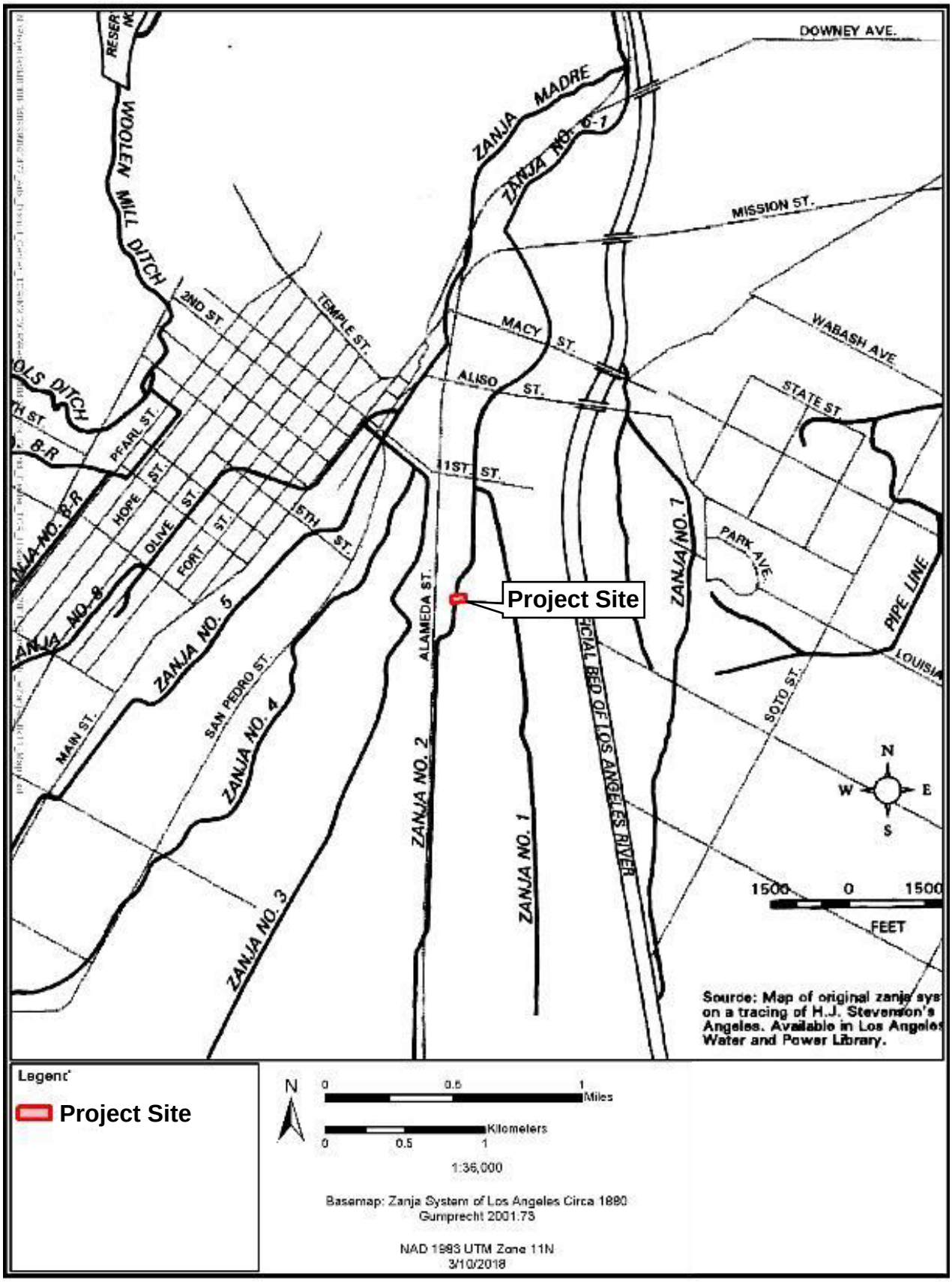
From Los Angeles' beginnings as a small pueblo, water was understood as a crucial force to control and use, if the city was to survive. Since the 1770s, a canal known as the Zanja Madre had been diverting water from the Los Angeles River to the camp that would become the Pueblo of Los Angeles. The pueblo's residents used this water for ranching, agriculture, drinking, bathing, and washing clothes. Though gravity was sufficient to force the water down the zanja onto the pueblo lands, the flow of water was not smooth and continuous as the ditch was frequently impeded by debris and damaged during heavy rainfall. Though at this time the maintenance of the zanja was the responsibility of all residents of the pueblo, the *ayuntamiento* (town council) realized early on that one person had to be in charge of ensuring the functionality of the zanja and to regularly inspect it. To this aim the ayuntamiento appointed a rotating position known as the *zanjero,* whose job was to properly inspect, maintain, and coordinate repairs of the zanja. Every week a new city official would be in charge of the zanjas and every head of household was required to contribute some share, be it monetary, or labor, to the maintenance of the zanjas, though many simply supplied Native American labor in order to fulfill their contribution.

Californians were still using the using the publicly owned zanjas after California's entrance into the union, and by this time the roles and duties of the zanjero had ballooned and he was in charge of issuing permits, overseeing deputy zanjeros, and collecting fees. Because the position had become so important, Mayor Stephen Foster established a permanent zanjero position, eliminating the rotating schedule that was used during the Spanish and Mexican periods, and providing stability to the office. The position quickly became one of the most important appointed positions in Los Angeles. At the time property owners were still "required to contribute a certain amount of time…" to devote to maintaining the zanja, underlying the importance of the zanja system to the young city. Though the duties and importance of the zanjeros changed over time, one thing that remained constant from the Spanish into the American period was the importance of Native American labor in the pueblo's functioning; not only did Native American laborers make up the majority of the farm labor, fixing the zanja often fell upon their shoulders.

As the budding city grew, new zanjas needed to be built to irrigate increasingly more farmlands. In 1857 the first offshoot was completed, Zanja No. 1, which ran between Alameda Street and the Los Angeles River. By 1870 there were a total of eight zanjas covering approximately 80 kilometers (50 miles) that connected to the Zanja Madre (see

Figure IV.D-9). At this early time the zanjas were little more than earthen ditches; none were covered or lined, allowing residents to easily steal water. Though the zanjas were a crucial water supply in early Los Angeles, they also served as waste disposal and a sewer system for early residents. Dead animals were frequently found in the zanjas, and in some cases even deceased people. Not surprisingly, dysentery during this period was common. Despite the public knowledge that the zanja water was unsanitary people continued bathing, washing, and dumping in the zanjas. Over time the City attempted to stop the constant bathing and washing in the main zanja; however, even after a law was passed explicitly prohibiting "bathing, washing clothes, dumping refuse, and the slaughter of cattle in the zanjas," all practices remained commonplace. Zanja No. 8 was singled out as being exceptionally foul, and one city official even recommended that all drainages to other zanjas from Zanja No. 8 be cut off so as to preserve the others. The Los Angeles Herald published a short article describing the public complaints received by the newspaper about Zanja No. 2 "reeking with pollution," and calls for the zanja to be cleaned and upstream property holders to be held accountable.

As residents became fed up with the contamination of the zanjas, Angelenos realized that sewers were necessary. The first sewer was privately constructed for the Bella Union Hotel, which used a square wooden pipe crossing Los Angeles Street to a connection with the zanja. However, at this time in the early 1860s, City engineers were focused more on mapping, constructing sidewalks, and installing lights than on developing a sewer network. After the Civil War, more settlers arrived in Los Angeles and within a few years the need for a sewer system became apparent. Despite the public awareness of sewage problems, sewer construction continued at a haphazard pace and without massive public investment until 1885, at which point the completion of the railroad to the city had caused exorbitant growth in overall population and density, and the sewage problem had become dire. The zanjas all began their lives as crudely constructed earthen ditches; however, over time it became necessary to modernize and update the zanjas. This first happened in 1877 when the city created its first comprehensive plan to improve and extend the zanjas using a bond measure of $75,000. Sometime during this period many of the original zanjas were upgraded to cement or wrought iron pipe, though this work was typically ad-hoc, being completed along portions of a zanja where a specific need was identified, such as a road crossing. Segments of Zanja No. 2 appear to have been upgraded to concrete in the 1880s, but the portion mapped in the Project Site appears to have remained a wooden flume box during its use (see below).



Project Site shown on Gumprecht's (2001:73) map of the zanja system in Los Angeles, ca. 1880.

Figure IV.D-9
Map of the Zanja System

Source: SWCA Environmental Consultants, 2019.

Useful in determining the status of each zanja during this period is William Hall's 1888 study on irrigation in California. In this work, Hall describes each zanja segment, providing information on construction type and length. Hall used the terms "low service" and "high service" to reference locations where the zanja diverted water from the Los Angeles River, and separated the City irrigation works into eastern and western districts based on the location with respect to the river.

By 1888, nearly 50 percent of the zanjas in Los Angeles were made of some type of conduit, be it wooden flumes, cement- or masonry-lined canals, cement and iron pipe, or brick culverts. In one section of Hall's report he estimates the cost of the zanja system to-date and his explanation for the difficulty of such a task provides important information on the materials and integrity of the various segments.

> *The difficulty of arriving at the original cost of works, constructed by "piecemeal," in a period of twelve years, under no definite plan, and supervised by successive city officials (and this refers only to the works regarded as permanent and not to the long-built earthen ditches) changes almost every year, without any system of keeping accounts of construction segregated from ordinary maintenance expense, can scarcely be appreciated until one attempts the task. Much of the work has been done several times over; ditches have been flumed, and after a time the flumes replaced with pipe; pipe-lines have been, locally but radially, altered and enlarged; iron pipe substituted for cement pipe, and vice versa; and no small part of the work has been abandoned and fallen into disuse.*

Many projects to improve the system, such as constructing a tunnel to replace part of the Zanja Madre, were started but never completed. Though the zanjas were improved greatly between 1870 and 1888, when Hall conducted his study, the water system in Los Angeles was crude and not in keeping with the rapid development occurring. The last twenty years of the nineteenth century brought many changes to Los Angeles; the real estate boom of the 1880s created a fivefold population increase in the City by 1890. This population increase had the added result of decreasing the city's irrigation needs, as many of the original vineyards and orchards had already been abandoned, while also increasing the city's domestic water needs. Two years after Hall's 1888 survey the zanjas began to be abandoned, starting first with Zanja No. 5. Slowly property owners began requesting zanjas be abandoned, as the unused structures now served as impediments to development, and fertile land that once held rows of orchards and vines was now far more valuable for homes. By 1904 all the zanjas had been abandoned; most were filled in, although some continued to be used as sewers.

Los Angeles continued to grow outward from the city core in the twentieth century in part due to the discovery of oil and its strategic location as a wartime port. The military presence led to the aviation and eventually aerospace industries having a large

presence in the city and region. Hollywood became the entertainment capital of the world through the presence of the film and television industries. With nearly four million residents, Los Angeles is the second largest city in the United States (by population), and it remains a city with worldwide influence that continues to struggle with its population's growth and needs.

Zanja No. 2

This zanja segment was documented by Hall in 1888 as part of the low service system on the western district. At the time of Hall's inventory, Zanja No. 2 was constructed entirely of a wooden flume box measuring 3 × 1 feet and running an estimated 13,200 feet. Zanja No. 2 originated at its connection with Zanja No. 6-1, where Zanja No. 1 diverged. Zanja No. 2 essentially extended Zanja No. 6-1 on the same south-southwestern alignment, terminating at the city boundary near the present-day intersection of Alameda Street and 25th Street. From its connection to Zanja 6-1 on First Street the zanja ran along the south-southwestern alignment, but with two zigzags before following Alameda Street. The northernmost segment trended south for approximately 1,800 feet, turning west for 300 feet along Fourth Street. Mid-way between Colyton Street and Seaton Street the zanja turned to a southwestern trajectory, extending 1,200 feet to Palmetto Street, where it trended west along a 380-foot segment on the south side of the street before finally turning south-southwest, where the southern-most segment flowed along the east side of Alameda Street. Hall's tabulation of acres irrigated by each zanja segment lists Zanja No. 2 among the highest, which was sustained through the 1880s.

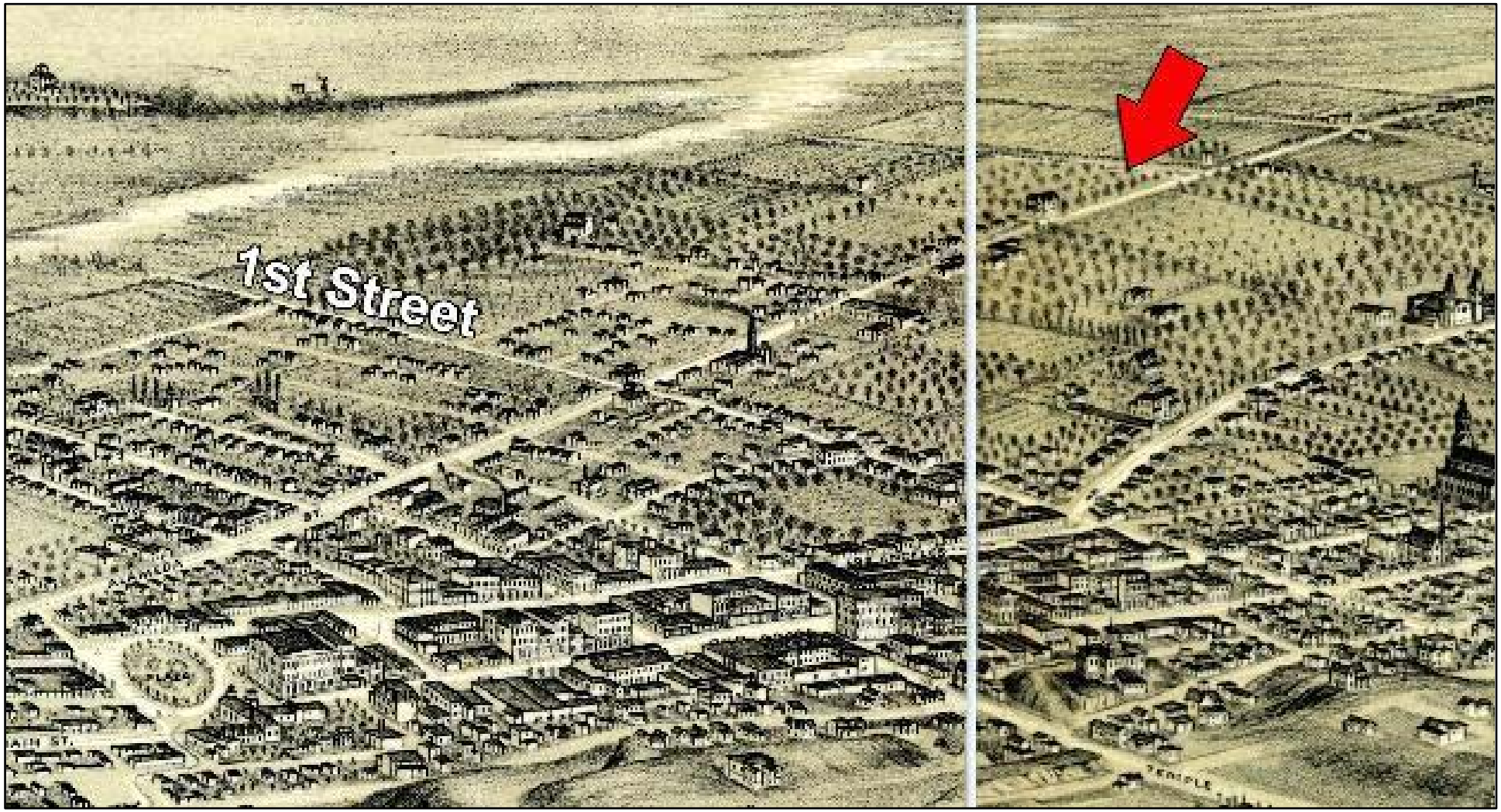
An archival research identified historical references to the Zanja No. 2 no sooner than 1871 and no later than 1901. Between 1885 and 1894 several newspaper articles reference seeking and awarding bids to either construct or replace unspecified segments of the wooden flume, reportedly completed by Peter Keenan. Two articles published in 1898 by the Los Angeles Herald mention the construction of a concrete zanja pipe "concrete zanja pipe on Fourth street between Colyton Seaton and Palmetto streets," and that "…property owners of Seaton Street, along which street this zanja runs, are desirous of improving the street, provided the zanja is piped by the city". No follow-up reports are provided to confirm the construction type or locations. An additional proposal to pipe Zanja No. 2 from 4th to Seaton Street was published in 1902 by the Los Angeles Times, again with no specific routes mentioned. In 1892 the Los Angeles Herald published a message from Mayor Hazard stating that a contract was prepared to repair Zanja No. 2 along Alameda and noting that the existing flume is old and in need of repair. The message was likely a follow-up to an 1891 petition submitted by the Los Angeles Electric Company to alter the zanja along Alameda Street beginning at the point of its intersection with Palmetto Street, located south of the Project Site. Although the proposal being considered referred to a segment of the zanja outside the

Project Site, in all likelihood the mayor's statement about the zanja's condition applied equally to the connecting segments, including those in the Project Site. Another article published in 1890 described a request by Charles Lantz, who requested the zanjero place iron grating over the top of the zanja pipe on Fourth Street between Colyton and Carolina Streets to protect children from injury. The 1894 Sanborn Map shows the zanja originating south of Fourth Street (north of the Project Site) with no other indications of its alignment within the street or in adjacent parcels to the north, which suggests the segment was likely replaced with a subterranean pipe, possibly the concrete conduit referenced in the articles. It is possible the non-specific references to construction of concrete pipe along Zanja No. 2 may have included the segment within the Project Site, but the available evidence suggests it was constructed as a wooden flume at the time it was de-commissioned, and the property was subsequently developed.

These reports are consistent with Hall's (1888) inventory that recorded Zanja No. 2 as a wooden flume box and reflects the piecemeal modifications, multiple designs, and variable building materials that define the zanja system but could be true of single zanja segment. And like many of the other zanjas comprising the system at its peak in the 1880s, portions of Zanja No. 2 likely had precursors constructed during the Spanish or Mexican Periods and the physical remains likely persisted into the twentieth century after being otherwise abandoned.

Historical Development of the Project Site

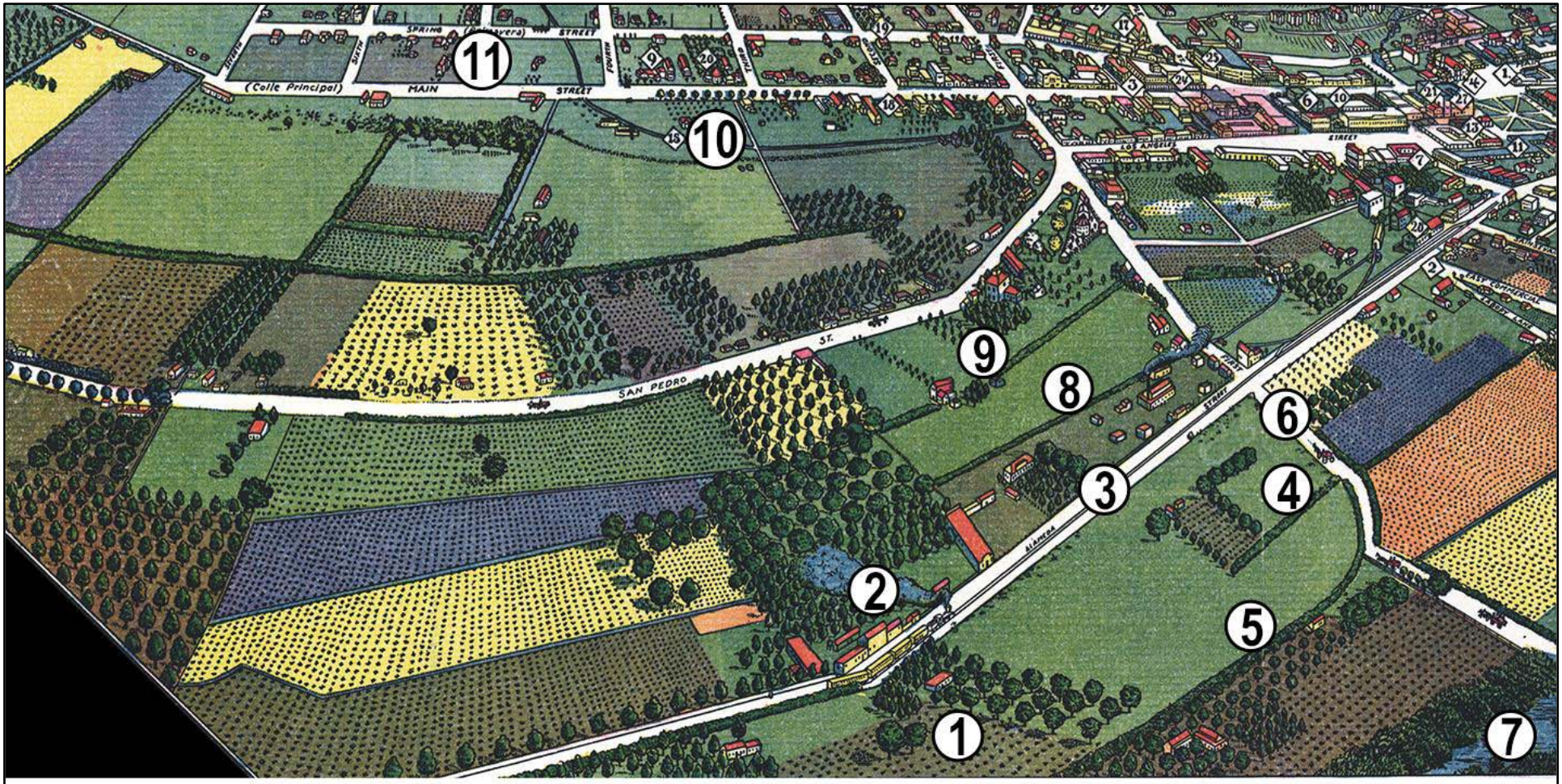
Maps and illustrations depicting pre-1880s Los Angeles capture an important, pre-industrial phase of the city's history, before small farms gave way to residential, commercial, and industrial developments (see Figures IV.D-10 through IV.D-15). These documents depict the Project Site within what was, for most of the nineteenth century, one of several abutting agricultural properties, mostly vineyards, but also fruit and nut trees, located immediately south of the city's historic core and west of the Los Angeles River. Farms in this area varied in size and shape, ranging up to approximately 50 acres with boundaries defined within a non-linear street grid, and were irrigated by water from Zanja Nos. 1, 2, 3, and 4.



Glover's *Bird's eye view of Los Angeles* published in 1877, shown with the approximate location of the Project Site (red arrow) south of 1st Street (Source: Library of Congress).

Figure IV.D-10
Glover's Bird's Eye View of Los Angeles

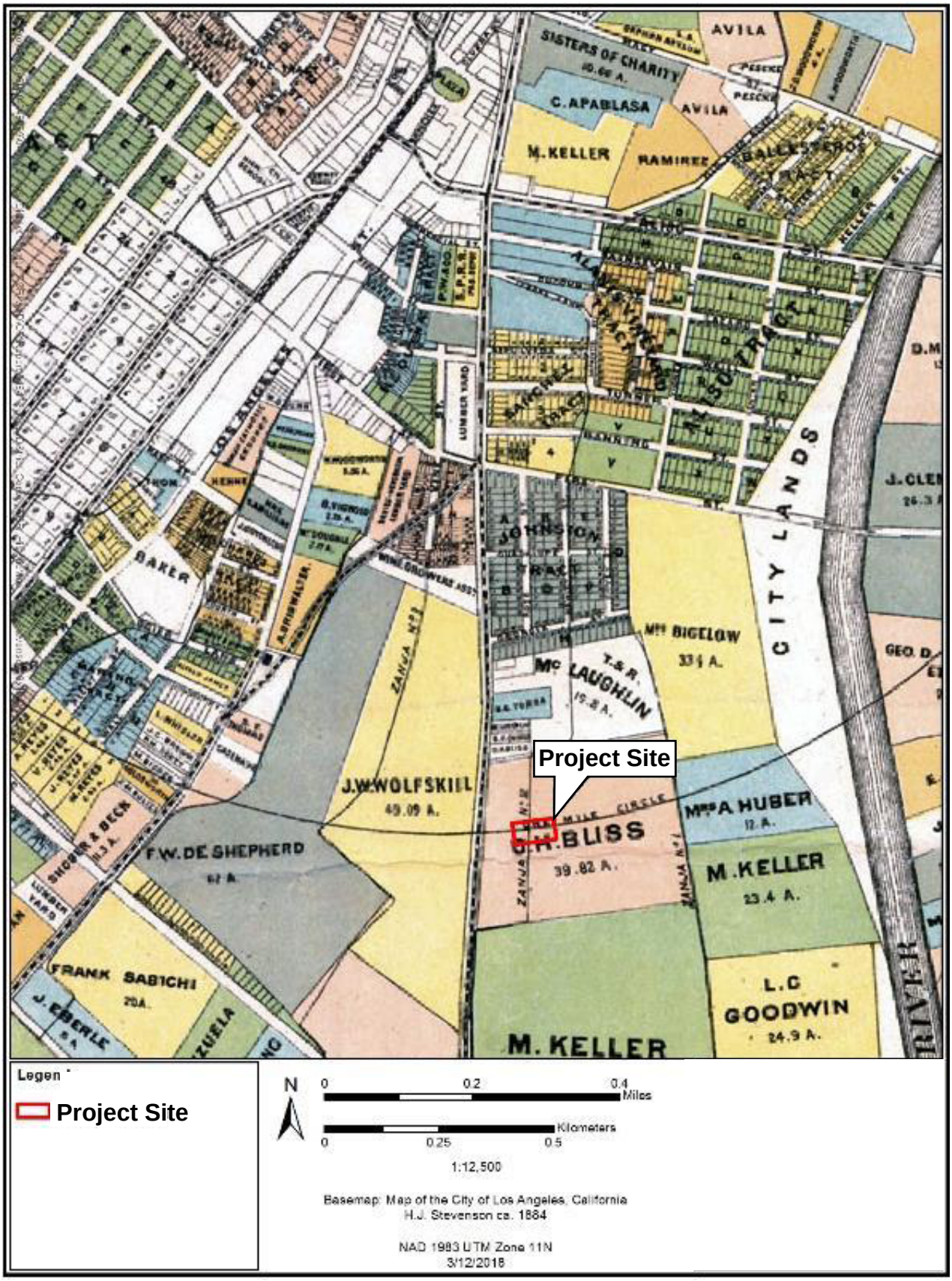
Source: SWCA Environmental Consultants, 2019.



Artistic rendering of ca. 1871 Los Angeles published in 1929 by the Women's University Club, Los Angeles, annotated with the location of the Project Site in an agricultural field, nearby zanja components and other landmarks (Source: Library of Congress).

Figure IV.D-11
Artistic Rendering of 1871 Los Angeles

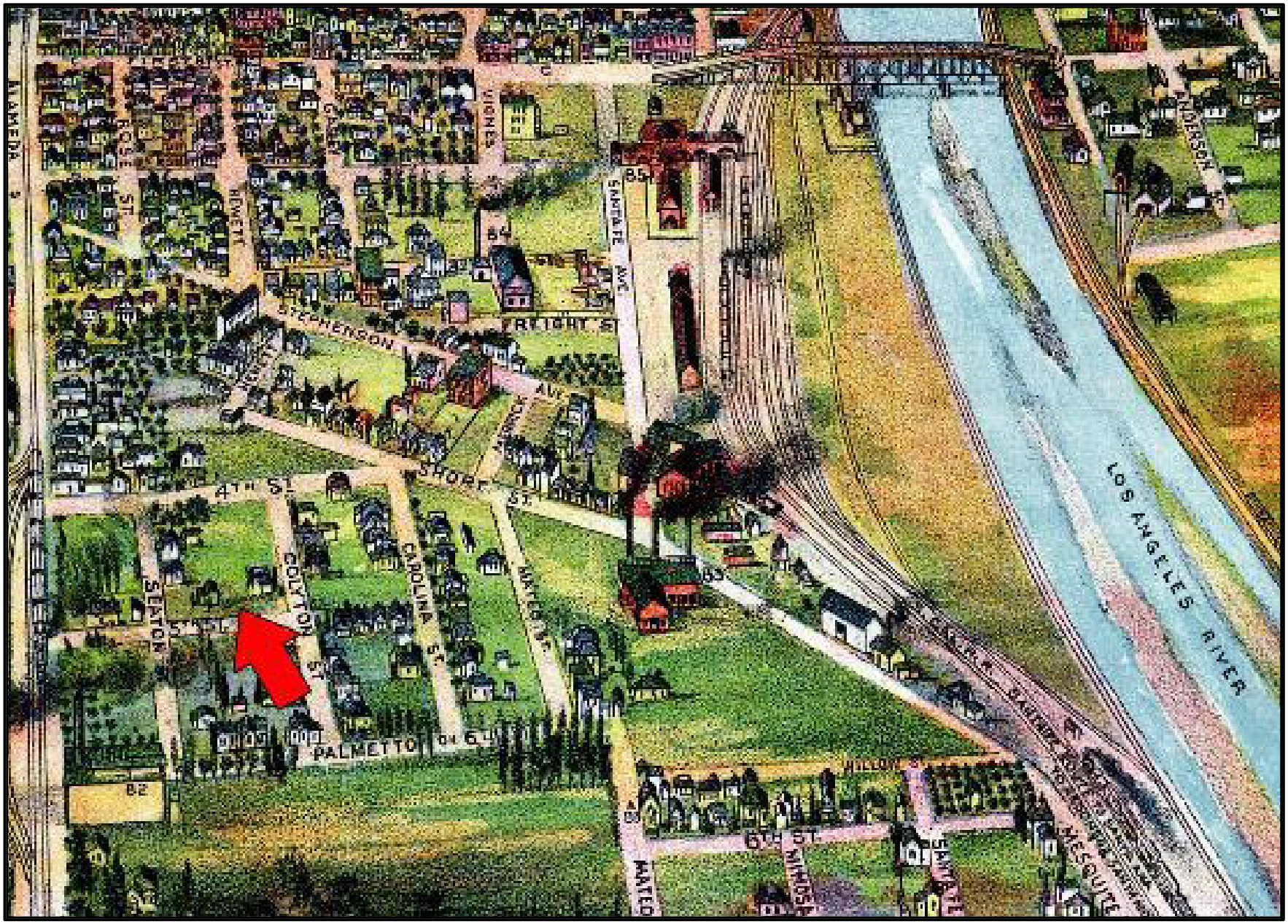
Source: SWCA Environmental Consultants, 2019.



Project Site shown on H. J. Stevenson's 1884 survey map of Los Angeles.

Figure IV.D-12
H.J. Stevenson's 1884 Survey Map of Los Angeles

Source: SWCA Environmental Consultants, 2019.



Project Site (red arrow) and vicinity on the 1894 illustration of Los Angeles (Pierce, B. W. & Semi - Tropic Homestead Co. 1894).

Figure IV.D-13
1894 Illustration of Los Angeles

Source: SWCA Environmental Consultants, 2019.



Project Site (red arrow) and vicinity on the 1909 bird's eye view illustration of Los Angeles (Birdseye View Publishing Co. 1909).

Figure IV.D-14
1909 Illustration of Los Angeles

Source: SWCA Environmental Consultants, 2019.



Project Site depicted on a 1927 aerial photograph (Fairchild Aerial Survey, Flight C - 113, Frame No. 307).

Figure IV.D-15
1927 Aerial Photograph

Source: SWCA Environmental Consultants, 2019.

The 1880s population boom resulted quickly in the subdivision of these small farms into lots, which were sold for primarily residential and commercial properties (see Figures IV.D-13 and IV.D-14) However, industrial developments quickly came to define the vicinity of the Project Site, so that by 1924 the entirety of the block was devoted to industrial and commercial buildings (see Figure IV.D-15). Most of these developments were built as general storage warehouses or as purpose-built facilities. Prominent buildings in the area included a Barker Brothers Furniture factory (see Figure IV.D-16), which took up an entire block between Palmetto and Sixth Street, and the Bekins Fireproof Storage at Alameda and Fourth Street. Other notable companies with nearby facilities include Pacific General Warehouse and the Cheek-Neal Coffee Company. The rapid industrialization of the neighborhood was primarily driven by the proximity to several railways and freight depots. Atchison, Topeka, and Santa Fe Railway, built in 1887, ran just east of the Project Site along the Los Angeles River, while Southern Pacific Railway tracks ran along Alameda Street to the west. Opened in 1893, the AT&SF La Grande Station (see Figure IV.D-17) was located just a few blocks northeast at Second Street and Santa Fe Avenue and served as the railroad's main passenger terminal until the opening of Union Station in 1939. By 1906 at least three lines extended form the main AT&SF railroad to Carolina Street (now Hewitt Street) and Palmetto Street. To the west at Central and Fourth Street was the Arcade Depot, built in 1888 in a Victorian style, at the convergence of three railways—the Los Angeles Railway Company, Pacific Electric Railway Company, and the Los Angeles Inter-Urban Railway Company (see Figure IV.D-18). The Arcade Depot was dismantled in 1915, after the Southern Pacific Railroad opened its Central Depot at Central and Fifth Street (see Figure IV.D-19).

The City Council's decision to create an industrial district between Main Street and the river, and subsequent zoning changes in the 1910s quickened the conversion of the area into a fully industrial sector, with few remaining residences and an increasing number of manufacturers establishing warehouses and other facilities. Smaller gauge railroad spurs were constructed along many of the smaller streets to connect each block to the primary rail lines. A few of the original houses remained until the 1950s (see Figure IV.D-20).

The mid-twentieth century saw many changes within the Project Site and Los Angeles as a whole. There was a growth in automobile sales, as well as the demise of Los Angeles's public transportation system, and as the railroads gave way to the trucking industry. By 1964 the Central Depot and the railways it served were demolished and built over and vacant warehouses began to decay, before being repurposed in the 1970's and beyond. Central station was repurposed as a meat packing company before being torn down and replaced by Young's Market Company. The Project Site is one such warehouse, though it was never demolished.



Barker Brothers Furniture Company, Palmetto Street, 1924. (Source: Los Angeles Public Library)

Source: SWCA Environmental Consultants, 2019.

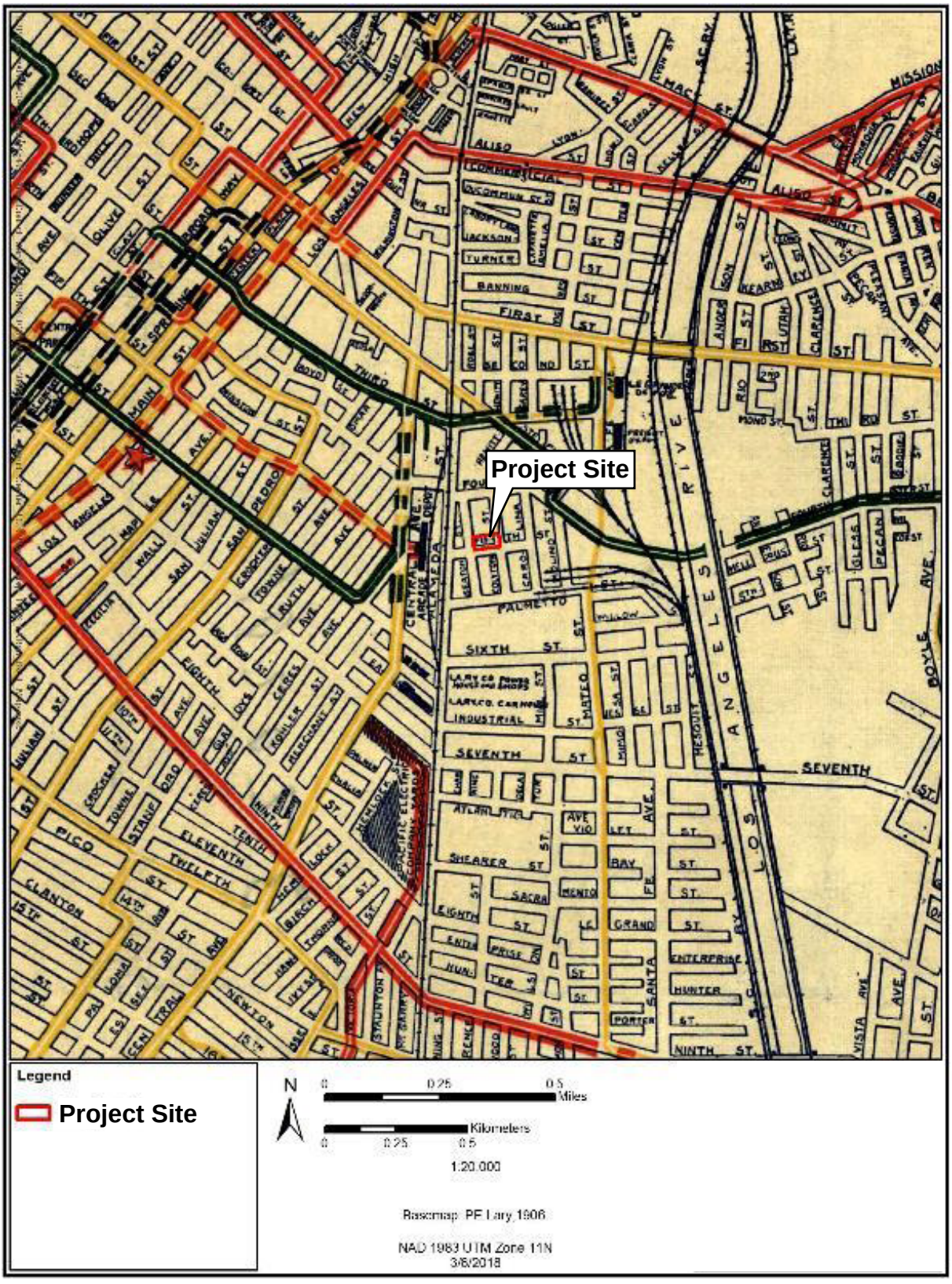
Figure IV.D-16
Barker Brothers Furniture Company



AT&SF La Grande Depot (right), located at Santa Fe and Second Street, 1893. (Source: Los Angeles Public Library)

Figure IV.D-17
AT&SF La Grande Depot

Source: SWCA Environmental Consultants, 2019.



Project Site depicted on a 1906 railway map (Travel and Hotel Bureau 1906). Note that the Arcade Depot, located just west of the Project Site, is intersected by three lines operated by the Los Angeles Railway Company (yellow line), Los Angeles Inter-Urban Railway Company (green line), and Pacific Electric Railway Company.

Figure IV.D-18
1906 Railway Map

Source: SWCA Environmental Consultants, 2019.



Southern Pacific Central Depot, Fifth and Alameda, 1926. (Source: Los Angeles Public Library)

Figure IV.D-19
Southern Pacific Central Depot

Source: SWCA Environmental Consultants, 2019.



Undated photo showing a residence adjacent to the Barker Brothers building, located in close proximity to the Project Site, likely along Colyton Street (Source: Los Angeles Public Library; see also Bray and Strauss 2015).

Figure IV.D-20
Residence Adjacent to Barker Brothers Building

Source: SWCA Environmental Consultants, 2019.

(b) CHRIS Records Search

(i) Previously Conducted Cultural Resources Studies

Results of the California Historical Records Information System (CHRIS) records search at the South Central Coastal Information System (SCCIC) indicates that 64 cultural resource studies have been conducted within 0.8 kilometers (0.5 miles) of the Project Site (see Appendix B of the AR Assessment included in **Appendix D-2** of the Draft EIR). One of these previous studies (LA-13239) intersects the Project Site. However, the only information included in the study is a map of the entire zanja system, mistakenly referred to as the Zanja Madre, and a list of three segments of the zanja system (possibly only segments of the Zanja Madre) that have been documented as archaeological sites. No original sources for the creation of the map were identified.

(ii) Previously Recorded Cultural Resources

Nine previously recorded cultural resources were documented in the CHRIS within a 0.5-mile radius of the Project Site (see Table IV.D-1), none of which are located within the Project Site. Each of the sites are historical archaeological resources and do not contain prehistoric components. Though not directly within the Project Site, P-19-004460 (hereafter LAN-4460H) was documented in an adjacent block with a nearly identical land-use history to the present Project Site. LAN-4460H was a historical archaeological site identified in 2014 by Environmental Science Associates (ESA) during construction monitoring within the boundaries of a city block bound by Fifth Street to the north, Colyton Street to the west, Palmetto Street to the south, and South Hewitt Street to the east. No tribal cultural resources were found intermixed or underlying the historic-period materials.

Table IV.D-1
Previously Recorded Resources within 0.5 miles of the Project Site

Primary Number	Trinomial Number	Time Period	Resource Description	Recorded By Affiliation	Year	Relationship to Project Site
P-19-002563	CA-LAN-002563H	Historic	Refuse deposit, 1860–1892, La Grande Railroad Station	John M. Foster, Robin D. Turner, Greenwood & Associates	1997	Outside
P-19-002610	CA-LAN-002610H	Historic	Paving stones and street car tracks and ties	Shelley M Owen, Greenwood & Associates; Shannon Loftus, ACE Environmental	1997; 2011	Outside
P-19-003338	CA-LAN-003338H	Historic	Refuse deposit, 1890–1910	Humphries, Frank, William Self Associates; Moore, Leann, Cogstone Resource Management	2000; 2000; 2006	Outside
P-19-003588	CA-LAN-003588H	Historic	Refuse deposit and brick building foundation, 1848–1880	John M. Foster, Greenwood & Associates.	2006	Outside
P-19-004171	CA-LAN-004171H	Historic	Refuse deposit and brick building foundation, 1848–1945	Denise Ruzicka, ArchaeoPaleo Resource Management	2009	Outside
P-19-004174	CA-LAN-004174H	Historic	Refuse deposit and rail car track, 1880–1945	Denise Ruzicka, ArchaeoPaleo Resource Management	2009	Outside
P-19-004192	CA-LAN-004192H	Historic	Refuse deposit, 1914–1945	L. Solis, N. Orsi, URS Corporation	2010	Outside
P-19-004193	CA-LAN-004193H	Historic	Road, 1914–1945	L. Solis, N. Orsi, URS Corporation	2010	Outside
P-19-004460	CA-LAN-004460H	Historic	Refuse deposits, building foundations, 1880–1923	Michael Vader, ESA; V. Ortiz, ESA	2014; 2016	Outside

Source: SWCA, February 2019.

CA-LAN-4460H

CA-LAN-4460H was a historical archaeological site identified in 2014 by ESA during construction monitoring within the boundaries of a city block bound by Fifth Street to the north, Colyton Street to the west, Palmetto Street to the south, and South Hewitt Street to the east. The site consisted of 27 features – 25 refuse deposits and two structural

remains. The refuse deposits consisted of varied historic cultural materials consistent with residential refuse, such as bottles and ceramic or earthenware dishes. Diagnostic artifacts from these refuse piles place the material as having been deposited within the latter half of the nineteenth century and the early part of the twentieth century. There were scattered throughout out the site but based on inspection of Sanborn Insurance maps, were found to be primarily located in the backyards of the residential buildings present between 1884 and 1955. Among the features documented, ESA identified two AT&SF railroad spurs that serviced the Palmetto Street neighborhoods. ESA also documented a rectangular brick foundation, the size and location of which indicated that it was a structural feature related either to the building at 548 Colyton Street (the home of the Sunset Telegraph and Telephone Company in 1906 and the National Creamery and Produce Company in 1921) or a portion of the later Barker Brothers Warehouse Complex. The construction of the La Kretz Innovation Campus Project destroyed the remains of the site, and the results of the archaeological monitoring were prepared in a technical report submitted to the Los Angeles Department of Water and Power (LADWP).

Archaeologically Documented Zanja Components

Material remains associated with zanjas have been previously identified in several downtown Los Angeles locations. Specifically, archaeological sites have been documented in the CHRIS for Zanja No. 6-1 and the Zanja Madre. Zanja No. 3 was recorded on a Historic American Engineering Record (HAER) and is on-file with Library of Congress under HAER No. CA-50; Zanja No. 3 has not been given a designation in the CHRIS.[16] Taken together, these archaeological resources exhibit a wide range in materials, associated features, and preservation level. The circumstances by which the remains were identified and the approach to data collection and treatment are also varied with long periods of time and sometimes little coordination between the recordings. Individual segments have been evaluated and nominated for listing on the National Register and California Register, but the zanja system as a whole has never been evaluated for the local, state, or federal registers. The sites and location for all archaeologically identified zanja components is presented in Table IV.D-2, plotted in Figure IV.D-21 and briefly discussed below.

[16] *Hereafter resources designated in the CHRIS are referred to by their trinomial designation (e.g., CA-LAN-887H); where no trinomial is assigned the primary number is used (e.g., P-19-190309).*

Table IV.D-2
Archaeological Sites and Observations of Zanja Segments

Primary Number	Trinomial Number	Resource Description	Physical Remains	Recording Year, Recorder (Affiliation)	National Register/ California Register Status
--	--	Zanja Madre	Brick conduit (below Avila Adobe)	1971, anonymous observation made during seismic retrofit	Unevaluated
P-19-000887	CA-LAN-887H	Zanja Madre (also, La Placita de Dolores, Las Placitas)	Brick conduit; midden and artifacts (Mexican Period)	1978, J.G. Costello and L.R. Wilcoxon	Unknown (contributing element of 1972 National Register listing for Los Angeles Plaza Historic District; non-contributing element of 2016 updated district record)
				2006, D. Slawson (Greenwood)	Unevaluated
		Unknown	Unknown*	1999, Beth Padon (LSA)	Unevaluated
P-19-003103	CA-LAN-3103H	Zanja Madre	Brick conduit (Broadway near Cottage and Home Streets); historical refuse	2002, A. Wesson (URS)	Recommended eligible for National Register
				2007, S. Gust (Cogstone)	Recommended eligible for National Register (Criterion A) and California Register (Criterion 1); see P-19-190309
		Zanja Madre	Brick conduit (Alameda between Ord and Alpine Streets)	2011, H. Gibson (AECOM)	Unevaluated
P-19-190309	--	Zanja Madre; OHP Property Number – 172542	Brick conduit**	2008, C. Taniguchi (Galvin Preservation Associates); 2014, Carren Jao (KCET)	Nominated for National Register (Criterion A); National Register nomination rejected by OHP
P-19-003352	--	Zanja No. 6-1	Concrete pipe	2005, Foster (Greenwood)	Recommended eligible for California Register

Table IV.D-2
Archaeological Sites and Observations of Zanja Segments

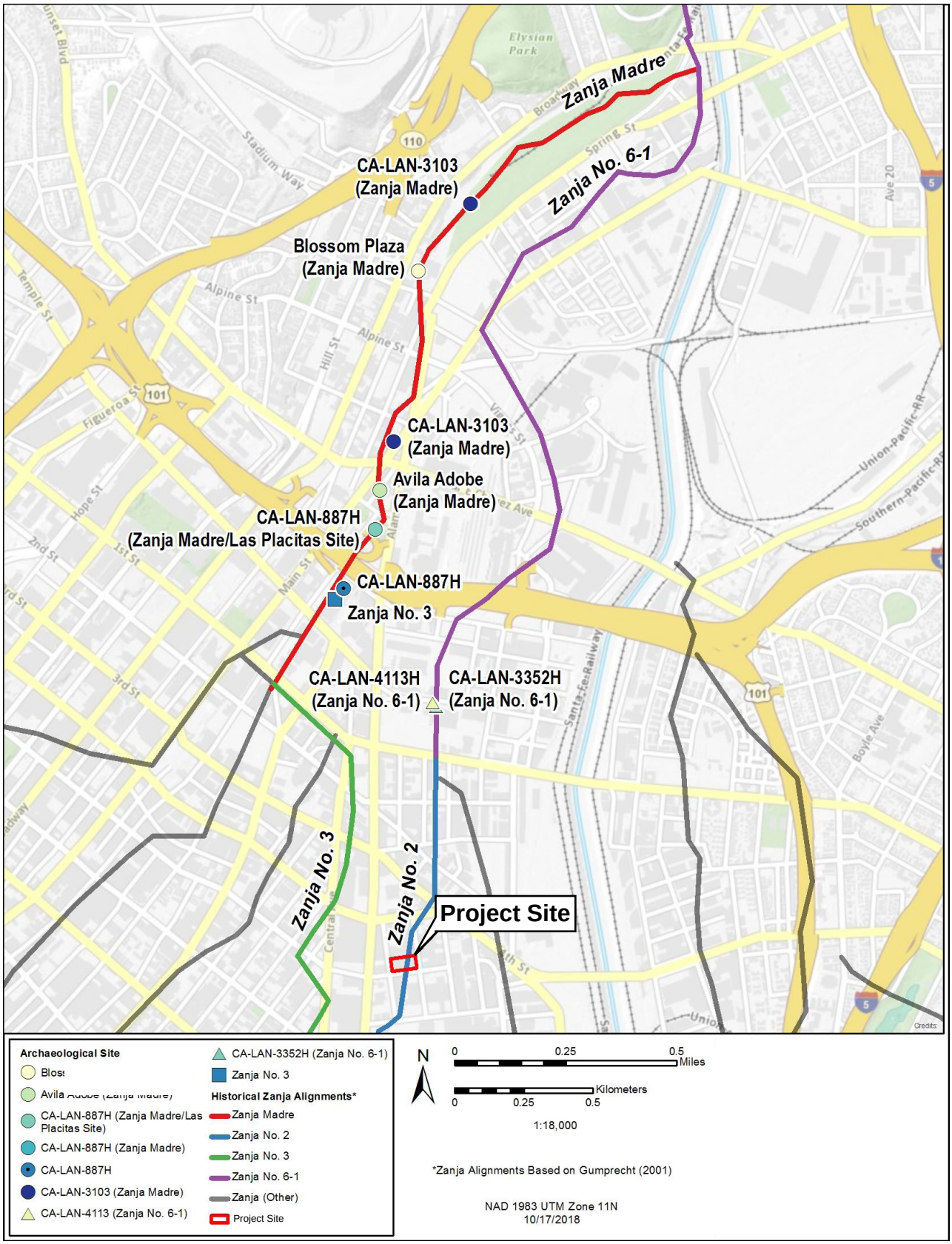
Primary Number	Trinomial Number	Resource Description	Physical Remains	Recording Year, Recorder (Affiliation)	National Register/ California Register Status
P-19-004113	CA-LAN-4113H	Zanja No. 6-1	Concrete pipe	2010, S. Dietler et al. (AECOM)	Unevaluated
--	--	Zanja No. 3 – HAER No. CA-50	Open ditch (stream deposits), brick culvert, wooden sewer, iron pipe gas line, iron water main, brick building foundation, concrete building foundation	1987, J. Hotopp, P. Friedman, M. Rodeffer, R. Tucher, J. Bowie (Louis Berger & Associates)	Determined eligible for National Register (Criterion A); HAER documentation

* *Likely refers to Zanja No. 3 but site form does not specify whether any remains were identified and provides only non-specific location bound by Alameda, Los Angeles, Temple, and Commercial Streets.*

** *This primary number was designation for the National Register nomination form and OHP rejection letter prepared for the segment recorded as P-19-003103 recorded by Gust (2007).*

Zanja Madre

The Zanja Madre has been observed in multiple locations and designated with three resource numbers in the CHRIS: P-19-000887/CA-LAN-887H, P-19-003103/CA-LAN-3103H, and P-19-190309. Preserved segments of brick conduit were identified below the Avila Adobe during a seismic retrofit in 1971 but no formal documentation was made. Intact portions of the brick conduit were also found among other Mexican-Period archaeological remains in the Los Angeles Plaza that were recorded as the Las Pacitas Site (CA-LAN-887H). The brick conduit measured 56 inches in diameter (9-inch-thick walls) and 54 feet in length. The results were reported by Costello and Wilcoxon (1978) and submitted to the Los Angeles Department of Public Works. It is not clear if the resource was formally evaluated for listing on the California Register or National Register at this time. The Zanja Madre had been previously identified as a contributing element to the Los Angeles Plaza Historic District, which was listed on the National Register in 1972. A 2016 update to the District nomination form found the Zanja Madre to be a non-contributing element.



Archaeological remains of former zanja components identified along selected zanjas alignments (as depicted by Gumprecht 2001) near the Project Site.

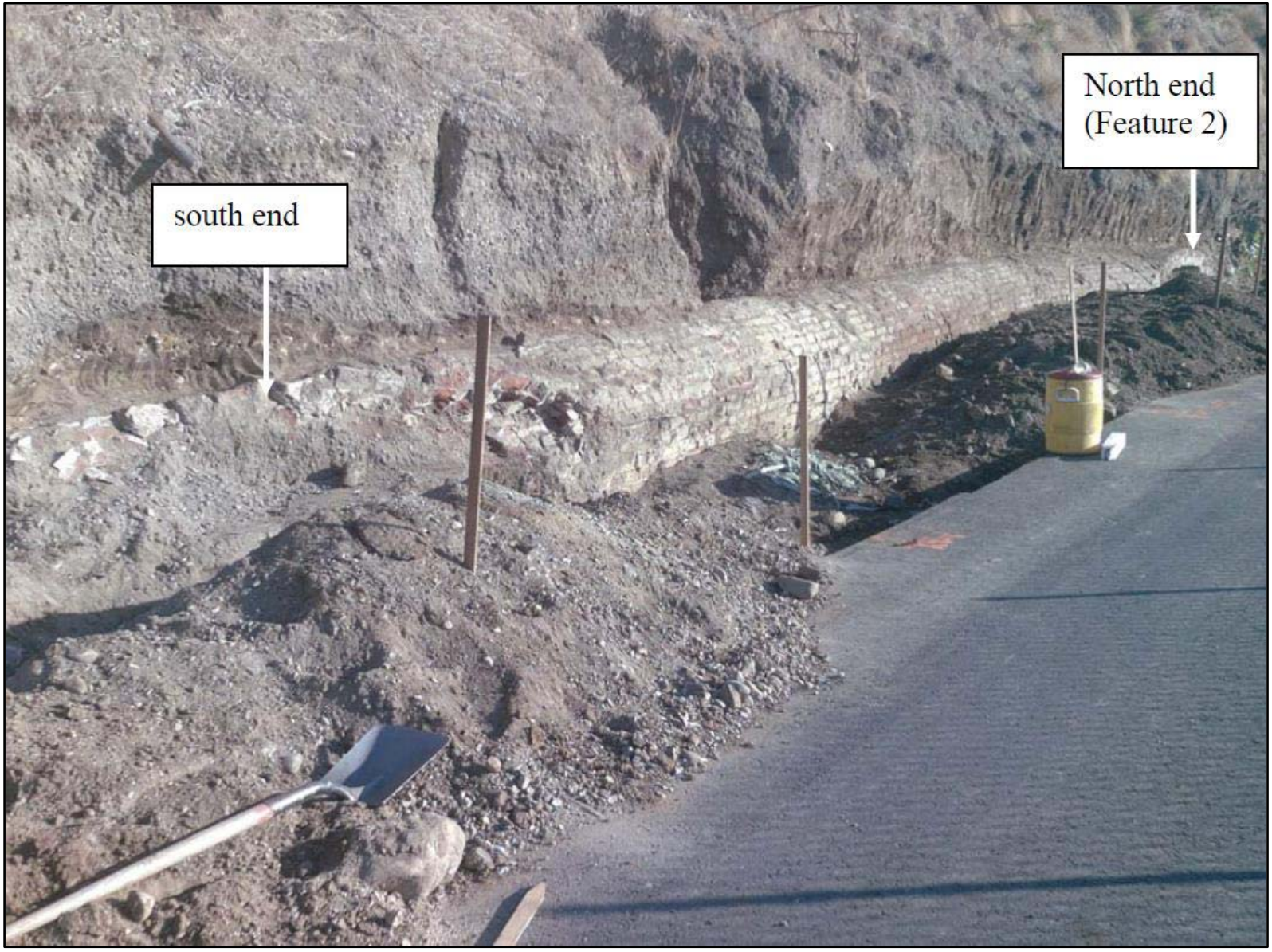
Figure IV.D-21
Archaeological Remains of Zanja

Source: SWCA Environmental Consultants, 2019.

Approximately 0.75 miles north of the Plaza, a third segment of brick conduit was recorded as part of a seismic retrofit project for the North Spring Street Bridge. The zanja had been previously identified by an amateur historian as a segment of brick exposed in a steep embankment along Broadway between Cottage and Home Streets and was then recorded in 2002 by Alex Wesson during the archaeological survey and designated as CA-LAN-3103. Because the zanja was only partially exposed along a 7-foot segment, the dimensions of the exterior diameter of the brick conduit were estimated at 39 inches. Another portion of the same segment of the brick conduit along Broadway was recorded in 2007 by Cogstone Resources Management for the Metro Gold Line. An update to the CA-LAN-3103 record was made and documented a 75-foot-long intact segment (see Figure IV.D-22). This segment was nominated for the National Register under Criterion A for its associated with the urban and agricultural development of Los Angeles. The nomination proposed this segment was the longest known surviving portion of the Zanja Madre. The nomination was rejected by the OHP who found that the segment did not retain sufficient integrity to convey the significance of the entire resource (i.e., the Zanja Madre, not necessarily the zanja system as a whole). More specifically, the OHP stated that all components comprising the Zanja Madre—underground linear features, structures, and associated buildings—would need to be identified and their condition analyzed to establish a given segment as the best surviving element. The nomination form and OHP reply were both designated as P-19-190309 in the CHRIS. The segment was preserved and incorporated into the design of the Los Angeles State Historic Park.

A third segment of brick conduit was identified during potholing along Alameda Street in 2007, approximately 0.2 miles north of the Las Placitas Site. Only the top of the portions of the conduit was exposed and the segment was preserved in place. The exposed portions were recorded by Gibson and Dietler (2011) as an update to the resource record for CA-LAN-3103.

On April 10, 2014 an approximately 100-foot segment of intact brick conduit was uncovered during excavation for the Blossom Plaza Project in Chinatown (see Figure IV.D-23), located 1,000 feet southwest of the portion nominated for the National Register. The project proponent, Forest City Enterprises, agreed to preserve and display a segment off-site through the support of a philanthropic donation from Lauren Bon of Metabolic Studios. The archaeological recording was completed by Cogstone Resources Management.



Segment of Zanja Madre along Broadway documented by Gust (2007:19).

Figure IV.D-22
Segment of Zanja Madre (A)

Source: SWCA Environmental Consultants, 2019.



Zanja Madre uncovered during excavation for the Blossom Plaza Project. Source: *Los Angeles Times* (Hall 2014).

Figure IV.D-23
Segment of Zanja Madre (B)

Source: SWCA Environmental Consultants, 2019.

Zanja No. 3

A segment of Zanja No. 3 was recorded in 1986 by archaeologists with Louis Berger and Associates for the Federal Center Complex Project in an area bound by Aliso, Alameda, Temple, and Los Angeles Streets. The segment was found eligible for listing on the National Register and the HAER documentation was adopted as mitigation through an MOA established with the General Services Administration, the California State Historic Preservation Office (SHPO), and Advisory Council on Historic Preservation. The segment was identified as part of an archaeological testing program and then more fully exposed as part of the data recovery mitigation. The archaeological recording identified a 165-foot long portion of the original earthen ditch constructed 1825–1831, measuring between 10 and 12 feet wide at the top and six feet at the base, with a depth averaging 5.6 feet below grade. A 36-foot-long brick culvert was constructed in 1869 along the portion that crossed the original alignment of Commercial Street (see Figure IV.D-24). Several associated features were also recovered and included public utility lines and architectural remains. The utilities included an 1869 wooden sewer (see Figure IV.D-25), 3.5-inch-wide iron gas line, 8-inch-diameter iron water main, and concrete electrical utility trench. The building foundations included on brick foundation from a Los Angeles Farming and Milling Company warehouse on Commercial Street, and a concrete foundation believed to be a structural element of a 1941 Post Office parking facility. No designation in the CHRIS was assigned and the HAER is filed as CA-50 with the Library of Congress.

A site form prepared by LSA in 1999 mentions the presence of Zanja No. 3 in the footprint of the project (the same approximate area as the Federal Center Complex Project) but does not specify whether any resources were identified. The site form was listed as an update to CA-LAN-887H, which was originally designated for the archaeological remains of the Zanja Madre. It is not clear why this resource number was assigned to the recording.



Zanja No. 3, view of brick conduit with utility pipes (HAER No. CA-50-5).

Source: SWCA Environmental Consultants, 2019.

Figure IV.D-24
Zanja No.3 (A)



Zanja No. 3, overhead view of wooden sewer with pipe fitting (HAER No. CA-50-12).

Source: SWCA Environmental Consultants, 2019.

Figure IV.D-25
Zanja No.3 (B)

Zanja No. 6-1

Segments of Zanja No. 6-1 have been identified in 2005 and 2008 on separate projects but near one another and given separate archaeological site numbers: P-19-003352 and CA-LAN-4113H. The first segment (P-19-003352) was recorded by Greenwood and Associates for the Emergency Operations Center Project along the east side of Alameda Street between Temple and Banning Streets. The segment was recorded as a concrete pipe measuring approximately 34 inches in diameter and associated with historical refuse. Foster concluded that the zanja was likely eligible for listing on the California Register, potentially under Criteria 1, 3, and 4, and recommended further work to formally evaluate the resource and conduct monitoring and/or data recovery as appropriate. It is not clear whether follow-up work occurred and which of the recommended mitigation measures were implemented. A second segment of Zanja No. 6-1 was documented in 2008 by AECOM on the southern side of Temple Street. This segment included an associated catch basin and deposit of historical artifacts with material dating to 1810. The exposed portions of the concrete pipe were left in place.

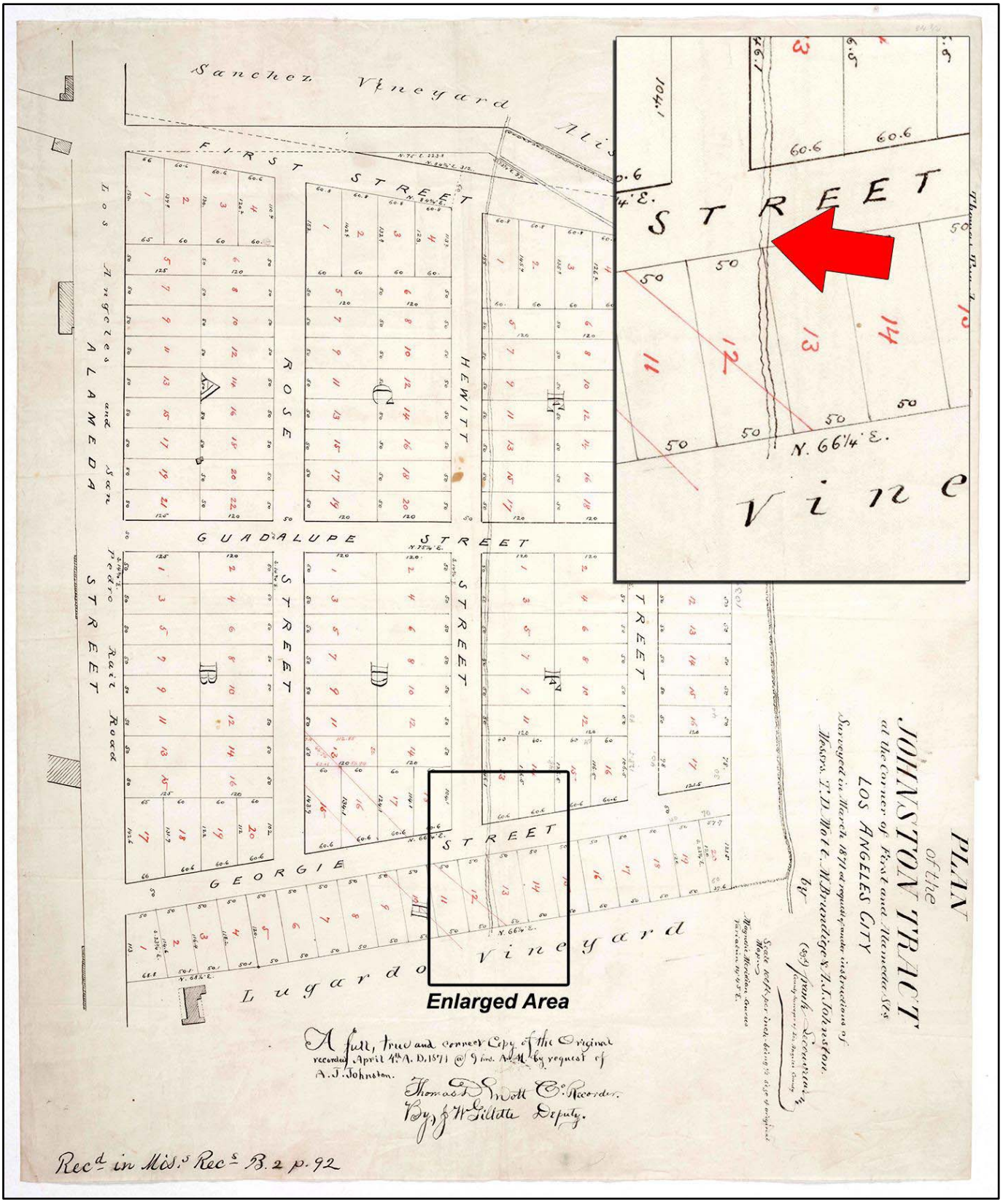
(c) Archival Research

The AR Assessment's archival research included a review of historical maps and descriptions of the Project Site and vicinity, with a focus on documenting historical modifications to the physical setting and identifying any potential natural or artificial features with relevance to use by Native Americans or (e.g., stream courses, vegetation, historical topography, roads, habitation markers) or use of the location by non-Native American people in the Historic period. The Project Site is located south of the historic core of downtown Los Angeles and was included in the earliest surveys of the City, first by Lieutenant E. O. C. Ord in 1849 and then by Henry Hancock and George Hanson in 1853 and 1857 (see Figure IV.D-7). Ord's map depicts the Project Site in a cornfield, directly adjacent to a ploughed field. H.J. Stevenson's 1884 map of Los Angeles shows the Project Site within a property owned by O.H. Bliss, who in 1874 purchased for $18,000 what was described as the "old Rowland homestead property." Other descriptions of the sale gave a more detailed inventory of the property as containing a residence, tens of acres of fruit trees (orange, walnut, lime, lemon, apple, peach, and pear), an acre of "fine old grapes," and was noted as being irrigated by one of the zanjas (Zanja No. 2). Stevenson's map confirms and later Hall's 1888 irrigation map both confirm the presence of Zanja No. 2 within the Project Site, though the scale at which the maps were drawn include a margin of error in the accuracy of the alignment, which is estimated at upwards of 100 feet in some location. Hall's report and other newspaper articles suggest the portion of Zanja No. 2 within the Project Site was constructed as a wooden flume box measuring 3 × 1 feet. It is not clear exactly when the portion in the Project Site was constructed or if it was excavated as an earthen ditch

before the wooden flume was installed, but it was present at least by 1871 and was likely abandoned by 1906.

The 1880s population boom in Los Angeles quickly manifested in the sale and subdivision of many such agricultural properties. Sale of parcels within the Bliss Tract had commenced by 1886, at which point residential developments had already begun in the adjacent areas, such as the Johnston Tract located one block to the north between First Street and Georgie Street (now Third Street). As farms were developed into residential tracts, surveys were commissioned to define property boundaries and delineate lots. These survey maps would often include historical information on extant structures, road alignments, natural features, and zanjas. Importantly, these early survey maps were drawn with a high degree of accuracy and are more easily aligned with contemporary parcels. The alignment of Zanja No. 2 is depicted in survey maps drawn for the Johnston Tract (see Figure IV.D-26) and the M. Keller Tract (see Figure IV.D-27) to the south between Palmetto Street and Seventh Street. Though less accurate than the City survey maps, the 1894 Sanborn Insurance maps drawn for the O.H. Bliss Tract also shows the south-trending zanja passing through the western half of the Project Site (see Figures IV.D-28 and IV.D-29). The 1894 Sanborn Insurance map also depicts two residences in the northeast corner of the Project Site, listed at 443 and 445 Colyton Street.

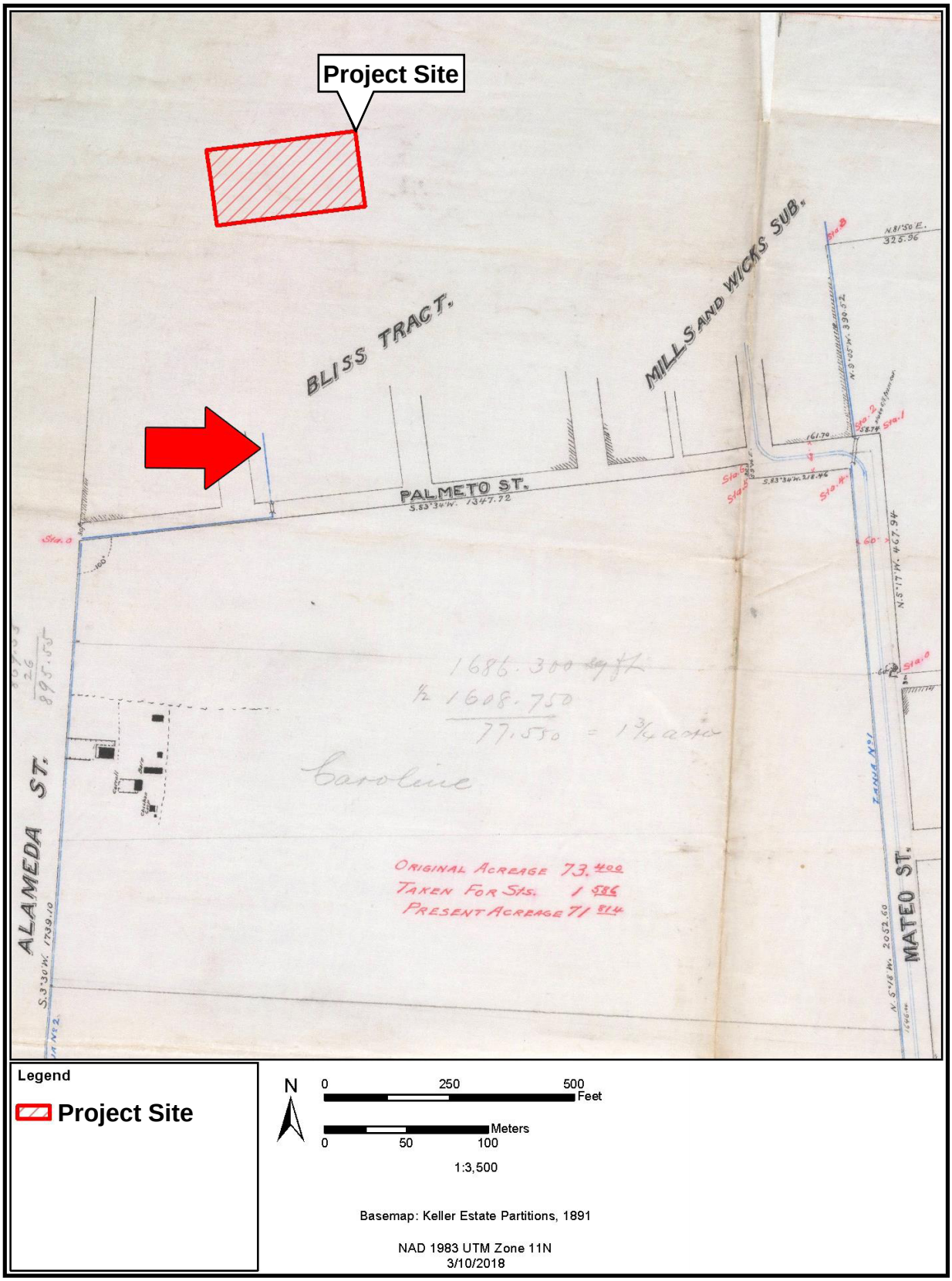
In 1906 the F.O. Engstrom Company had constructed two buildings within the Project Site, including a planing mill—the largest in the entire city containing a dry kiln, glue room, oil storage, and lumber storage, and a small iron and cement operation, on the east-facing side of the property along Seaton Street and west-facing side along Colyton Street, respectively (see Figure IV.D-30). Sometime around 1915 the property was purchased by Weber Showcase & Fixtures Company. Research conducted for the current Project by GPA Consulting found that the former F.O. Engstrom Company warehouse on Seaton Street was demolished around the time they acquired the property in 1915. However, the existing office building on the southeast corner was apparently retained and incorporated into the subsequent construction of the two-story warehouse that currently occupies the Project Site.



Survey map created in 1871 for the Johnston Tract, located north of the Project Site, depicting the precise north - south alignment of Zanja No. 2 (red arrow in the inset) on the east side of Hewitt Street.

Figure IV.D-26
1871 Survey Map

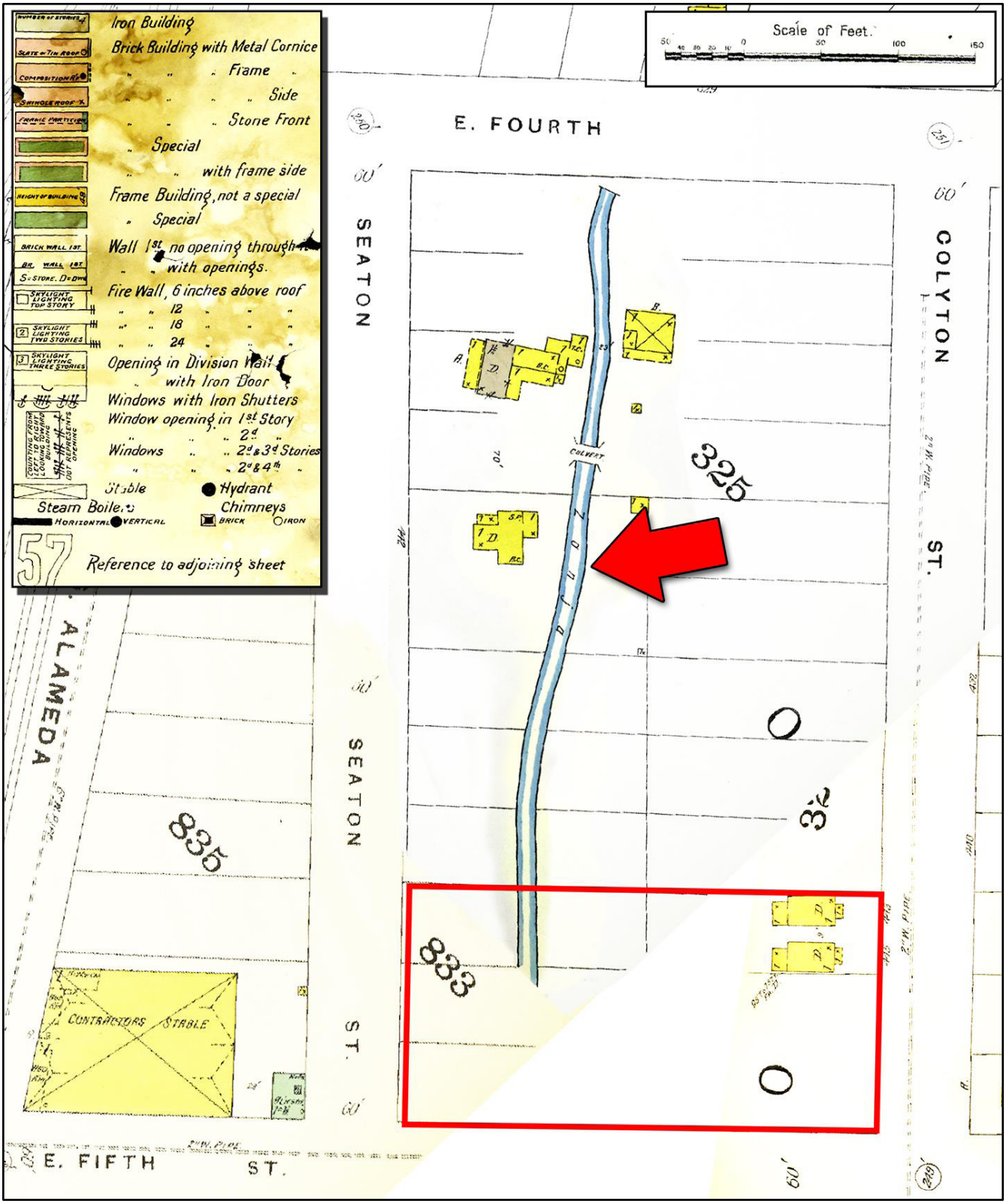
Source: SWCA Environmental Consultants, 2019.



Survey map created in 1891 for the Keller Estate, located south of the Project Site, depicting the precise route of Zanja No. 2 drawn with a blue line (red arrow) and Zanja No. 1 (right side along Mateo Street).

Figure IV.D-27
1891 Survey Map

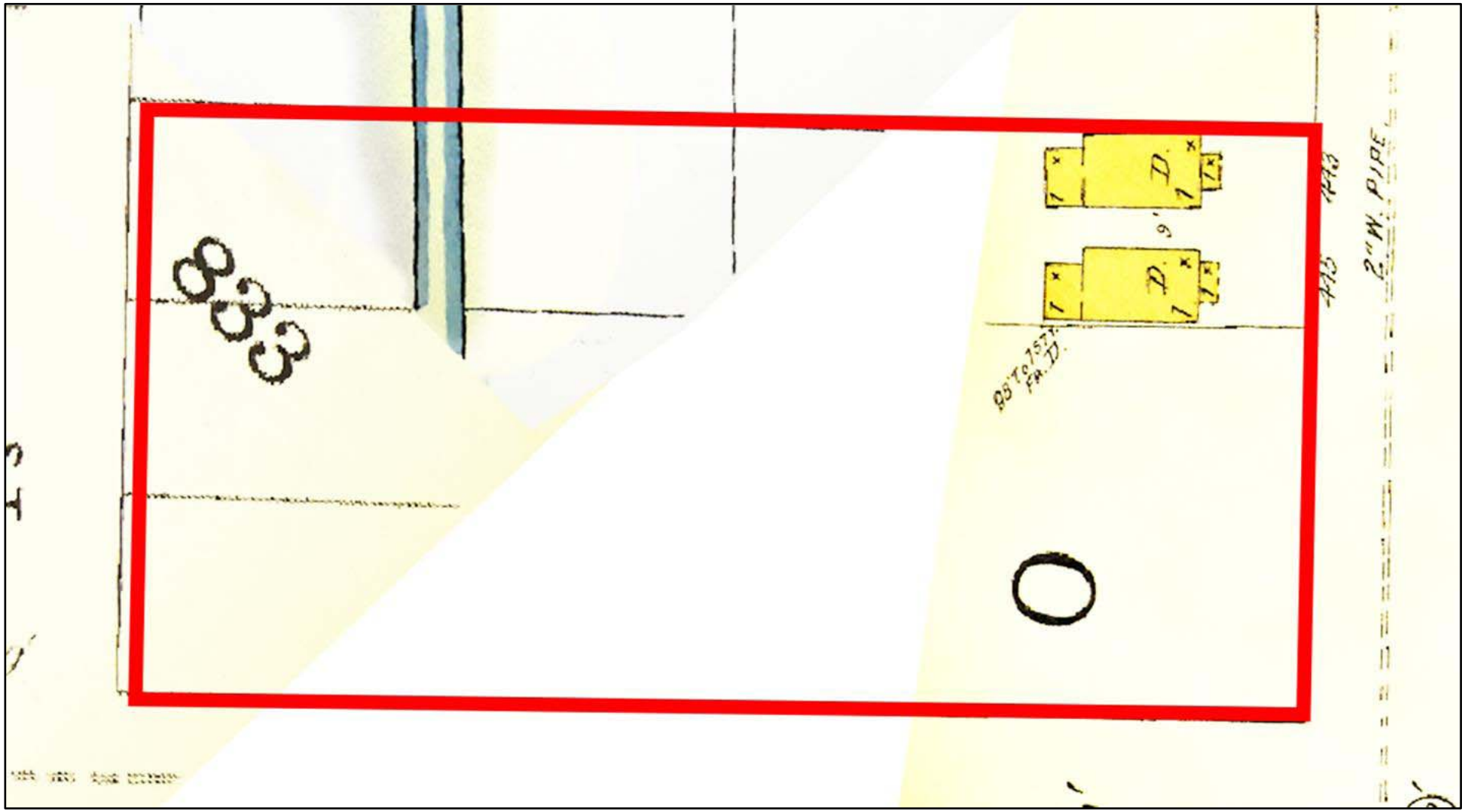
Source: SWCA Environmental Consultants, 2019.



Composite Sanborn Fire Insurance Maps from 1894 (sheets 25, 27, 83) depicting Zanja No. 2 (red arrow) and the Project Site (red outline). The maps included in the 1894 edition did not include coverage for land south of the Project Site, and the zanja appears cutoff but would extended further south through the Project Site.

Figure IV.D-28
Composite 1894 Sanborn Fire Insurance Maps

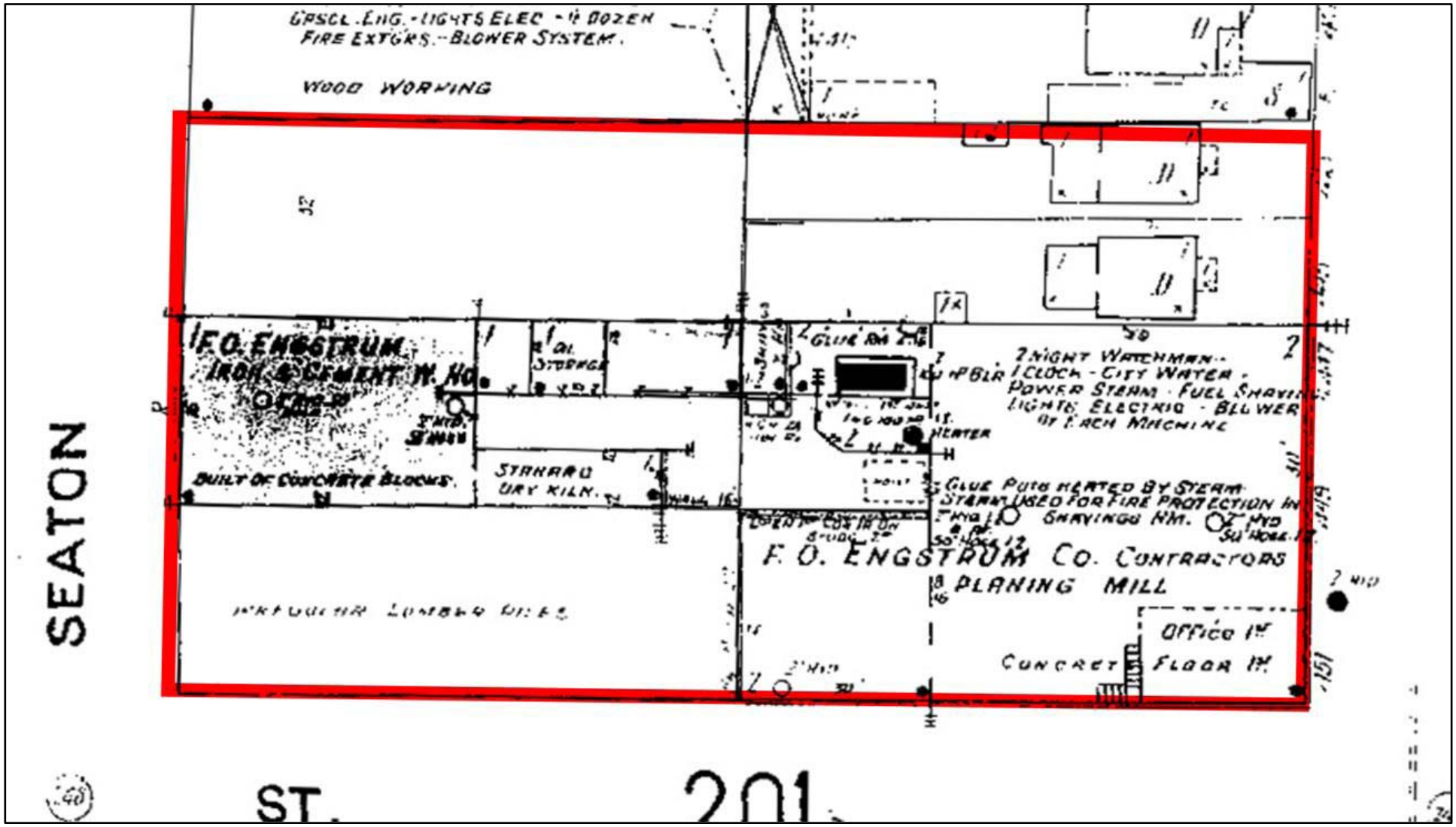
Source: SWCA Environmental Consultants, 2019.



Detailed view of composite 1894 Sanborn Fire Insurance Maps (see Figure IV.D-28) showing the Zanja No. 2 and two single - story dwellings (labeled 'D') at 443 and 445 Colyton Street within the Project Site.

Figure IV.D-29
Detailed View of Composite 1894 Sanborn Fire Insurance Maps

Source: SWCA Environmental Consultants, 2019.



Sanborn Fire Insurance Map from 1906 (sheet 202) and the Project Site (red outline).

Figure IV.D-30
1906 Sanborn Fire Insurance Maps

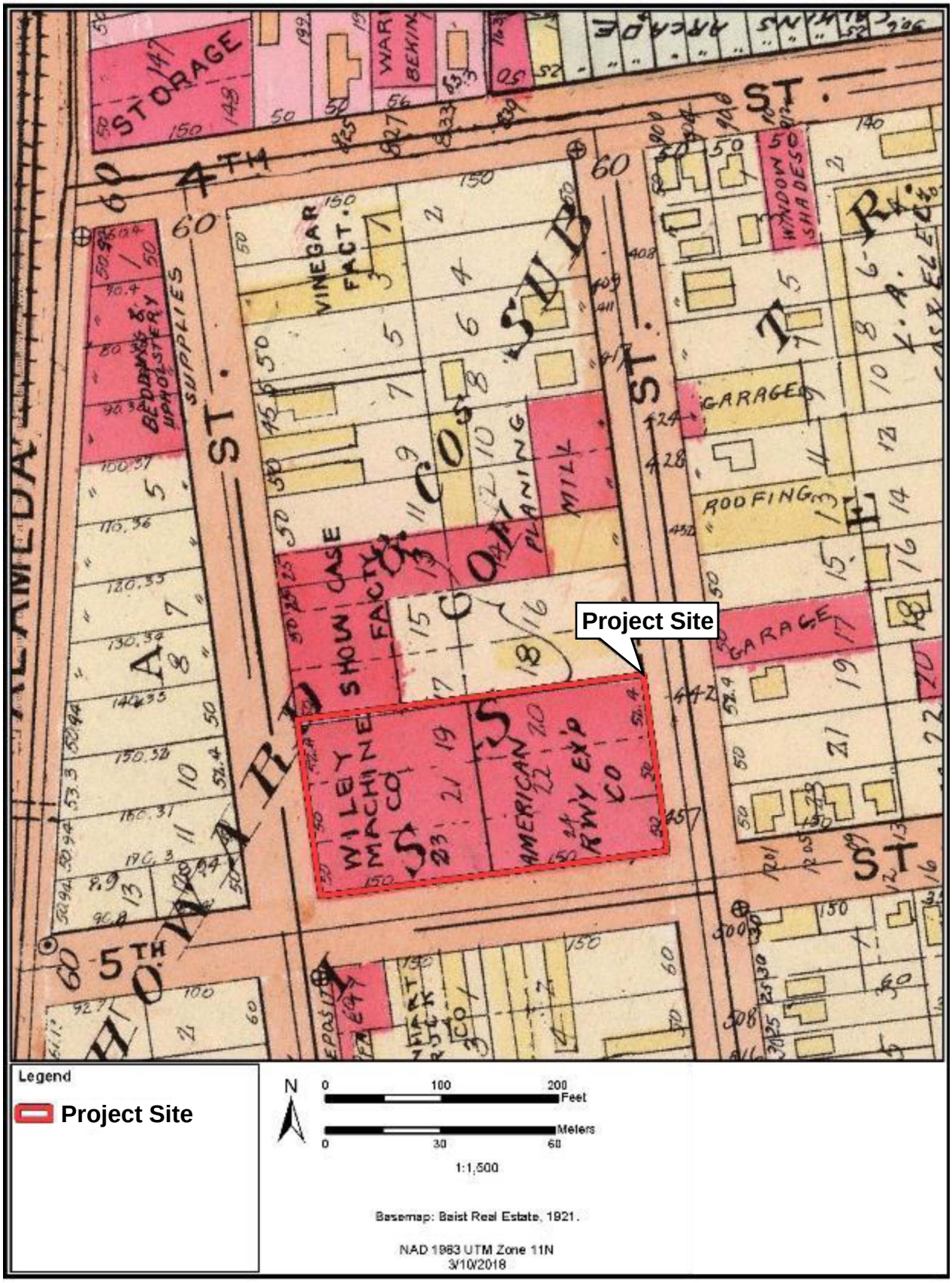
Source: SWCA Environmental Consultants, 2019.

A Baist Real Estate map from 1921 shows the existing Project Site split between the Wiley Machine Company and the American Railway Export Company in the western and eastern halves, respectively (see Figure IV.D-31). At this point the two residences previously located in the northeast corner of the Project Site were likely demolished or relocated. The property was later purchased by the Jenny Nibley Warehouse, who owned the entire block by 1923 and occupied the former warehouse complex until 1970, using the former Weber Company building for general storage. Subsequent maps depict railway spurs running along Fifth Street and Colyton Street, connecting to the Southern Pacific Railroad Company tracks along Alameda Street (see Figure IV.D-32). By 1972 the tracks were either paved over or removed.

(d) Native American Coordination

(i) Sacred Lands File Search

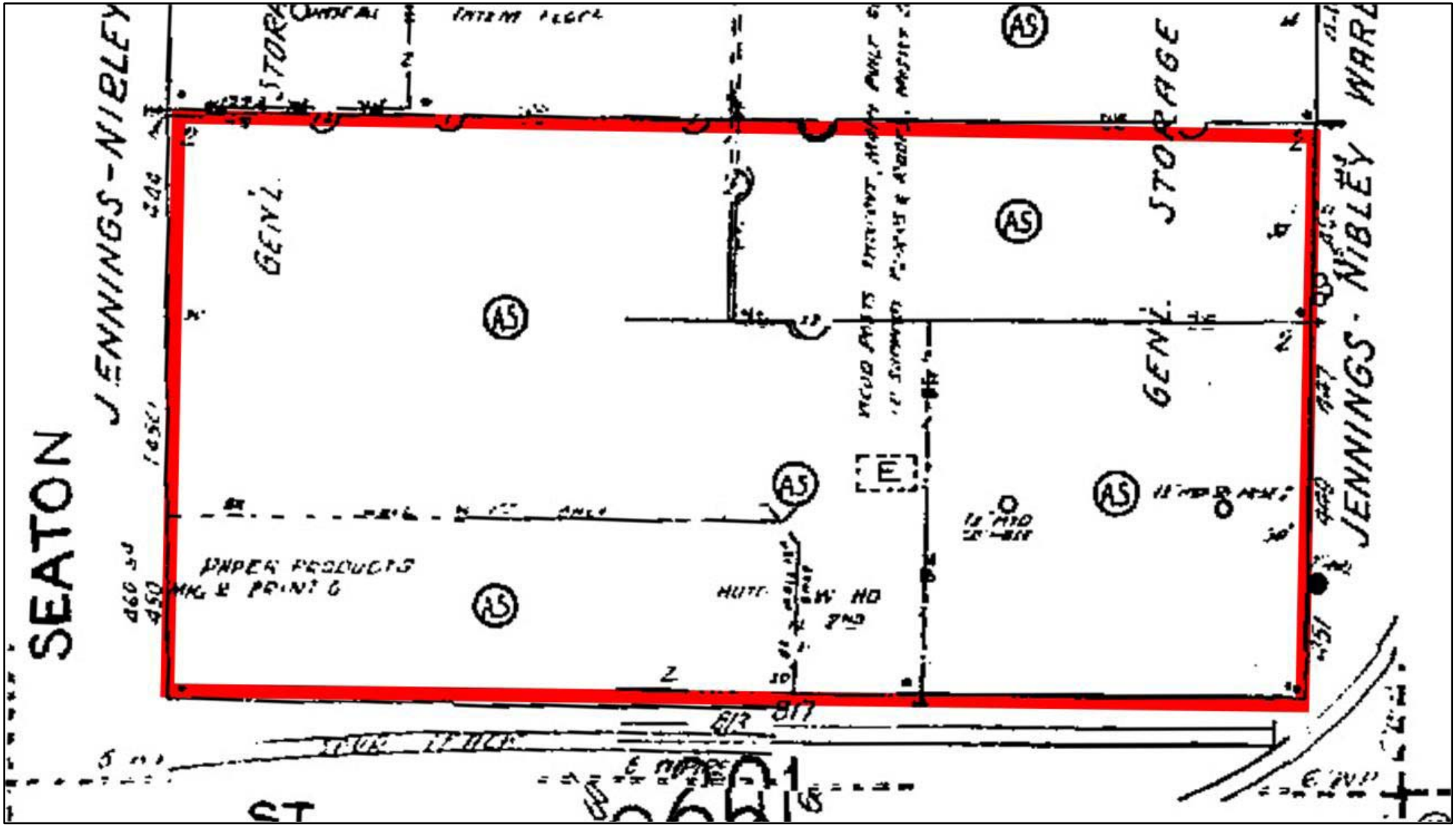
On July 11, 2017, the results of a Sacred Lands File (SLF) search were received from the NAHC. The NAHC letter indicated that there are no sacred sites in the SLF documented within the Project Site, but that the area is "sensitive for potential tribal cultural resources." The letter also notes that neither the SLF nor CHRIS are exhaustive inventories of resources that may be present in any given area, and that tribes may uniquely possess information on the presence of an archaeological resource. A list of five Native American contacts was provided and the letter suggests contacting them to provide information on sacred lands that may not be listed in the SLF. Each of these individuals were already included in the City's Assembly Bill 52 (AB 52) notification list and all additional outreach was conducted as part of compliance with AB 52 (PRC Section 21082.3), described in a separate Tribal Cultural Resources Assessment (see **Section IV.N, Tribal Cultural Resources**, of the Draft EIR. The NAHC letter is included in Appendix C of the AR Assessment included in **Appendix D-2** of the Draft EIR.



Baist Real Estate Survey Map from 1921 and the Project Site.

Figure IV.D-31
Baist Real Estate Survey Map

Source: SWCA Environmental Consultants, 2019.



Composite Sanborn Fire Insurance Map from 1950 (sheets 201 and 202) and the Project Site (red outline).

Figure IV.D-32
Composite 1950 Sanborn Fire Insurance Maps

Source: SWCA Environmental Consultants, 2019.

(e) Sensitivity Assessment

(i) Preservation Potential

Geotechnical boring for the current Project documented up to 12 feet of fill directly underneath the paved surface and building. This fill material is described as containing construction debris, specifically brick fragments. Below the fill are deposits of dense sand with inclusions of gravel, cobbles, and potentially boulders, extending at least 80 feet below the surface. The bore samples also identified relatively thin—up to 8 or 9 feet thick—lenses of sandy silt and silty sand, and loose-medium density sand within the larger sand matrix. The depositional pattern is consistent with high-energy alluvial deposits resulting from flood events along the Los Angeles River. Since 1815, two shifts of the river's alignment have been documented, with the main channel shifting from the east to the west side, then back again in 1825. Floods along the Los Angeles River were episodic but occurred numerous times in recorded history, which can potentially preserve archaeological remains where lower energy deposition occurs, or displace archaeological material in higher energy, erosional settings. These differential patterns of preservation would have varied on both large and small scales within the flood plain of the Los Angeles River and throughout the prehistoric and historic periods, until the modern flood control infrastructure was built in the middle twentieth century.

(ii) Prehistoric Archaeological Sites

A CHRIS records search and archival research identified nine archaeological resources, none of which were prehistoric archaeological sites. The NAHC returned negative results in their SLF search, though the Project Site was noted to be sensitive for the presence of undocumented tribal cultural resources (including prehistoric archaeological sites). Archaeological finds near Union Station, also situated within the flood plain between the two former river courses, demonstrate that significant Native American archaeological remains can exist within alluvial sediment deposits underlying pavement, historic-period disturbances, and fill. Many archaeologists have speculated that the archaeological site documented at Union Station was affiliated with the ethnographically documented Native American village of Yaanga, plotted 0.9 miles north of the Project Site. Most accounts of the village location consider it to have been situated throughout a relatively broad area between Fort Moore Hill and Union station, within a few blocks of the pueblo plaza.

That Native American settlements and activity occur in higher concentration around permanent water sources is undisputed by archaeologists. The significance of the Los Angeles River to the Gabrielino is well-documented in ethnographic works and oral history and was emphasized in Native American consultation conducted for the current Project. Because of the proximity to the Los Angeles River and the estimated location of

Yaanga relative to the Project Site, the AR Assessment finds an overall increase in the sensitivity for Native American activity near the Project Site. However, additional criteria are required to distinguish levels of sensitivity for archaeological resource potential. Specifically, land-use history, existing disturbances to the Project Site, and the depositional setting must be considered in greater detail and given weight in determining the sensitivity. The CR Assessment finds the presence of non-native or otherwise historically modified sediments at depths of 8 to 12 feet (2.5–3.7 meters), combined with the evidence of a high-energy depositional setting in the alluvial substrate, significantly reduces the sensitivity for the preservation of any prehistoric or historical Native American archaeological resources within the Project Site. Given these considerations, the AR Assessment finds the Project Site has a low sensitivity for containing prehistoric or historical Native American archaeological resources.

(iii) Historical Archaeological Sites

Household Refuse and Building Foundations

A CHRIS records search and archival research identified nine archaeological resources, all historic-period sites, within a 0.8-kilometer (0.5-mile) radius of the Project Site. A previously recorded historical archaeological site (CA-LAN-4460H) was identified during construction monitoring immediately southwest of the Project Site. The site contained a substantial deposit of domestic items and structural remains associated with residential development between the 1880s and 1920s. Archival research documents the land-use history of the Project Site in its conversion from agriculture in the mid-nineteenth century, to mixed residential and industrial properties in the 1880s, to primarily industrial uses by the 1910s. Agricultural uses almost certainly involved plowing, which would have disturbed any native surface sediments and displacing any archaeological material that might have been located within the Project Site. Though no specific figures are available for middle nineteenth century agricultural practices in Los Angeles, plow zones observed in archaeological contexts typically do not extend more than a few feet (less than 1 meter) below the surface.

Two 1890s single-story residences were formerly located on the northeastern corner of the Project Site (443 and 445 Colyton Street) and were moved sometime after 1907. In the lots adjacent to the residences, two warehouses were constructed and demolished prior to 1924, when the two-story building currently occupying the Project Site was constructed. Notably, one two-story office building at the northwest corner of Fifth Street and Colyton Street, originally constructed in 1915, was not demolished and is incorporated (with modifications) into the existing building in the southeast corner of the Project Site. There is high sensitivity for the Project Site to contain buried deposits of domestic refuse associated with the two 1890s residences, and construction material and building foundations associated with two warehouses demolished in the 1910s.

These resources have the highest probability to occur in the soil strata defined as fill, which are estimated to extend at least 12 feet below the surface.

Zanja No. 2

One segment of the Los Angeles zanja system (Zanja No. 2) was historically located within the Project Site. Sources vary as to the precise location, but maps created between 1884 and 1894 depict the zanja in a north-south alignment within the western half of the Project Site (see Figure IV.D-12 and Figure IV.D-28). Archival sources indicate Zanja No. 2 was constructed as a wooden flume box measuring 3 × 1 feet and was in operation operated between 1871 and 1906 as part of the City's water distribution system for agricultural and domestic use. An inventory of the zanja system in 1888 reported the full length of Zanja No. 2 as approximately 13,200 feet, extending along a south–southwestern alignment from its connection with Zanja No. 6-1 near the intersection of 1st Street and Hewitt Street to the city boundary near Alameda Street and 25th Street. It is not clear exactly when the portion in the Project Site was constructed or if it was excavated as an earthen ditch before the wooden flume was installed, but it was present at least by 1871 and was likely abandoned by 1906. Various non-specific references in newspapers from the 1890s and first decade of the twentieth century suggest that portions of Zanja No. 2 were replaced with concrete conduit. It is possible that the segment mapped within the Project Site was replaced as a concrete conduit, but the available evidence suggests it was constructed as a wooden flume at the time it was de-commissioned, and the property was developed. This is consistent with the 1888 inventory and reflects the piecemeal modifications, multiple designs, and variable building materials that define most of the conduits in the zanja system. Like many of the other zanjas composing the system at its peak in the 1880s, portions of Zanja No. 2 likely had precursors constructed during the Spanish or Mexican Periods and the physical remains may have persisted into the twentieth century after being otherwise abandoned.

Within the Project Site, vestiges of the wooden flume could remain shallowly buried below the paved surface. If any undocumented modifications to the zanja occurred, such as installation of concrete or cast-iron pipe, these materials may also be present. It is possible that the segment of Zanja No. 2 in the Project Site was originally excavated as an earthen ditch or had other associated components during either the Spanish, Mexican, or early American Periods. Controlled archaeological excavation has demonstrated that stream deposits associated with the historical earthen ditches can be preserved below or intermixed with more substantial zanja components such as flumes and pipes.

(3) Paleontological Resources

Paleontology is the study of fossils, which are the remains of ancient life forms. On May 28, 2015, a Project-specific paleontological records search was conducted through the Natural History Museum of Los Angeles County to determine the potential impacts of the Project on paleontological resources. The results of the paleontological records search, which are included in **Appendix D-3** of the Draft EIR, indicate there are no previously encountered fossil vertebrate localities located within the Project Site. However, the records search indicates that there are nearby fossil localities from sedimentary deposits that are similar to those that underlie the Project Site.

The entire Project Site area has surficial deposits of younger Quaternary Alluvium, primarily derived as fluvial deposits from the flood plain of the Los Angeles River, which currently flows in a concrete channel to the east. These younger Quaternary deposits usually do not contain significant fossil vertebrates, at least in the uppermost layers, but the underlying older Quaternary deposits found at varying depths may well contain significant vertebrate fossils.[17]

The closest identified vertebrate fossil locality from the older Quaternary deposits in proximity to the Project Site is LACM 1755, located southwest of the Project Site near the intersection of 12th Street and Hill Street. This locality produced fossil specimen of horse, *(Equus)*, at a depth of 43 feet below the street. The next closest vertebrate fossil localities from these deposits are LACM 7701-7702, southeast of the Project Site in the City of Commerce near the intersection of Atlantic Avenue and the Long Beach Freeway (I-710) just north of the Los Angeles River that produced fossil specimens of threespine stickleback (*Gasterosteus aculeatus)*, salamander (*Batrachoseps)*, lizard *(Lacertilia)*, Snake *(Colubridae)*, rabbit *(Sylvilagus)*, pocket mouse *(Microtus)*, harvest mouse (*Reithrodontomys)*, and pocket gopher (*Thomomys)* at 11 to 34 feet below grade. At about the same distance, but southwest of the Project Site near the intersection of 46th Street and Western Avenue, vertebrate fossil locality LACM 7758 produced fossil specimens of three-spine stickleback (*Gasterosteus aculeatus)*, meadow vole (*Microtus)*, deer mouse (*Peromyscus)*, pocket gopher (*Thomomys)*, and pocket mouse (*Perognathus)* at a depth of 16 feet below the surface.[18]

[17] *Written correspondence from Dr. Samuel A. McLeod, Natural History Museum of Los Angeles County, May 28, 2015.*

[18] *Ibid.*

3. Project Impacts

a) Methodology

(1) Historical Resources

To identify potential historical resources and assess potential project impacts, the following analytical steps were undertaken in the preparation of the Historical Resources Technical Report:

1. A field inspection of the Project Site and vicinity was conducted to determine the scope of the analysis. As the Project involves new construction, the study area was defined as the Project Site and a half-block radius that includes adjacent properties (see Figure IV.D-1). This half-block radius was established to account for indirect impacts on historical resources in the vicinity. Historical resources beyond this radius were not included in the study area because the Project would have no potential to indirectly impact these resources.

2. A records search from the South Central Coastal Information Center (SCCIC) was requested to determine whether or not the Project Site is currently listed under national, state, or local landmark or historic district programs and whether or not it has been previously identified or evaluated as a potential historical resource. This involved a review of the California Historic Resources Inventory System (CHRIS), which includes data on properties listed and determined eligible for listing in the National Register, listed and determined eligible for listing in the California Register, California Registered Historical Landmarks, Points of Historical Interest, as well as properties that have been evaluated in historical resources surveys and other planning activities.

3. The SurveyLA findings for the Central City North Community Plan Area were reviewed to determine if any properties within the study area were identified as potential historical resources.

4. The general condition and physical integrity of the building on the Project Site was assessed during the field inspection. Digital photographs of the building's exterior were also taken.

5. Research on the history of the building on the Project Site was conducted. Dates of construction and subsequent alterations were determined by the building permit record, as well as additional sources, such as the Los Angeles County Office of the Assessor records, newspaper articles, city directories, and historic maps.

6. A determination was made that the building on the Project Site should be re-evaluated based upon the field inspection and research.
7. Project plans and documentation were reviewed and analyzed to determine if the Project would have direct or indirect impacts on the identified historical resources as defined by CEQA.

(2) Archaeological Resources

(a) Archaeological Resource Types

Archaeological resources (or sites) are analyzed and described according to distinct temporal and cultural affiliations, specifically those affiliated with Native American activity and those resulting from non-Native American activity. Native American-affiliated archaeological resources are those that date to the prehistoric or historic periods (i.e. prior to Spanish contact and after, respectively). For brevity, all archaeological resources affiliated with Native Americans are referred to as prehistoric archaeological resources, which include Native American archaeological sites dating to the historic period. By contrast, historical archaeological resources are those affiliated with non-Native Americans and could date to any portion of the historic period, including the Spanish, Mexican, and American periods. One archaeological resource may include both prehistoric and historic site components.

(b) CHRIS Records Search

On February 14, 2018, a confidential search of the CHRIS records was conducted at the SCCIC, located on the campus of California State University, Fullerton. The SCCIC maintains records of previously documented cultural resources (including those that meet the definition of a Tribal cultural resource) and technical studies; it also maintains copies of the OHP's portion of CHRIS records. The search included any previously recorded archaeological resources (i.e., excludes historic buildings) within the Project Site and surrounding 0.8-kilometer (0.5-mile) area. The purpose of the CHRIS records search is to identify whether any archaeological resources have been documented in the Project Site and assess the potential for undocumented resources to be present by comparison to adjacent areas. Confidential CHRIS results include specific information on the nature and location of sensitive archaeological sites, which should not be disclosed to the public or unauthorized persons and are exempt from the Freedom of Information Act. The information included in a confidential CHRIS records search is needed to assess the sensitivity for undocumented archaeological resources and inform the impact analysis. Appendix B of the AR Assessment included in **Appendix D-2** of the Draft EIR includes a summary of previous studies conducted in the Project Site and records search radius, but site records and copies of reports have been excluded. Thus, Appendix B is not considered confidential. To assist in research specifically related to

the historical Los Angeles zanja system, relevant archaeological site records and reports from the SCCIC outside the 0.5-mile radius were also obtained. The resource locations and report titles were identified based on the historical research conducted prior to the records search.

(c) Archival Research

Concurrent with the confidential CHRIS records search, site-specific historical and ethnographic context research was reviewed to identify information relevant to the Project Site. Research focused on a variety of primary and secondary materials relating to the history and development of the Project Site, including historical maps, aerial and ground photographs, ethnographic reports, and technical reports prepared for the Project. Historical maps that have been drawn to-scale were georeferenced using ESRI ArcMAP v10.5 in order to show precise relationships to the Project Site.

Sources consulted included the following publicly accessible data sources:

- City of Los Angeles OHR (SurveyLA);
- City of Los Angeles Department of Building and Safety (building permits);
- Sanborn Fire Insurance Company Maps (Sanborn maps);
- Los Angeles Public Library (maps and photographs);
- Huntington Library Digital Archives (maps);
- University of Southern California Digital Library (photographs and manuscripts);
- University of California, Santa Barbara Digital Library (aerial photographs);
- David Rumsey Historical Map Collection;
- Library of Congress (maps and illustrations); and
- USGS historical topographic maps.

In addition, technical reports prepared for the Project were reviewed, including the geotechnical report (see **Appendix E-1** of the Draft EIR) and the historical resources report (see **Appendix D-1** of the Draft EIR).

(d) Sensitivity Assessment

In circumstances where a known archaeological resource is not present, the potential for an undocumented resource (in the form of a buried archaeological site) was assessed to be present. This determination considers historical use of the Project Site

and vicinity, broadly, and the physical setting, specifically, including an assessment of whether the setting is capable of containing buried archaeological material. Lacking any data specifically gathered to assess the presence or absence of archaeological material below the surface, the resulting sensitivity is by nature qualitative, ranging along a spectrum of increasing probability for encountering such material, designated here as low, moderate, and high. The sensitivity of the Project Site was assessed to contain non-Native American archaeological resources and prehistoric and historical Native American archaeological resources. Specific factors are considered for each respective resource type. In general, for areas in which there was historical use and poor physical integrity within the Project Site, (e.g., high levels of disturbances from recent development), the resulting sensitivity assessment would be low. Areas that show some evidence of activity or a likelihood based on the presence of natural features (e.g., perennial water), and retain sediments dated to the approximate time period of that activity, the resulting sensitivity assessment would be either moderate or high. In some cases, evidence of archaeological material from non-archaeological by sources (e.g., geotechnical boring logs, anecdotal accounts by local residents or listed in historical accounts) can be sufficient for elevating the sensitivity from moderate to high.

(3) Paleontological Resources

To address potential impacts associated with paleontological resources, formal records searches were conducted to assess the paleontological resource sensitivity of the Project Site and vicinity. In addition, existing conditions and previous disturbances within the Project Site, the geology of the Project Site, and the anticipated depths of grading were considered to determine the potential for uncovering paleontological resources.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to cultural resources if it would:

(a) Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5; or

(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; or

(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

(d) Disturb any human remains, including those interred outside of dedicated cemeteries.

(2) 2006 L.A. CEQA Thresholds Guide

In the context of the above questions from the CEQA Guidelines, the *2006 L.A. CEQA Thresholds Guide* (Thresholds Guide) states that a project would normally have a significant impact on historical resources if it would result in a substantial adverse change in the significance of an historical resource. Accordingly, a project would normally have a significant impact on historical resources if a substantial adverse change in historic significance occurs due to any of the following:

- Demolition of a significant resource;
- Relocation that does not maintain the integrity and significance of a significant resource;
- Conversion, rehabilitation, or alteration of a significant resource which does not conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; or
- Construction that reduces the integrity or significance of important resources on the Project Site or in the vicinity.

In addition to this guidance provided by the City, the State Legislature, in enacting the California Register, also amended CEQA to clarify which properties are considered historical resources, as well as which project impacts are considered to be significantly adverse. A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.[19] A substantial adverse change in the significance of a historical resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.[20] As such, the test for determining whether or not a proposed project would have a significant impact on an identified historical resource is whether or not the project would alter in an adverse manner the physical integrity of the historical resource such that it would no longer be eligible for listing in the National or California Registers or other landmark programs such as the list of HCMs.

[19] *CEQA Guidelines Section 15064.5(b).*

[20] *CEQA Guidelines Section 15064.5(b)(1).*

(3) Secretary of the Interior's Standards

Projects that may affect historical resources are considered mitigated to a level of less than significant if they are consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards).[21] The Standards are accompanied by Guidelines for four types of treatments for historical resources: Preservation, Rehabilitation, Restoration, and Reconstruction.

Though none of the four treatments as a whole applies specifically to new construction in the vicinity of historical resources, Standards #9 and #10 of the Standards for Rehabilitation provide relevant guidance for such projects.

The Standards for Rehabilitation are as follows:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

[21] *14 CCR Section 15126.4(b).*

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

It is important to note that the Standards are not intended to be prescriptive but, instead, provide general guidance. They are intended to be flexible and adaptable to specific project conditions to balance continuity and change, while retaining materials and features to the maximum extent feasible. Their interpretation requires exercising professional judgment and balancing the various opportunities and constraints of any given project. Not every Standard necessarily applies to every aspect of a project, nor is it necessary to comply with every Standard to achieve compliance.

(a) Archaeological Resources

In the context of the above questions from the CEQA Guidelines, the Thresholds Guide states that a project would normally have a significant impact upon archaeological resources if it could disturb, damage, or degrade an archaeological resource or its setting that is found to be important under the criteria of CEQA because it:

- Is associated with an event or person of recognized importance in California or American prehistory or of recognized scientific importance in prehistory;

- Can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable archaeological research questions;

- Has a special or particular quality, such as the oldest, best, largest, or last surviving example of its kind;

- Is at least 100 years old (or eligible for nomination to the National Register) and possesses substantial stratigraphic integrity; or

- Involves important research questions that historical research has shown can be answered only with archaeological methods.

(b) Paleontological Resources

In the context of the above questions from Appendix G of the CEQA Guidelines, the Thresholds Guide states that the determination of the significance of paleontological impacts shall be made on a case-by-case basis, considering the following factors:

- Whether, or the degree to which, the project might result in the permanent loss of, or loss of access to, a paleontological resource; and
- Whether the paleontological resource is of regional or statewide significance.

In assessing impacts related to cultural resources in this section, the City will use Appendix G as the thresholds of significance. The factors identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds

c) Project Design Features

No specific project design features (PDFs) are proposed with regard to cultural resources.

d) Analysis of Project Impacts

Threshold (a) Would the project cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5?

(1) Impact Analysis

The Project involves two activities that have the potential to directly impact the Potential Historic District: demolition and new construction. The following analysis discusses the potential impacts of the Project on the Potential Historic District's integrity.

(a) Demolition

The Project involves the demolition of the existing building on the Project Site, which was identified by SurveyLA as potentially contributing to the significance of the Potential Historic District. However, as discussed above, the building on the Project Site lacks integrity and, therefore, does not contribute to the significance of the Potential Historic District. The demolition of this building would not result in a substantial adverse change to the Potential Historic District because it is neither individually eligible as a historical resource nor a contributor to the significance of the Potential Historic District. Its demolition would not reduce the integrity of the Potential Historic District to the degree that it would no longer be eligible for listing in the National Register, California Register,

or for designation as a HPOZ. Such an effect would only occur if the Potential Historic District no longer retained sufficient physical integrity to convey its significance as the City's primary industrial district from the late 19th century through World War II.

As of the date of this analysis, 196 properties were recorded within the Potential Historic District. Of these, 104 were evaluated by SurveyLA as contributors. However, because the building on the Project Site does not retain integrity, it does not contribute to the significance of the Potential Historic District. Therefore, 103 properties contribute to the Potential Historic District, or approximately 52 percent, and 93 properties do not contribute due to alterations or construction outside the period of significance. The integrity of the Potential Historic District as a whole would not be affected by the Project because the number of contributing buildings would not change.

The Potential Historic District's contributing buildings are also only one feature that adds to its character. Other contributing characteristics to the Potential Historic District include its location, interior circulation pattern, predominantly industrial use, absence of landscaping, and evidence of former rail lines. These contributing characteristics to the Potential Historic District would not be impacted by the demolition of the building on the Project Site because the location of the Potential Historic District would not change and these other distinctive features would remain throughout the Potential Historic District overall. The relationships among the Potential Historic District's components, including its contributing buildings and other contributing characteristics, would not be substantially changed from the period of significance. Therefore, the activity of demolishing the building on the Project Site, in and of itself, would have a less-than-significant impact on the Potential Historic District.

(b) New Construction

The Project would not increase the relative number of intrusions (i.e., non-contributing buildings) within the Potential Historic District because one non-contributing building would be replaced by another non-contributing building. It would, however, result in the introduction of a new visual element within the Potential Historic District's boundaries. Though the design of the proposed new building is contemporary and not necessarily compatible in size, features, and materials with the contributing buildings in the study area, the Potential Historic District is already characterized by a variety of building types and styles with differing heights, footprints, and setbacks organized within a gridded street pattern. Building heights range from one to seven stories and include both modest industrial buildings and large warehouses spanning full city blocks.

There are several mid-rise contributing and non-contributing buildings and structures throughout the Potential Historic District, though most are located east of S. Hewitt Street and north of E. 4th Street. There are also mid-rise buildings immediately outside

of the boundaries, surrounding the Potential Historic District on all sides. Additionally, new buildings as tall as seven stories in height are currently under construction and others are being proposed both within and just outside the boundaries of the Potential Historic District.

Because of its location along the western boundary, the new building would not substantially change the relationships among the Potential Historic District's contributing buildings, of which all 103 would remain intact. The relationship among the other contributing characteristics would remain throughout the Potential Historic District, including its relationship to the Los Angeles River and the Alameda Corridor, interior circulation pattern, predominantly industrial use, and the absence of sidewalks, street lighting, and street trees. Overall, the relationships among the Potential Historic District's components, including its contributing buildings, would not be substantially changed from the period of significance as a result of the Project.

The new building would introduce a new visual element, slightly diminishing the integrity of setting and feeling within the study area; however, the Project would not impair the integrity of the Potential Historic District as a whole to the degree that it would no longer be eligible for listing under national, state, and local landmark designation programs. The Potential Historic District's contributing buildings and other contributing characteristics, which reflect the Potential Historic District's significance, would remain throughout the Potential Historic District. The Potential Historic District would still convey its sense of historic environment, retaining integrity of setting and feeling overall. Therefore, the Project would not result in a substantial adverse change to the integrity of the historical resource because it would remain eligible for listing under national, state, and local historic district programs. As such, while the Project would introduce a new visual element, its impact on the Potential Historic District would be less than significant.

(c) Consistency with Secretary of the Interior Standards

The Secretary of the Interior's Standards are generally not applicable as the Project does not involve the preservation, rehabilitation, restoration, or reconstruction of a historic building. Rehabilitation Standards #9 and #10, which address related new construction, are relevant but not determinative in analyzing the potential impact of a new building in a historic district. Nevertheless, compliance with Standards #9 and #10 is discussed below.

(i) Compliance with Standard #9

As identified above, Standard #9 states: "New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will

be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment."

The new building would be located on a parcel separate from the surrounding contributing buildings in the Potential Historic District; thus, the new building would not destroy the historic materials and features of these surrounding contributing buildings. The new building also would not destroy the spatial relationships that characterize the Potential Historic District as a whole because of its location on the Potential Historic District's western boundary and on a secondary side street. The Potential Historic District is characterized by flat terrain with industrial buildings in a variety of heights, footprints, and setbacks organized within a gridded street pattern. The new building would not alter these characteristics. The relationship between the Potential Historic District and the Los Angeles River and Alameda Corridor and the overall absence of sidewalks and street trees throughout the Potential Historic District would also be unaffected by the new building.

The new building would be differentiated from the surrounding contributing buildings by its contemporary design and materials. The massing would be articulated to appear as two volumes. The first volume would comprise the first and second stories, and the second volume would comprise the upper 10 stories. The primary exterior material of the first volume would be brick, and the primary exterior material of the second volume would be a glass curtain wall system. The design of the first volume would evoke the character of the surrounding low-rise industrial buildings, while the second volume, which would be set back at the third story, would appear to be detached from and floating above the first volume. The new building's size, scale, and proportion would not necessarily be compatible with the surrounding contributing buildings, and, as such, it would not strictly comply with this particular aspect of Standard #9.

(ii) Compliance with Standard #10

As identified above, Standard #10 states: "New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired."

The new building would be separated from the surrounding contributing buildings. If the new building were removed in the future, the adjacent contributing buildings would not be materially affected. The essential form and integrity of the Potential Historic District and its environment would be unimpaired. Accordingly, the Project would comply with Standard #10.

(d) Impact Conclusion

The demolition of the building on the Project Site would not result in a substantial adverse change to the Potential Historic District because it is neither individually eligible as a historical resource nor a contributor to the significance of the Potential Historic District. However, it would result in the introduction of a new visual element. Because the proposed new building is not compatible with the Potential Historic District in size, scale, or design (see above discussion of consistency with Secretary of the Interior Standard #9), the integrity of the Potential Historic District and its environment would be reduced by the Project. Nonetheless, its integrity would not be reduced to the degree that the historical resource would no longer be eligible for listing in the National Register, California Register, or for designation as a HPOZ; it would continue to be eligible for listing as a historical resource as defined by CEQA. **Overall, the relationships among the Potential Historic District's components, including its contributing buildings, would not be substantially changed from the period of significance as a result of the Project. Therefore, impacts to historical resources would be less than significant.**

(2) Mitigation Measures

No significant impacts related to historical resources have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts to historical resources would be less than significant.

Threshold (b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

(1) Impact Analysis

Ground disturbing activities for the Project would occur during the proposed demolition and grading phases, specifically during the demolition of the south building and excavation for the subterranean parking lot within the Project Site. The total depth of excavation required for the Project is expected to be approximately 50 feet below the surface and is expected to extend into the natural alluvial sediments underlying the estimated 12 feet of overlying fill. Potential impacts to the archaeological sites that could occur as a result of the Project are discussed below. The discussion of each site type also considers specific California Register criteria, significance as a unique archaeological resource, and associated aspects of integrity. These are intended to

provide a general framework for assessing the site significance based on background research compiled for the AR Assessment prepared for the Project.

(a) Prehistoric Archaeological Sites

The CHRIS records search identified no known prehistoric archaeological resources within the Project Site. The NAHC's search of the SLF did not identify any sacred lands of sites. Although the sensitivity is found to be low, prehistoric archaeological sites could be deeply buried within alluvial soils below or intermixed with fill soils. Prehistoric artifacts and features include flaked stone tools, tool-making debris, stone milling tools, shell, sediment discoloration or carbonization, and depressions or other features indicative of a former living surface.

If a prehistoric archaeological site were present in the Project Site, it would be evaluated for significance under the California Register and as a unique archaeological resource as required by the mitigation measures defined below. Most prehistoric archeological sites lack identifiable or important association with specific persons or events of regional or national history (Criteria 1 and 2), and do not possess the characteristics and structural attributes necessary to be satisfy Criterion 3. Significance for prehistoric archaeological sites is typically found under Criterion 4.

California Register Criterion 4. Properties that are significant under this criterion have yielded, or have the potential to yield information important to the prehistory of the local area, California or the nation. A prehistoric site could be considered significant under this criterion if it displays one or more of the following attributes: chronologically diagnostic, functionally diagnostic, or exotic artifacts; datable materials; definable activity areas; multiple components; faunal or floral remains; archeological or architectural features; notable complexity, size, integrity, time span, or depth; or stratified deposits. The content of a prehistoric archeological site provides information regarding its cultural affiliations, temporal periods of use, functionality, and other aspects of its occupation history. The range and variability of artifacts present in the site can allow for reconstruction of changes in ethnic affiliation, diet, social structure, and other aspects of prehistoric culture. Determining the period(s) of occupation at a site provides a context for the types of activities undertaken and could well supply a link with other sites and cultural processes in the region. Further, well-defined temporal parameters help illuminate processes of culture change and continuity in relation to natural environmental factors and interactions with other cultural groups. Finally, chronological controls could provide a link to regionally important research questions and topics of more general theoretical relevance. As a result, the ability to determine the temporal parameters of a site's occupation is critical for a finding of eligibility under Criterion 4 (information potential). A site that cannot be dated is unlikely to possess the quality of significance required for California Register eligibility.

Unique archaeological resource. For a prehistoric archaeological site to be considered a unique archaeological resource, it must contain information needed to answer important scientific research questions of public interest, possess a unique quality such as being the oldest or best example of a resource type, or be directly associated with scientifically recognized important prehistoric events. A prehistoric archaeological site that does not meet the significance threshold for any California Register eligibility criteria is unlikely to be considered a unique archaeological resource.

If present, a prehistoric archaeological site has the potential to be significant under CEQA and would require mitigation to avoid potentially significant impacts. Implementation of CUL-MM-1 through CUL-MM-4 (discussed below) would ensure that previously unrecorded prehistoric archaeological sites are properly identified by a qualified archaeologist, so that the sites could be evaluated for the California Register under the applicable criteria. Specifically, CUL-MM-4 requires an archaeological monitor to be present during excavation or grading in the area of sensitivity so that any prehistoric sites are identified, and impacts are avoided. CUL-MM-2 requires preparation of an Archaeological Resources Monitoring and Mitigation Plan (ARMMP) that addresses the means by which California Register eligibility would be assessed in the event of a discovery. This includes but is not limited to the considerations discussed under Criterion 4. The ARMMP also would outline a procedure for treatment of any prehistoric sites determined to be historical resources under CEQA such that potentially adverse impacts are reduced to less than significant. **Therefore, with implementation of mitigation measures CUL-MM-1 through CUL-MM-4, Project impacts related to prehistoric archaeological resources would be less than significant.**

(b) Historical Archaeological Sites

(i) Household Refuse and Building Foundations

The potential for unidentified historical archaeological resources within the Project Site is found to be high. Specifically, there is potential to encounter structural remains, features, and artifacts associated with the historic-period agricultural, domestic, and industrial use of the Project Site beginning in the 1890s. These resources have not been confirmed archaeologically and could occur across the entire horizontal extent of the Project Site, with the highest potential in soils described as fill, estimated to extend at least 12 feet below the surface. If a historic-period refuse deposit or building foundation is present in the Project Site, it would be evaluated for significance under the California Register and as a unique archaeological resource as required by the mitigation measures defined below.

Significance for most archaeological sites of this type are typically found under Criterion 4, but significance can also be found eligible under Criteria 1 and 2 where the

archaeological materials can be correlated with a historically significant event or person. The nature of historic-period refuse scatters and building foundations are such that they are not commonly found eligible for the California Register under Criterion 3 (i.e., refuse scatters and buildings foundations do not typically convey any distinctive characteristics in type, period, region, or method, and they are not the focus of masterful design or artistry). As such, a more detailed discussion of the considerations under Criterion 3 has been omitted from the subsequent section. Determining the integrity and the extent (horizontal and vertical) of the archaeological remains is an important component of California Register eligibility evaluation. Information on the horizontal distribution and vertical depth of the cultural material provides baseline data about the site (e.g., size, presence or absence of subsurface components, discrete activity areas) that contribute to a determination of the site's integrity. For an archeological site to be considered California Register eligible, it must be considered significant under the California Register criteria for evaluation and possess the quality of integrity (i.e., location, design, setting, materials, workmanship, feeling, and association). The integrity of an archeological site, particularly the elements of location, setting, and association, can be seriously impacted by disturbance due to natural or cultural transformations.

California Register Criteria 1 and 2. An archaeological site can be found significant where a direct association can be demonstrated with a historically significant event (Criterion 1) or person (Criterion 2). No known historically significant events or persons were identified that have direct associations with the location of the Project Site. Additional archival research would be required in order to assess whether any archaeological materials (if present) identified in the Project Site are significant under Criterion 1 and 2. The same integrity considerations described under Criterion 4 would equally apply when determining California Register eligibility under Criteria 1 and 2. For any refuse deposits or building foundations identified in the Project Site, the California Register eligibility under Criteria 1 and 2 would be considered unlikely, compared to Criterion 4, but could not be categorically ruled out.

California Register Criterion 4. Properties that are significant under Criterion 4 have yielded, or have the potential to yield, information important to the history of the local area, California or the nation. The Project Site has a history of residential and industrial development from the last decades of the nineteenth century and the first half of the twentieth century. Although much is known about the history of late nineteenth- and early twentieth-century Los Angeles, questions remain about details of daily life for the diverse people who came to make Los Angeles their home in this period. Archaeological deposits that date to this key period of growth for the city have the potential to contribute to the understanding of individuals and communities and industrial development in the early twentieth century. When historical archaeological investigations integrate both archival and archaeological data sets, they are even better

positioned to meet this potential. Archaeological materials from refuse deposits could provide household- and community-level data, although certain types of data have the potential to answer some research questions better than others. For instance, economic status and consumer choices can be ascertained through an analysis of household artifacts, and the spatial organization of a neighborhood can be understood through analysis of structural remains. Refuse from household activities is one of the main sources of archaeological information in historically settled areas. Refuse can be discarded during everyday activities or can be intentionally deposited in disposal areas. Concentrated disposal areas such as privies, trash pits, and wells constitute one of the best sources of information on residents and their behavioral patterns. Refuse from commercial activities also could be identified. A variety of historical businesses operated within or adjacent to the Project Site in the early twentieth century, including a planning mill, iron and cement manufacture, general machining, offices, and warehouse storage. Much like household activities, industrial activities resulted in discard of refuse as part of daily activities or in intentional deposition of refuse in disposal areas.

Assessing the integrity of archaeological materials is important for establishing the eligibility of sites under Criterion 4. The integrity of any refuse deposits or building foundations depends on whether or not surfaces or features are preserved, and also includes the potential for identifying and analyzing horizontal and vertical spatial patterning in past behavior. If post-depositional natural or cultural processes have disturbed the context of the artifacts, potential information can be lost or its value highly compromised. As a result, a site with poor integrity often has a diminished capacity to yield information important in history (Criterion 4). Exploring both the horizontal and vertical aspects of the site allows for an evaluation of the information potential of the site and determination of the level of disturbance, if any.

Unique archaeological resource. For a historic-period refuse scatter or building foundation to be considered a unique archaeological resource it must contain information needed to answer important scientific research questions of public interest, possess a unique quality such as being the oldest or best example of a resource type, or be directly associated with scientifically recognized important historic event or person. A historical archaeological site that does not meet the significance threshold for any California Register eligibility criteria is unlikely to be considered a unique archaeological resource.

If present, historic-period refuse scatters or building foundations have the potential to be significant under CEQA and would require mitigation to avoid potentially significant impacts. Implementation of CUL-MM-1 through CUL-MM-4 would ensure that previously unrecorded archaeological resources are properly identified by a qualified archaeologist, so that they can be evaluated for the California Register under the applicable criteria. Specifically, CUL-MM-4 requires an archaeological monitor to be

present during excavation or grading in the area of sensitivity so that any historical archaeological sites are identified, and impacts are avoided. CUL-MM-2 requires preparation of an ARMMP that addresses the means by which California Register eligibility would be assessed in the event of a discovery. This includes, but is not limited to, the considerations under Criterion 1, 2, and 4 discussed above. The ARMMP also would outline a procedure for treatment of any historical archaeological sites determined to be historical resources under CEQA such that potentially adverse impacts are reduced to less than significant. **Therefore, with implementation of mitigation measures CUL-MM-1 through CUL-MM-4, Project impacts related to historical archaeological sites would be less than significant.**

(ii) Zanja No. 2

There is potential to encounter remains from Zanja No. 2 in the Project Site below the current grade. Zanja No. 2 was in operation at between approximately 1871 and 1906 as part of the City's water distribution system for agricultural and domestic use. Archival sources indicate Zanja No. 2 was constructed as a wooden flume box measuring 3 feet wide by 1 foot deep, running north/south in the western portion of the Project Site. An inventory of the zanja system in 1888 reported the full length of Zanja No. 2 as approximately 13,200 feet; the maximum length of the segment within the Project Site is estimated as 152 feet. Other archival sources suggest that portions of Zanja No. 2 were replaced with a concrete conduit but do not specify where those replacements occurred and could have included the segment within Project Site. Undocumented modifications to zanja segments were routine and could include other types of construction such as earthen ditches, iron pipes, and brick conduits. Associated features and artifacts are also a possibility and include vaults, inlet/outlet valves, drains, bridges, sewers, refuse, tools, and hardware.

Material remains of some zanja segments have been identified elsewhere in Los Angeles and when encountered have been either determined eligible, recommended as eligible, or treated as eligible for the National Register and/or California Register. Based on review of archival sources that identified historically mapped segments of Zanja No. 2 within the Project Site, significance of any preserved remains is most likely to be found under Criteria 1 and 3 of the California Register and as a unique archaeological resource. California Register eligibility under Criteria 2 and 4 are less likely but further work would be required to assess in the event the physical remains are identified in the Project Site.

California Register Criterion 1. Zanja No. 2 is part of the larger Los Angeles zanja system—an extensive and integrated water conveyance network that was originally established during the Spanish period and served large areas of the city for multiple generations. From the time of its inception the zanja system was expanded and it

became more elaborate during the American period as the city grew. The system reached its peak in the 1880s, leading to the real estate boom of 1887–1888, when most agricultural properties were subdivided into housing tracts, including those in the Project Site. Zanja No. 2 was in operation as early as 1871, at which point archival sources suggest it was constructed as a wooden flume box measuring 3 feet wide and 1 foot deep, and remained in service as late as 1906. Zanja No. 2 provided irrigation for the southern portions of the city, fulfilling agricultural and domestic water needs that contributed to the growth of Los Angeles through the end of the nineteenth century. Because of its role in the development of Los Angeles' early water supply system, California Register eligibility under Criterion 1 is likely at the local level for its association with events that have made a significant contribution to broad patterns of history. Among the seven aspects of integrity to be considered should any remains be identified with Zanja No. 2, integrity of location and materials would be of particular relevance under Criterion 1. A fully or mostly preserved wooden flume in its original context would likely be sufficient to convey the historical association; the preservation of associated geophysical markers, artifacts, or other materials that can be used to date the construction of Zanja No. 2 or otherwise reconstruct its design would also be considered. For example, detailed sediment profiles could be used to reconstruct the location of the original ditch that was later replaced by the wooden flume.

California Register Criterion 2. Resources with significance under Criterion 2 have a direct association with persons of local, state, or national significance. For Zanja No. 2 and much of the development of the early Los Angeles water system, the design, construction, maintenance, use, and administration of individual components included a variety of people. Where these individuals can be identified through archival research, their historical significance would be considered when evaluating any material remains of Zanja No. 2 under this criterion. The information currently available did not identify any such associations for Zanja No. 2. Assessing California Register eligibility under Criterion 2 for any preserved segments of Zanja No. 2 within the Project Site would require additional archival research. The evaluation would consider the historical significance of any person(s) associated with the design, construction, administration, operation, or use of the zanja. The evaluation would also consider the nature of the association and whether it rises to the level of significance to satisfy California Register eligibility under Criterion 2. Among the seven aspects of integrity to be considered when evaluating significance under this criterion, the integrity of materials and location would be of particular relevance, as the type and date of construction would be required to establish the association through any archival research.

California Register Criterion 3. Engineered properties like a linear water conveyance feature could also be considered eligible under Criterion 3, which recognizes features that embody the distinctive characteristics of a method of construction. If present, the

type of features encountered (e.g., an earthen ditches, wooden flumes, pipes, conduits, vaults, inlet/outlet valves, drains, bridges, sewers) and their design would be considered in the context of the early Los Angeles water distribution system. Specifically, the evaluation would determine whether any identified remains embodied the distinctive characteristics of the historical zanja system. Among the seven aspects of integrity to be considered when evaluating significance under this criterion, the integrity of location, design, materials, and workmanship are of particular importance.

California Register Criterion 4. Properties that are significant under this criterion have yielded, or have the potential to yield, information important to the history of the local area, California or the nation. Assessing the significance of surviving Zanja No. 2 under this criterion requires identifying relevant historical themes, developing research questions, and listing the type of data required to address the questions. Where an archaeological site possess data that can be used to answer the research questions and contribute to our understanding of local history beyond what is currently known, the resource is considered significant under Criterion 4. Assessing the integrity of archaeological materials is important for establishing the eligibility of any archaeological sites under Criterion 4. The integrity of any zanja features identified depends on the level of preservation for the materials themselves and the potential for identifying and analyzing horizontal and vertical spatial patterning in past behavior. If post-depositional natural or cultural processes have disturbed the context of Zanja No. 2 or association of artifacts and features, potential information can be lost or its value highly compromised. As a result, a site with poor integrity often has a diminished capacity to yield information important in history (Criterion 4). Exploring both the horizontal and vertical aspects of the resource would allow for an evaluation of the information potential of the site and determine the level of disturbance, if any.

Unique archaeological resource. For an archaeological site to be considered a unique archaeological resource it must contain information needed to answer important scientific research questions of public interest, possess a unique qualify such as being the oldest or best example of a resource type, or be directly associated with scientifically recognized important historic events. Associations with important historic events or persons are addressed above in under California Register Criterion 1 and 2; information potential is largely addressed by the same considerations under California Register Criterion 4. In each of these cases, the identified remains would be assessed to determine whether it can be clearly demonstrated that the individual criteria are met and add to what is already known about the zanja system or Zanja No. 2. Examples of preserved zanja system components are very rare. Determining whether any remains of Zanja No. 2 identified in the Project Site are a unique archaeological resource would require determining whether the remains are the oldest or best example of its type. Very few examples of wooden flumes associated with the zanja system have ever been

identified in an archaeological setting and it is unknown whether any have been collected and curated. Concrete and brick conduits and iron pipes from zanja segments system have been encountered more commonly and at least one from the Zanja Madre is incorporated into a publicly accessible interpretive display.

If present and found to retain integrity, the remains of Zanja No. 2 could provide a tangible link to a system that once fed water to a dry but highly productive agricultural region that later evolved into one of the nation's largest metropolitan areas. While the presence of the zanja within the Project Site and its integrity are unknown, the archaeological remains of Zanja No. 2 have a high likelihood of being significant under CEQA, and project-related impacts from grading and excavation would require mitigation to reduce this impact to less than significant.

Implementing CUL-MM-1 through CUL-MM-4 would ensure that any remains of the zanja are properly identified by a qualified archaeologist so that they can be evaluated as a historical resource consistent with CEQA Guidelines Sections 15064.5(a) and PRC Section 21083.2(g). The archaeological monitors would work closely with equipment operators to ensure that every effort is made to avoid damaging zanja segments as defined in CEQA Guidelines Sections 15064.5(b), if present, prior to their adequate evaluation and documentation. CUL-MM-2 requires an ARMMP be prepared that would include the protocols and methods by which any remains are evaluated as historical resource. The evaluation would consider eligibility for the California Register under Criteria 1 through 4 and as a unique archaeological resource, and assess the integrity of the remains. Based on the information currently available, if the archaeological remains of Zanja No. 2 are indeed present within the Project Site and if they exhibit sufficient integrity, they would likely be eligible for the California Register under Criteria 1 and 3, and would also likely to be a unique archaeological resource.

The ARMMP would outline treatment options in the event the zanja is determined to meet one or more of the significance criteria and found to retain integrity, or not. If Zanja No. 2 is identified and found to retain integrity, the ARMMP would include, but not be limited to, documentation that conforms to HAER standards. HAER documentation would capture the original conditions of the zanja, including its manufacturing or engineering process, convey the associations with historically significant persons, and recover the scientific data necessary to answer important historical research questions. These actions, as implemented through CUL-MM-2, would mitigate impacts to Zanja No. 2 to less than significant, where California Register eligibility is found under Criterion 2–4. If eligibility of Zanja No. 2 is found under Criterion 1, CUL-MM-2 requires additional treatment to develop interpretive materials for the public, at the expense of the project applicant, prepared by professionals meeting the Secretary of the Interior standards in history or historical archeology. Interpretive materials already available to the public would be considered so that the development of new materials would add to

the existing body of work on the historical Los Angeles water system. In so doing, the alterations to the zanja materials and impacts to the setting that convey its historical significance would be offset through the substantial public benefits provided by the interpretive materials and retain its significant historical associations.

In the event the treatment options discussed in the ARMMP are found to be infeasible or alternatives not already included are proposed, CUL-MM-4 requires that the qualified archaeologist (retained through implementation of CUL-MM-1) would coordinate with the Project Applicant and City Planning to develop a formal treatment plan that would reduce impacts to the resource, the process and timing of which would be specified in the ARMMP implemented under CUL-MM-2.

In the event that a segment of Zanja No. 2 is identified and found to retain integrity, impacts assessed under CEQA Guidelines Sections 15064.5 would be mitigated through implementation of CUL-MM-1 through CUL-MM-4 that, based on significance considerations, requires rigorous documentation and interpretive program. **Therefore, with implementation of mitigation measures CUL-MM-1 through CUL-MM-4, Project impacts related to Zanja No. 2 would be less than significant.**

(2) Mitigation Measures

According to CEQA Guidelines 15126.4(b)(3), preservation in place (i.e., avoidance) is the preferred manner of treatment of archaeological sites. If avoidance is not feasible, treatment could include archaeological data recovery (i.e., excavation, laboratory processing, and analysis) to obtain important information and thereby reduce potential impacts under Criterion 4 to less than significant. Architectural documentation of engineered properties like a zanja could reduce potential impacts under Criterion 3 to less than significant. Treatment options for impacts to properties eligible under Criteria 1 and 2 are described below.

Preservation in place could include any of the following: planning construction to avoid archaeological sites; incorporating archaeological sites into a park, greenspace, or open space; covering the archaeological site with a layer of chemically stable soil; and deeding the site into a permanent conservation easement. There are no known, previously recorded archaeological sites identified in the Project Site; therefore, planning for avoidance is not applicable to this Project. Archaeological sensitivity was assessed as high for the entire horizontal extent of the Project Site and extending to an estimated depth of 12 feet. The Project design currently includes approximately 50 feet of excavation below grade to meet the geotechnical requirements for the building foundations and accommodate four or five levels of subterranean parking, which precludes the potential for incorporating any archaeological sites that could be discovered during construction into a park, greenspace, or open space, protecting the

archaeological site under a soil stratum, or deeding the property into a conservation easement. Thus, if a previously unrecorded archaeological resource is identified within the Project Site and found to be significant, it is very unlikely that preservation in place would be a feasible form of mitigation under any of the examples listed in CEQA Guidelines. As a result, mitigation measures including, but not limited to, architectural documentation in conformance with HAER standards and archaeological data recovery is proposed in the event that a previously unrecorded archaeological site is identified during construction and found to meet California Register eligibility.

In the event that preservation in place is not an option, to ensure that impacts related to archaeological resources would be less than significant, the following mitigation measures are required:

CUL-MM-1 Prior to the issuance of a demolition permit, the project proponent shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology, during the excavation phase to carry out and ensure proper implementation of the mitigation measures related to archaeological resources. The qualified archaeologist shall submit a letter of retention to the project proponent no fewer than 15 days before demolition or excavation activities commence. The letter shall include a resume for the qualified archaeologist that demonstrates fulfillment of the SOI standards.

CUL-MM-2 Prior to the commencement of demolition and excavation, an Archaeological Resources Monitoring and Mitigation Plan (ARMMP) shall be prepared. The ARMMP shall include, but not be limited to, a construction worker training program (described in CUL-MM-3), monitoring protocol for demolition and excavation activities, discovery and processing protocol for inadvertent discoveries of archaeological resources, and identification of a curation facility should artifacts be collected. The ARMMP shall identify areas that require monitoring, provide a framework for assessing the geoarchaeological setting to determine whether sediments capable of preserving archaeological remains are present, and include a protocol for identifying the conditions under which additional or reduced levels of monitoring (e.g., spot-checking) may be appropriate. The duration and timing of the monitoring shall be determined based on the rate of excavation, geoarchaeological assessment, and, if present, the quantity, type, and spatial distribution of archaeological resources identified.

The ARMMP shall minimally include a historical context statement, research design, and methodology by which any newly identified

archaeological sites shall be evaluated for California Register eligibility and as unique archaeological resources. The ARMMP shall specify the specific types of archaeological sites likely to be encountered, the means by which significance shall be assessed. If any archaeological resources are identified and are found not to be significant or do not retain integrity, then they shall be recorded to a level sufficient to document the contents and condition. The ARMMP shall include a proactive identification and documentation protocol that would facilitate preservation or mitigation of impacts to Zanja No. 2 and any other archaeological sites identified in a cost-effective manner. The ARMMP shall include potential treatment plans to be implemented in the event a newly discovery archaeological resource is determined by the qualified archaeologist to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to PRC 21083.2(g). The ARMMP shall require that if the treatment plans outlined therein are found to be infeasible or other alternatives are proposed, the qualified archaeologist shall coordinate with the project proponent and City Planning to amend the ARMMP with a formal treatment plan that would reduce impacts to the resource(s). The treatment plans stated in the ARMMP or prepared after the discovery of a historical resource, shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment and if it is determined avoidance is not feasible, treatment may include but not be limited to any of the following depending on the type of resource and the significance evaluation:

- **Prehistoric archaeological sites.** Data recovery shall be conducted (i.e., excavation, laboratory processing and analysis) to remove the resource(s) and reduce potential impacts to less than significant where significance is determined under California Register Criterion 4 and integrity is retained.

- **Historical archaeological sites.** If a historic-period site, including but not limited to a refuse scatter or building foundation(s), is present and found to retain integrity, data recovery shall be conducted (i.e., excavation, laboratory processing and analysis) to remove the resource(s) and reduce potential impacts to less than significant. In addition to data recovery, specific treatments shall be developed and implemented based on potential California Register or eligibility criteria or as a unique archaeological resource as follows:

- **Treatment Under Criteria 1 and 2, or as a unique archaeological resource:** Treatment shall include interpretation for the public. Interpretive materials may include, but not be limited to, signage at the project site, relocating preserved materials in a publicly accessible display, or visual representations of recovered materials. The interpretive materials shall be prepared, at the expense of the project applicant, by professionals meeting the Secretary of the Interior standards in history or historical archaeology. The details of the interpretive materials, including the form, content, and timing of their preparation, shall be completed to the satisfaction and subject to the approval of the Department of City Planning. The results of the historical and archaeological studies conducted for the Project shall be made available to the public through repositories such as the local main library branch or identified non-profit historic groups interested in the subject matter.

- **Treatment Under Criterion 3:** Architectural documentation of exposed zanja segments shall be conducted by producing narrative records, measured drawings, and photographs in conformance with HAER standards prior to any alteration or demolition activity.

- **Treatment Under Criterion 4:** No additional work; data recovery is sufficient.

- **Zanja No. 2**. If segments of Zanja No. 2 are present and found to retain integrity, architectural documentation of exposed zanja segments shall be conducted by producing narrative records, measured drawings, and photographs in conformance with HAER standards prior to any alteration or demolition activity. In addition to HAER documentation, specific treatments shall be developed and implemented based on potential California Register or eligibility criteria or as a unique archaeological resource as follows:

  - **Treatment Under Criterion 1:** Treatment shall include interpretation of Zanja No. 2 for the public. The interpretive materials may include, but not be limited to, interpretive displays of photographs and drawings produced during the HAER documentation, signage at the Zanja No. 2 alignment, relocating preserved segments in a publicly accessible display, or other visual representations of zanja alignments through appropriate means such as a dedicated internet website other online-based materials. At a minimum, the interpretive materials shall include

photographs and drawings produced during the HAER documentation, and signage. These interpretive materials shall be employed as part of Project public outreach efforts that may include various forms of public exhibition and historic image reproduction. Additionally, the results of the historical and archaeological studies conducted for the Project shall be made available to the public through repositories such as the local main library branch or with identified non-profit historic groups interested in the subject matter. The interpretive materials shall be prepared at the expense of the Project applicant, by professionals meeting the Secretary of the Interior standards in history or historical archaeology. The development of the interpretive materials shall consider any such materials already available to the public so that the development of new materials would add to the existing body of work on the historical Los Angeles water system, and to this end, shall be coordinated, to the extent feasible and to the satisfaction of the Department of City Planning, with the content, format and location of any public interpretive materials that may be developed as part of the proximate related projects Nos. 99 and 101. The interpretive materials shall include a consideration of the Zanja No.2 segment located on the Project Site in relation to the entire Zanja No. 2 and the entire Zanja system as a whole. The details of the interpretive materials, including the content and format, and the timing of their preparation, shall be completed to the satisfaction and subject to the approval of the Department of City Planning.

- **Treatment Under Criterion 2:** No additional work; archival research about important persons directly associated with the construction and use of Zanja No. 2 would be addressed as part of HAER documentation.

- **Treatment Under Criterion 3:** No additional work; HAER documentation is sufficient.

- **Treatment Under Criterion 4:** No additional work; archaeological data recovery and HAER documentation are sufficient.

- **Treatment as a unique archaeological resource:** Same as Criterion 1 treatment.

The ARMMP shall summarize the requirements for tribal coordination in the event of an inadvertent discovery of Native American archaeological resources, including the applicable regulatory compliance measures or conditions of approval for the inadvertent discovery of tribal cultural resources to be carried out in concert. The ARMMP shall be prepared in compliance with Public Resources Code Section 5024.1, Title 14 California Code of Regulations, Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1.

CUL-MM-3 Before the commencement of initial demolition or excavation at the Project Site, the retained qualified archaeologist or their designee shall provide a Worker Environmental Awareness Program (WEAP) training to on-site project personnel responsible for supervising demolition and excavation (i.e., foreman or supervisor) and machine operators. The WEAP training shall brief construction crews regarding the regulatory compliance requirements and applicable mitigation measures that must be adhered to during demolition and excavation activities for the protection of archaeological resources. As an element of the WEAP training, the qualified archaeologist or their designee shall advise the construction crews on proper procedures to follow if an unanticipated archaeological resource is discovered during construction. The qualified archaeologist or their designee shall also provide the construction workers with contact information for the qualified archaeologist and their designee(s) and protocols to follow if inadvertent discoveries are made. In addition, workers shall be shown examples of the types of archaeological resources that would require notification of the archaeologist, if encountered. Once the ground disturbances have commenced, the need for additional or supplemental WEAP training shall be determined through consultation with the qualified archaeologist, project proponent or their designated project supervisor. Within five days of completing WEAP training, a list of those in attendance shall be provided by the qualified archaeologist to the project proponent.

CUL-MM-4 Before the commencement of demolition or excavation activities, an archaeological monitor shall be present during ground disturbing activities as stipulated in the ARMMP. The qualified archaeologist may designate an archaeologist to conduct the monitoring under their direction. The monitor shall have the authority to temporarily halt or redirect construction activities in soils that are likely to contain potentially significant archaeological resources, as determined by the qualified archaeologist. The monitor shall complete a daily log documenting construction activities

and observations. The field observations shall include assessment of the geoarchaeological setting and whether sediments are identified that are no longer capable or unlikely to contain archaeological material (i.e., sterile), which could be encountered prior to reaching the total depth of excavation expected for the project. If initial archaeological monitoring identifies low archaeological sensitivity (i.e., sterile soil strata) below a certain depth or within a certain portion of the project site, a corresponding reduction of monitoring coverage would be appropriate. In the event that potentially significant archaeological resources are exposed during construction, work in the immediate vicinity of the find (within 8 meters [25 feet]) shall stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas in coordination with the qualified archaeologist. If the discovery is determined by the qualified archaeologist to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to PRC 21083.2(g), and the treatments proposed in the ARMMP are found to be infeasible or other alternatives are proposed, the qualified archaeologist shall coordinate with the project proponent and the Department of City Planning to amend the ARMMP with a formal treatment plan that would reduce impacts to the resource(s). The treatment plan established for the resource(s) shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment and if it is determined avoidance is not feasible, treatment may include architectural documentation and archaeological data recovery (i.e., excavation, laboratory processing and analysis) to remove the resource(s) and reduce potential impacts to less than significant.

Within 30 days of concluding the archaeological monitoring, the qualified archaeologist shall prepare a memo stating that the archaeological monitoring requirement of the mitigation measure has been fulfilled and summarize the results of any archaeological finds. The memo shall be submitted to the project proponent and the Department of City Planning. Following submittal of the memo, the qualified archaeologist shall prepare a technical report documenting the methods and results of all work completed under the ARMMP, including, if any, treatment of archaeological materials, results of artifact processing, analysis, and research, and evaluation of the resource(s) for the California Register of Historical Resources. Once laboratory analysis is complete, any recovered archaeological materials shall be curated at a public, non-profit research

institution that would ensure their long-term preservation and allow access to interested scholars, and shall be done at the expense of the project applicant. Should no such institutions accept the materials, they shall be donated to an educational institution or historical society. The format and content of the report shall follow the California Office of Historic Preservation's *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format*. Any archaeological resources identified shall be documented on appropriate California Department of Parks and Recreation 523-Series Forms. The report shall be prepared under the supervision of a qualified archaeologist and submitted to the Department of City Planning within 6 months of completion of the monitoring. The final draft of the report shall be submitted to the South Central Coastal Information Center.

(3) Level of Significance After Mitigation

To address potential impacts to previously undiscovered archaeological resources, the Project Applicant would be required to retain a qualified archaeologist (see CUL-MM-1), produce and implement a detailed ARMMP (see CUL-MM-2 and CUL-MM-4), and conducting a worker training (see CUL-MM-3). Doing so would ensure any archaeological sites are identified and determined to be historical resources or unique archaeological resources, to which Project-related impacts would be mitigated on the basis of their eligibility under each California Register criteria and as a unique archaeological resource.

In the event that a segment of Zanja No. 2 is identified and found to retain integrity, impacts assessed under CEQA Guidelines Sections 15064.5 would be mitigated through implementation of CUL-MM-2 that, based on significance considerations, requires a rigorous documentation and interpretive program. HAER documentation would capture the original conditions of the zanja, including its manufacturing or engineering process, convey the associations with historically significant persons, and recover the scientific data necessary to answer important historical research questions, and in a publicly accessible platform. The development of interpretive materials would provide substantial public benefit that would offset the loss of the archaeological materials, and mitigate adverse impacts under CEQA Guidelines Sections 15064.5 by reducing impacts to less than significant levels. If a segment of the zanja is identified but does not retain integrity, then it would be recorded to a level sufficient to document its condition, and the Project would result in no adverse impacts.

Therefore, after mitigation, potential impacts to archaeological resources would be less than significant.

Threshold (c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

(1) Impact Analysis

Although the Initial Study (see **Appendix A** of the Draft EIR) concluded that the Project would result in a less-than-significant impact with respect to this threshold, based on results of the records search performed by the Natural History Museum of Los Angeles County for the Project, an analysis of this threshold has been prepared and is presented below.

As previously discussed, a records search conducted for the Project Site indicates there are no previously encountered fossil vertebrate localities located within the Project Site. The closest identified locality in proximity to the Project Site is LACM 1755, collected at a depth of 43 feet below the surface area. While the Project Site has been subject to grading and development in the past, grading for the Project would consist of excavation to a maximum a depth of approximately 50 feet below the existing ground surface. Thus, the possibility exists that paleontological artifacts that were not recovered during prior construction or other human activity may be present. **As such, the Project would have the potential to destroy a unique paleontological resource or site or unique geologic feature. Therefore, without mitigation, impacts related to paleontological resources would be potentially significant.**

(2) Mitigation Measures

To ensure that impacts related to paleontological resources would be less than significant, the following mitigation measure is required:

CUL-MM-5 A qualified paleontologist shall be retained to perform periodic inspections of excavation and grading activities at the Project Site. The frequency of inspections shall be based on consultation with the paleontologist and shall depend on the rate of excavation and grading activities and the materials being excavated. If paleontological materials are encountered, the paleontologist shall temporarily divert or redirect grading and excavation activities in the area of the exposed material to facilitate evaluation and, if necessary, salvage. The paleontologist shall then assess the discovered material(s) and prepare a survey, study, or report evaluating the impact. The Project Applicant shall then comply with the recommendations of the evaluating paleontologist, and a copy of the paleontological survey report shall be submitted to the Los Angeles County Natural History Museum.

(3) Level of Significance After Mitigation

By ensuring that excavation work is undertaken in accordance with a monitoring plan and is overseen by a qualified paleontologist with the ability to halt work in the event of any inadvertent resource discoveries, and that any resources encountered are properly identified and handled, implementation of Mitigation Measure CUL-MM-5 would ensure that any potential impacts related to paleontological resources would be less than significant.

Threshold (d) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

(1) Impact Analysis

As discussed in in the Initial Study (see **Appendix A** of the Draft EIR), the Project Site is located in a heavily urbanized area and is currently developed with a building. The likelihood of encountering human remains on the Project Site is minimal. The Proposed Project would be required to comply with applicable provisions of State law with respect to the inadvertent discovery of unknown human remains. If human remains were discovered during construction of the Project, work in the immediate vicinity would be halted, the County Coroner, construction manager, and other entities would be notified per California Health and Safety Code Section 7050.5, and disposition of the human remains and any associated grave goods would occur in accordance with Public Resources Code Section 5097.91 and 5097.98, as amended. **Compliance with all required regulatory measures would ensure that any potential impacts related to human remains would be less than significant.**

(2) Mitigation Measures

Impacts related to human remains would be less than significant. Therefore, no mitigation measures would be required.

(3) Level of Significance After Mitigation

Impacts related to human remains would be less than significant without mitigation.

e) Cumulative Impacts

(1) Impact Analysis

As provided in **Section III, Environmental Setting**, of the Draft EIR, there are 117 cumulative development projects within an approximate 1.5-mile radius of the Project Site. In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the

initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to those of many of the cumulative projects. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects, which itself is a conservative assumption, would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

While the majority of the cumulative projects are located a substantial distance from the Project Site (as shown in Figure III-8 in **Section III, Environmental Setting**, of the Draft EIR), several are located in proximity to the Project Site. Collectively, the cumulative projects involve a variety of residential uses (i.e., live/work units and condominiums), retail, restaurant, commercial, hotel, industrial, and office uses, consistent with existing uses in the Project Site vicinity, as well as within the Arts District and Central City North Community Plan area.

(a) Historical Resources (Aboveground)

Although impacts to aboveground historical resources tend to be site-specific, cumulative impacts would occur if the Project, cumulative projects, and other future development within the Community Plan area, such as the growth forecast by the Community Plan Update, affected local resources with the same level or type of designation or evaluation, affected other structures located within the same historic district, or involved resources that are significant within the same context as the Project. As discussed above, there is one aboveground historical resource, the Potential Historic District, located on and adjacent to the Project Site. None of the 10 properties within the study area (excluding the Project Site) identified by SurveyLA as contributors to the Potential Historic District are included on the list of cumulative projects currently being proposed. Furthermore, all Project development would remain on-site, and as described above, impacts to potential aboveground historical resources located within the vicinity of the Project Site would not occur. **Therefore, cumulative impacts related to aboveground historical resources would be less than significant.**

(b) Prehistoric Archaeological Resources and Paleontological Resources

With regard to potential cumulative impacts related to prehistoric archaeological resources and paleontological resources, the Project Site vicinity and Community Plan area are urbanized and have been disturbed and developed over time. As discussed previously, record searches conducted for the Project noted that no known prehistoric archaeological resources or paleontological resources have been identified at the Project Site, but such resources have been identified in the Project Site area. As such, it

is possible that unknown prehistoric archaeological resources and paleontological resources could be encountered during the Project's grading and excavation phase. Thus, the Project would be required to implement Mitigation Measures CUL-MM-1 through CUL-MM-5 to ensure that impacts related to unknown prehistoric archaeological resources and paleontological resources would be less than significant. Similar to the Project, it is reasonably anticipated that the City would require the applicants of each cumulative project to conduct record searches to determine whether any known resources have been identified at the sites of the cumulative projects and/or the potential to encounter unknown resources. As necessary, each of the cumulative projects would be required to implement mitigation measures that are similar to Mitigation Measures CUL-MM-1 through CUL-MM-5 and/or comply with other applicable regulatory requirements to ensure that impacts related to prehistoric archaeological resources and paleontological resources would be less than significant. **Therefore, the Project's contribution to potential cumulative impacts to prehistoric archaeological resources and paleontological resources would not be considerable, and cumulative impacts would be less than significant.**

(c) Historical Archaeological Resources

As discussed previously, there is potential to encounter remains from Zanja No. 2 at the Project Site during the Project's grading and excavation phase. Mitigation Measures CUL-MM-1 through CUL-MM-4 have been identified to ensure that Project impacts to Zanja No. 2 would be less than significant. As stated previously, there are several cumulative projects located in the vicinity of the Project Site. To determine the potential for these cumulative projects to also encounter Zanja No. 2, the locations of the cumulative projects were compared to the anticipated alignment of Zanja No. 2. This review identified five cumulative projects (Nos. 7, 31, 37, 99, and 101) that appear to intersect the Zanja No. 2 alignment and two cumulative projects (Nos. 30 and 84) that could potentially intersect the Zanja No. 2 alignment. Depending on the depth and extent of excavation, it is possible that these cumulative projects could encounter remains of Zanja No. 2. For cumulative projects Nos. 7 and 31, a Mitigated Negative Declaration (MND) and an EIR have already been prepared, respectively, and included mitigation measures to ensure that impacts to Zanja No.2 would be less than significant. As with the Project, the City would require the applicants of cumulative projects Nos. 30, 37, 84, 99, and 101 to implement mitigation measures similar to Mitigation Measures CUL-MM-1 through CUL-MM-4 to ensure that impacts of those cumulative projects on Zanja No. 2 would be less than significant. There are also five related projects (Nos. 13, 18, 28, 39, and 78) that appear to be in the vicinity of the Zanja No. 2's anticipated alignment but do not intersect it. Thus, it is unlikely that cumulative project Nos. 13, 18, 28, 39, and 78 would intersect with the Zanja No. 2 alignment or result in any associated adverse impacts. As such, with implementation of mitigation, cumulative

development would not result in a substantial adverse change in the significance of Zanja No. 2 as a historical archaeological resource. **Therefore, cumulative impacts related to historical archaeological resources would be less than significant.**

(2) Mitigation Measures

See Mitigation Measures CUL-MM-1 through CUL-MM-5, above.

(3) Level of Significance After Mitigation

Cumulative impacts related to historical resources, archaeological and paleontological resources, and human remains would be less than significant.

IV. Environmental Impact Analysis

E. Geology and Soils

1. Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts with regard to geology and soils, including rupture of a known earthquake fault, seismic ground shaking, seismic-related ground failure (e.g., liquefaction), geologic unit or soil stability (e.g., settlement, lateral spreading, subsidence), and expansive soils. The section includes information from the following documents, which are included in **Appendix E** of the Draft EIR:

E-1. *Revised Report of Geotechnical Engineering Services, Proposed Arts District Center, 1101 E. 5th Street, Los Angeles, California, GeoDesign, Inc., August 15, 2017.*

E-2. *Soils Report Approval Letter, City of Los Angeles, Department of Building and Safety, July 21, 2017.*

2. Environmental Setting

a) Regulatory Framework

(1) State of California

(a) Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PRC] Section 2621) was enacted by the State of California in 1972 to address the hazard of surface faulting to structures for human occupancy.[1] The Alquist-Priolo Earthquake Fault Zoning Act was enacted in response to the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged homes, commercial buildings, and other structures. The primary purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to address the construction of buildings intended for human occupancy on the surface traces of active faults. The Alquist-Priolo Earthquake Fault

[1] *The Alquist-Priolo Earthquake Fault Zoning Act was originally entitled the Alquist-Priolo Geologic Hazard Zones Act. California Geological Survey, Fault-Rupture Hazard Zones in California, Special Publication 42, Interim Revision 2007.*

Zoning Act is also intended to increase the safety of citizens and minimize the loss of life during and immediately following earthquakes by facilitating seismic retrofitting to strengthen buildings against ground shaking.

The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones, known as "earthquake fault zones," around the surface traces of active faults and to issue appropriate maps to assist cities and counties in planning, zoning, and building regulation functions. Maps are distributed to all affected cities and counties for the control of new or renewed construction and are required to sufficiently define potential surface rupture or fault creep. The State Geologist is charged with continually reviewing new geologic and seismic data and revising existing zones and delineating additional earthquake fault zones when warranted by new information. Local agencies must enforce the Alquist-Priolo Earthquake Fault Zoning Act in the development permit process, where applicable, and may be more restrictive than state law requires. According to the Alquist-Priolo Earthquake Fault Zoning Act, before a project located within an earthquake fault zone can be permitted, cities and counties shall require a geologic investigation, prepared by a licensed geologist, to demonstrate that buildings will not be constructed across active faults. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back a minimum of 50 feet.[2] The Alquist-Priolo Earthquake Fault Zoning Act and its regulations are presented in California Department of Conservation, California Geological Survey (CGS), Special Publication 42, *Fault-Rupture Hazard Zones in California*.

(b) Seismic Safety Act

The California Seismic Safety Commission (Commission) was established by the Seismic Safety Act in 1975 to provide oversight, review, and recommendations to the Governor and State Legislature regarding seismic issues. The Commission's name was changed to the Alfred E. Alquist Seismic Safety Commission in 2006. The Commission has adopted several documents based on recorded earthquakes, including the following:[3]

- Research and Implementation Plan for Earthquake Risk Reduction in California 1995 to 2000, report dated December 1994; and
- Commercial Property Owner's Guide to Earthquakes Safety, report dated October 2006.

[2] *California Department of Conservation, www.conservation.ca.gov/cgs/rghm/ap/Pages/main.aspx, accessed April 13, 2018.*

[3] *Alfred E. Alquist Seismic Safety Commission, Publications, http://ssc.ca.gov/forms_pubs/seismic_safety_act.pdf, accessed April 13, 2018.*

(c) Seismic Hazards Mapping Act

In order to address the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events, the State Legislature enacted the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699). Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate "seismic hazard zones." Cities and counties must regulate certain development projects within these zones to ensure that the geologic and soil conditions of a project site are investigated and appropriate mitigation measures, if required, are incorporated into development plans. The State Mining and Geology Board has promulgated additional regulations and policies to assist municipalities in preparing the Safety Element of their General Plans and encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. Under PRC Section 2697, cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard. Each city or county shall submit a copy of the geotechnical report, including mitigation measures, to the State Geologist within 30 days of its approval. PRC Section 2698 does not prevent cities and counties from establishing policies and criteria that are stricter than those established by the State Mining and Geology Board.

State publications supporting the requirements of the Seismic Hazards Mapping Act include CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards in California,* and CGS Special Publication 118, *Recommended Criteria for Delineating Seismic Hazard Zones in California*. The objectives of Special Publication 117 are to assist in the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations and to promote uniform and effective statewide implementation of the evaluation and mitigation elements of the Seismic Hazards Mapping Act. Special Publication 118 implements the requirements of the Seismic Hazards Mapping Act in the production of Probabilistic Seismic Hazard Maps for the state.

(d) California Building Code

The California Building Code (California Code of Regulations [CCR], Title 24) is a compilation of building standards, including seismic safety standards for new buildings. California Building Code standards are based on the following: (i) building standards that have been adopted by state agencies without change from a national model code; (ii) building standards based on a national model code that have been changed to address particular California conditions; and (iii) building standards authorized by the California legislature but not covered by the national model code. Given the state's susceptibility to seismic events, the seismic standards within the California Building Code are among the strictest in the world. The California Building Code includes

provisions for demolition and construction, as well as regulations regarding building foundations and soil types. The California Building Code applies to all occupancies in California, except where stricter standards have been adopted by local agencies.

The California Building Code is published on a triennial basis, and supplements and errata can be issued throughout the cycle. The 2016 edition of the California Building Code became effective on January 1, 2017, and incorporates by adoption the 2015 edition of the International Building Code of the International Code Council, with California amendments.[4] The 2016 California Building Code incorporates the latest seismic design standards for structural loads and materials, as well as provisions from the National Earthquake Hazards Reduction Program to mitigate losses from an earthquake and provide for the latest in earthquake safety. The current California Building Code has been adopted by the City of Los Angeles (City) as the Los Angeles Building Code, with local amendments. As such, the California Building Code forms the basis of the Los Angeles Building Code.

(2) City of Los Angeles

(a) Los Angeles General Plan Safety Element

The City of Los Angeles General Plan Safety Element (Safety Element), which was adopted in 1996, addresses public safety risks due to natural disasters, including seismic events and geologic conditions; and sets forth guidance for emergency response during such disasters. The Safety Element also provides generalized maps of designated areas within the City that are considered susceptible to earthquake-induced hazards such as fault rupture and liquefaction.

Regarding assessment of seismic hazards, the Safety Element acknowledges that PRC Section 2699 requires that a safety element take into account available seismic hazard maps prepared by the State Geologist pursuant to the Alquist-Priolo Earthquake Fault Zoning Act to assess seismic hazards. The PRC also requires that the State Geologist map active faults throughout the state. The Safety Element states that those maps which are applicable to the City are incorporated into Exhibit A of the Safety Element. The Safety Element also states that local jurisdictions are required by the Seismic Hazards Mapping Act to require additional studies and appropriate mitigation measures for development projects in the areas identified as potential hazard areas by the state seismic hazard maps. In addition, the Safety Element states that as maps are released for Los Angeles, they will be utilized by the Los Angeles Department of Building and Safety (LADBS) to help identify areas where additional soils and geology studies are

[4] *California Building Code, California Code of Regulations, Title 24, Part 2.*

needed for evaluation of hazards and imposition of appropriate mitigation measures prior to the issuance of building permits.

The Safety Element acknowledged that it was based on available official maps at the time, and that exhibits in the Safety Element would be revised following receipt of reliable new information. The State of California released the current official and final Earthquake Zones of Required Investigation Map for the Los Angeles Quadrangle on June 15, 2017.[5] This map is the State of California's official earthquake fault zone map for the portion of the City that includes the Project Site. It is the most current and accurate map available to delineate the boundaries of earthquake fault zones and seismic hazard zones within this portion of the City.[6] Accordingly, the seismic hazards analysis in this Draft EIR relies primarily on the state's current official Los Angeles Quadrangle map to determine the location of the Project Site in relation to the nearest officially mapped earthquake fault zone and other seismic hazard zones.

(b) Los Angeles Building Code

Earthwork activities, including grading, are governed by the Los Angeles Building Code, which is contained in Los Angeles Municipal Code (LAMC), Chapter IX, Article 1. Specifically: Section 91.7006.2 requires the submittal of soils and geological reports to LADBS for review and approval for all grading work in excess of 5,000 cubic yards of cut and fill;[7] Section 91.7006.7 includes requirements regarding import and export of earth material; Section 91.7010 includes regulations pertaining to excavations; Section 91.7011 includes requirements for fill materials; Section 91.7014 includes general construction requirements, as well as requirements regarding flood and mudflow protection; and Section 91.7016 includes regulations for areas that are subject to slides and unstable soils. In addition, Section 91.1803 includes specific requirements addressing seismic design, grading, foundation design, geologic investigations and reports, soil and rock testing, and groundwater. The Los Angeles Building Code incorporates by reference the California Building Code, with City amendments for additional requirements. LADBS is responsible for implementing the provisions of the Los Angeles Building Code.

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[5] *State of California, California Geologic Survey, Los Angeles Quadrangle, Earthquake Fault Zones (June 15, 2017) and Seismic Hazard Zones (March 25, 1999) Map.*

[6] *Ibid.*

[7] *The soils reports required by Section 91.7006.2 must include data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures and design criteria for corrective measures, and opinion on adequacy for the intended use of sites to be developed by the proposed grading as affected by soils engineering factors, including the stability of slopes. In addition, the engineering report required by Section 91.7006.2 must include an adequate description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and opinion on the adequacy for the intended use of sites to be developed by the proposed grading.*

b) Existing Conditions

(1) Regional Geologic Setting

The Project Site is located in the northern portion of the Los Angeles Basin, approximately one-half mile west of the Los Angeles River channel. The Los Angeles Basin is a coastal plain bounded by the Santa Monica Mountains on the north, the Elysian Hills and Repetto Hills on the northeast, the Puente Hills and Whittier Fault on the east, the Palos Verdes Peninsula and Pacific Ocean on the west and south, and the Santa Ana Mountains and San Joaquin Hills on the southeast. The Los Angeles Basin is underlain by a deep structural depression, which has been filled by both marine and continental sedimentary deposits underlain by a basement complex of igneous and metamorphic composition. The basement surface within the central portion of the basin extends to a maximum depth of approximately 32,000 feet below sea level.

Regionally, the Project Site is located within the northern portion of the Peninsular Ranges geomorphic province. This geomorphic province is characterized by northwest-trending physiographic and geologic features, such as the Newport-Inglewood Fault Zone and the Whittier Fault Zone located approximately 6.5 miles west and nine miles east of the Project Site, respectively.

(2) Existing Site Conditions

The Project Site is currently occupied by an at-grade, two-story masonry building. The site is relatively level, with no pronounced highs or lows. Surface water drainage at the site is by sheet flow from the building edges to the city streets. The site is fully improved and paved with no existing vegetation.

(a) Soils

As part of the field investigation conducted by GeoDesign, Inc. for the Project, four borings were drilled within the existing building on the Project Site to depths ranging between 67 and 77 feet below ground surface (bgs). The borings were drilled using limited-access, hollow-stem auger drilling equipment. Based on the results of the field investigation and on published geologic maps of the area, the Project Site is underlain by artificial fill and loose sand below the fill material to a depth of approximately 12 feet bgs. This loose sand is underlain primarily by very dense sand, silty sand, and very dense gravel with intermittent layers of medium dense sand with silt and/or stiff silt to the depths explored. Gravel-sized particles are present within a majority of the sand layers. In several cases, sheared cobbles were recovered in the soil boring samples. Although not directly observable in the small-diameter borings drilled as part of the field investigation, boulders are also likely present within the sand and gravel layers. Detailed

stratigraphic profiles of the materials encountered at the Project Site are provided on the boring logs in Appendix A of the Geotechnical Report (see **Appendix E-1** of the Draft EIR).

(b) Artificial Fill

Fill material up to 12 feet thick was encountered in the borings mentioned above. The fill material generally consists of loose to medium dense, silty sand and contains construction debris, including brick fragments. Based on the age of the existing development on the Project Site, deeper fill similar in nature is likely present at other locations on-site.

(c) 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 CGS for the Alquist-Priolo Earthquake Fault Zone Program. 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 primary purpose of the Alquist-Priolo Earthquake Fault Zoning Program is to identify sites that have a potential for surface rupture due to active faults that are in close proximity to the site. In such cases, a building setback zone is established to mitigate the potential for surface rupture. The Project Site is not located within an Alquist-Priolo Earthquake Fault Zone or within a city-designated Preliminary Fault Rupture Study Area for surface fault rupture hazards. The Project Site is not located within an active fault zone, based upon a review of the *Fault Activity Map of California*.[8] Therefore, the potential for surface rupture due to faulting occurring beneath the Project Site is considered very low.

(d) Seismic Ground Motion

The Project Site is located in the seismically active Southern California region and could be subjected to moderate to strong ground shaking in the event of an earthquake on one of the many active Southern California faults. However, this hazard is common in Southern California, and the effects of ground shaking can be mitigated, if structures are designed and constructed in conformance with current building codes and engineering

[8] *California Department of Conservation, Fault Activity Map of California, 2010.*

practices. Regional faults closest to the Project Site are listed on Table IV.E-1 and shown on Figure IV.E-1.

Table IV.E-1
Regional Faults

Fault Name	Mmax[1]	Slip Rate[2] (mm/yr)	Distance from Site (miles)	Direction from Site
Puente Hills Thrust (LA)	7.0	0.7	Below[3]	Below[3]
Upper Elysian Park	6.7	1.3	2.5	N
Compton Blind Thrust	6.8	1.7	3.5	SW
Hollywood	6.7	1.0	5.2	N
Santa Monica	7.4	1.0	5.3	W
Raymond	6.8	1.5	5.5	N
Elysian Park Blind Thrust	6.7	3.0	6.2	S
Newport-Inglewood	7.2	1.0	7.4	SW
Verdugo	6.9	0.5	7.4	NE
Whittier	7	2.5	10	SE
Elsinore	7.1	5.0	11	E
Sierra Madre	7.2	2.0	12	NE
Palos Verdes	7.3	3.0	17	SW
Clamshell-Sawpit	6.7	0.5	17	NE
Malibu Coast	6.7	0.3	17	W
San Fernando	6.7	2.0	17	N
Anacapa-Dume	7.2	3.0	18	W
Northridge	6.9	1.5	19	NW
San Gabriel	7.3	1.0	19	NE
San Jose	6.7	0.5	21	E
Santa Susana	6.9	5.0	24	NW
Chino-Central Avenue	6.7	1.0	25	E
Cucamonga	6.7	5.0	29	E
San Joaquin Hills	7.1	0.5	30	SE
Holser	6.8	0.4	30	NW
Simi – Santa Rosa	6.9	1.0	32	NW
San Andreas (Mojave)	7.4	30	35	NE
Oak Ridge (onshore)	7.5	4.0	36	NW
San Cayetano	7.2	6.0	40	NW
San Jacinto (San Bernardino)	7.0	6.0	42	ESE
Cleghorn	6.8	3.0	48	NE
Santa Ynez (East)	7.2	2.0	51	NW
Coronado Bank	7.6	3.0	55	S

Table IV.E-1
Regional Faults

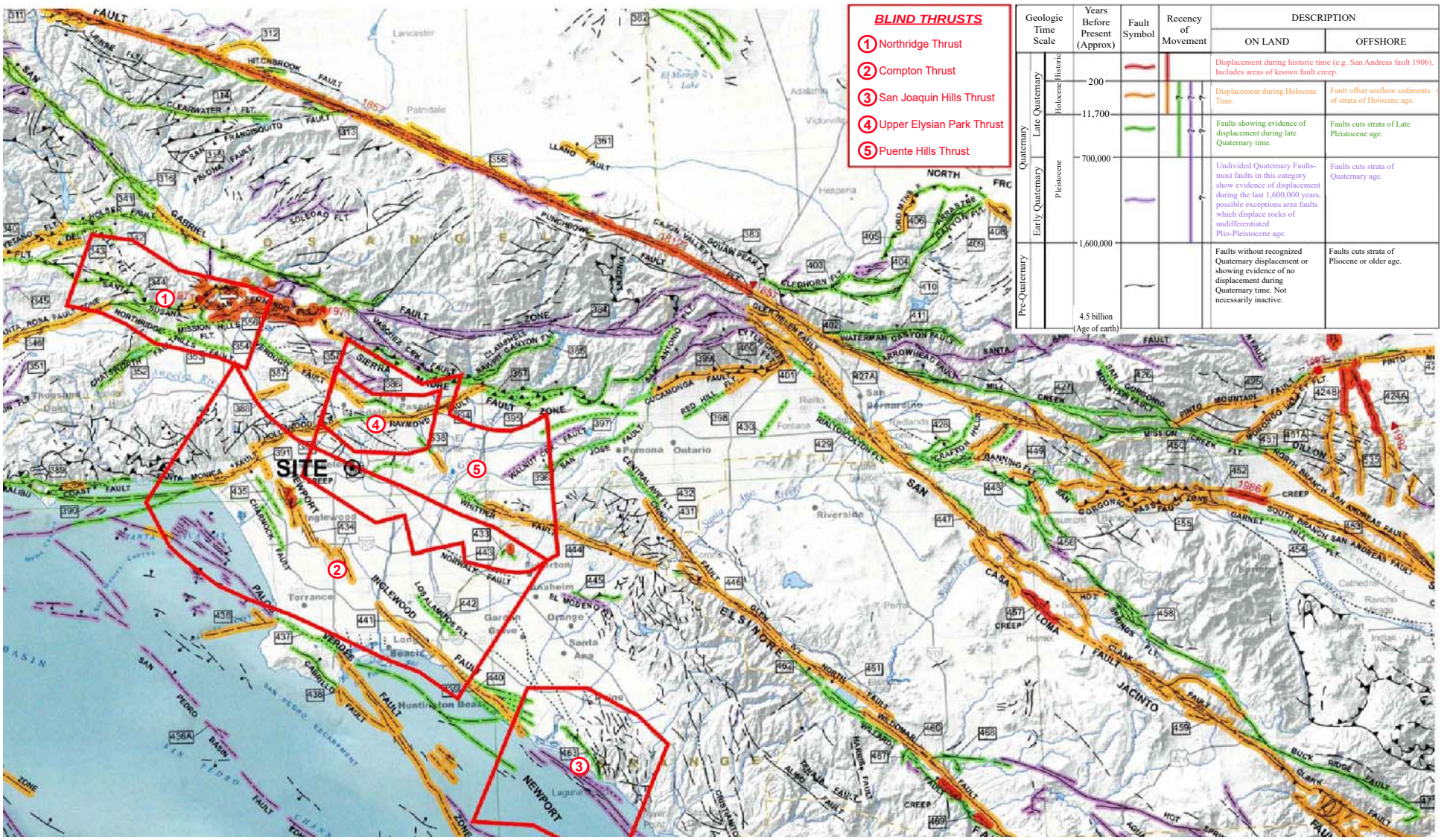
Fault Name	Mmax[1]	Slip Rate[2] (mm/yr)	Distance from Site (miles)	Direction from Site
Ventura – Pitas Point	7	1.0	55	W
Oak Ridge (offshore)	7.0	3.0	58	WNW
North Frontal Zone (Western)	7.2	1.0	58	ENE
Santa Cruz Island	7.2	1.0	58	W
Channel Islands Thrust	7.3	1.5	59	WNW
Mission Ridge-Arroyo Parida-Santa Ana	6.9	0.4	60	NW
Red Mountain	7.4	2.0	64	W

[1] *Mmax is the estimated maximum earthquake magnitude capable of being generated by a fault.*
[2] *Slip rate is the rate of motion of a fault.*
[3] *The Puente Hills Thrust Fault is located at depth under an area extending east from the Griffith Park/Downtown Los Angeles area (including the Project Site) to the Chino Hills. This fault has no surface features.*

Source: GeoDesign Inc., May 2018.

(e) Liquefaction and Seismic Dry Settlement 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. As the density and/or particle size of the soil increases and as the confinement (overburden pressure) increases, the potential for liquefaction decreases. Typically, saturated soils within the upper 50 feet of the ground surface or lowest adjacent grade are considered subject to liquefaction.



Source: GeoDesign, Inc, 2018.

Figure IV.E-1
Regional Fault Map

The State of California Seismic Hazard Zone Map for the Los Angeles Quadrangle (1998) indicates that the Project Site is not located in an area designated as "liquefiable." The native soils at the planned foundation levels consist of very dense sand and gravel with sand and cobbles. The historic high groundwater level beneath the Project Site is approximately 90 feet beneath the ground surface. Based on these conditions, the potential for liquefaction beneath the Project Site is very low.

Seismic (dry) settlement can occur in loose to medium dense, granular soil as a result of strong ground shaking. As stated above, the soil at the planned foundation levels is very dense sand and gravel with sand and cobbles and is not considered subject to seismically induced (dry) settlement.

(f) Subsidence

Subsidence is typically associated with the withdrawal of subsurface fluids or gases, such as groundwater, methane or oil. No evidence or records of historic wells at the Project Site was encountered during site investigations and record searches. Although the Project Site is located within the Union Station Oil Field, no past extraction activities have occurred either on the Project Site or within a 1,500-foot radius of the Project Site.[9] As a result, there appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the Project Site.

3. Project Impacts

a) Methodology

To evaluate potential hazards relative to geology and soils, a Geotechnical Report was prepared by GeoDesign, Inc. The Geotechnical Report included field exploration (i.e., exploratory soil borings) and laboratory testing to determine the characteristics of the subsurface conditions at the Project Site. In addition, relevant literature and materials were reviewed as part of the Geotechnical Report. The Geotechnical Report is contained in **Appendix E** of the Draft EIR.

The Project Site was explored in June 2014 by drilling four borings utilizing a limited-access hollow-stem auger drill rig. The borings were excavated to depths between approximately 67 and 77 feet below the existing ground surface. Laboratory tests were performed on selected soil samples obtained during the investigation to determine pertinent physical and chemical soil properties. The laboratory test results are summarized in Appendix A of the Geotechnical Report (see **Appendix E-1** of the Draft EIR).

[9] *California Division of Oil, Gas, and Geothermal Resources, online well finder; https://maps.conservation.ca.gov/doggr/wellfinder/#openModal.*

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In 2015, the California Supreme Court in *California Building Industry Association v Bay Area Air Quality Management District (CBIA v. BAAQMD)* 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.[10] The revised thresholds below are intended to comply with this decision. Specifically, the decision held that an impact from the existing environment to the project, including future users and/or residents, is not an impact for the purposes of CEQA. However, if the project, including future users and residents, exacerbates conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project.

In accordance with Appendix G of the CEQA Guidelines and the *CBIA v. BAAQMD* decision, a project would have a significant impact related to geology and soils if it would result in any the following impacts to future residents or users:

(a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault, caused in whole or in part by the project's exacerbation of the existing environmental conditions. Refer to Division of Mines and Geology Special Publication 42.[11]

(ii) Strong seismic ground-shaking, caused in whole or in part by the project's exacerbation of the existing environmental conditions.

(iii) Seismic-related ground failure, including liquefaction, caused in whole or in part by the project's exacerbation of the existing environmental conditions.

(iv) Landslides, caused in whole or in part by the project's exacerbation of the existing environmental conditions.

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[10] *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, Case No. S213478.*

[11] *Now the California Geological Survey.*

(b) Result in substantial soil erosion or the loss of topsoil.

(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse caused in whole or in part by the Project's exacerbation of the existing environmental conditions.

(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property caused in whole or in part by the project exacerbating the expansive soil conditions.

(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater.

(2) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) identifies the following factors to evaluate geology and soils:

(a) Geologic Hazards

- Cause or accelerate geologic hazards, which would result in substantial damage to structures or infrastructure, or expose people to substantial risk of injury.

(b) Sedimentation and Erosion

- Constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or
- Accelerate natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition that would not be contained or controlled on site.

(c) Landform Alteration

- Cause one or more distinct and prominent geologic or topographic features to be destroyed, permanently covered, or materially and adversely modified as a result of the project. Such features may include, but are not limited to hilltops, ridges, hillslopes, canyons, ravines, rock outcrops, water bodies, streambeds, and wetlands.

In assessing impacts related to geology and soils in this section, the City will use Appendix G as the thresholds of significance. The factors identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds. The Thresholds Guide criteria for landform alteration has no equivalent Appendix G threshold and will be assessed after the evaluation of Appendix G Threshold (e).

c) Project Design Features

No specific Project Design Features (PDFs) are proposed with regards to geology and soil.

d) Analysis of Project Impacts

Threshold (a) ***Would the Project expose people or structure to potential substantial adverse effects, including the risk of loss, injury, or death involving:***

(1) 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, caused in whole or in part by the project's exacerbation of the existing environmental conditions? Refer to Division of Mines and Geology Special Publication 42?

(2) Strong seismic ground shaking caused in whole or in part by the project's exacerbation of existing environmental conditions?

(3) Seismic-related ground failure, including liquefaction caused in whole or in part by the project's exacerbation of existing environmental conditions?

(4) Landslides caused in whole or in part by the project's exacerbation of the existing environmental conditions?

(1) Impact Analysis

(a) Fault Rupture

As discussed previously, the Project Site is not located within an Alquist-Priolo Earthquake Fault Zone or within a city-designated Preliminary Fault Rupture Study Area for surface fault rupture hazards. The Project Site is not located within an active fault

zone. Accordingly, the potential for surface rupture due to faulting occurring beneath the Project Site is considered very low. **As a result, the Project would not exacerbate geologic hazards related to fault rupture. Therefore, impacts associated with fault rupture would be less than significant.**

(b) Strong Seismic Ground Shaking

Although the Project Site is not within an Alquist-Priolo Zone, as with all properties in the seismically active southern California region, the Project Site is susceptible to ground shaking during a seismic event. The main seismic hazard affecting the Project Site is moderate to strong ground shaking on one of the local regional faults (refer to Table IV.E-1 and Figure IV.E-1). However, the Project would be required to conform to all applicable provisions of the City Building Code and California Building Code with respect to new construction. Adherence to current building codes and engineering practices would ensure that the Project would not expose people, property, or infrastructure to seismically induced ground shaking hazards that are greater than the average risk associated with locations in the southern California region and would minimize the potential to expose people or structures to substantial risk, loss, or injury. **As such, the Project would not exacerbate existing hazardous environmental conditions related to seismic ground shaking. Therefore, impacts related to seismic ground shaking would be less than significant.**

(c) Seismic-Related Ground Failure

The State of California Seismic Hazard Zone Map for the Los Angeles Quadrangle (1998) indicates that the Project site is not located in an area designated as "liquefiable." The native soils at the planned foundation levels consist of very dense sand and gravel with sand and cobbles. The historic high groundwater level at the Project Site is approximately 90 feet beneath the ground surface. Typically, saturated soils within the upper 50 feet of the ground surface or lowest adjacent grade are considered subject to liquefaction. Based on the conditions documented at the Project Site, the potential for liquefaction is very low. **Thus, the potential for ground failure to occur at the Project Site is considered low, and development of the Project at this location would not exacerbate existing hazardous conditions related to liquefaction or seismically induced ground failure. Therefore, impacts related to ground failure would be less than significant.**

(d) Landslides

As discussed in the Initial Study (see **Appendix A** of the Draft EIR), the Project Site is relatively flat and not near any hillside areas. The Project Site is not classified as a

landslide hazard zone in the State Seismic Hazard Zones Map.[12] The Project Site is also not identified by ZIMAS as being within a landslide hazard zone.[13] Finally, the City's Seismic Safety Element shows that the Project Site is not within a landslide area.[14] **Therefore, no impact with respect to landslides would occur, and no further analysis is required.**

(2) Mitigation Measures

No significant impacts related to seismic events, including fault rupture, strong seismic ground shaking, and ground failure, have been identified. In addition, no impacts related to landslide would occur. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to seismic events would be less than significant.

Threshold (b) Would the Project result in substantial soil erosion or the loss of topsoil?

(1) Impact Analysis

Construction activities, such as grading and excavation, could create the potential for soil erosion. The potential for soil erosion on the Project Site is low due to the generally level topography of the Project Site and the presence of existing off-site drainage facilities. Project construction would require the removal of existing pavement and grading earth and excavation. Conformance with City Building Code Sections 91.7000 through 91.7016, which include construction requirements for grading, excavation, and use of fill, would reduce the potential for wind or waterborne erosion.

In addition, the Los Angeles Building Code requires an erosion control plan to be reviewed by the Department of Building and Safety prior to construction if grading exceeds 200 cubic yards and occurs during the rainy season (between November 1 and April 15). If grading occurs during the rainy season, the Project must prepare an erosion control plan and is required to comply with its provisions, as applicable. As the Project would comply with all mandatory Code requirements, Project impacts related to soil erosion during construction would be minimal and less than significant.

The potential for soil erosion during Project operation would be relatively low due to the urban nature of the Project area and the generally level topography of the

[12] *Ibid.*

[13] *City of Los Angeles, ZIMAS Parcel Profile Reports, website: http://zimas.lacity.org, July 14, 2017.*

[14] *City of Los Angeles, Safety Element, Exhibit C, Landslide Inventory & Hillside Areas in the City of Los Angeles:* http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf.

Project Site. The Project would develop the entire Project Site with a new building, paving, landscaping, and surface treatments. Therefore, impacts related to soil erosion and the loss of topsoil would be less than significant.

(2) Mitigation Measures

No significant impacts related to soil erosion or the loss of topsoil have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to soil erosion or the loss of topsoil would be less than significant.

Threshold (c) ***Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse caused in whole or in part by the Project's exacerbation of the existing environmental conditions?***

(1) Impact Analysis

As discussed previously, the Project Site is not located in an area designated as "liquefiable," and the potential for liquefaction beneath the Project Site is very low. Also, the Project Site is not susceptible to landslides.

Furthermore, as discussed previously, there appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the Project Site.

Given the absence of these geologic hazards and the physical conditions within which they are likely to occur at the Project Site, the Project would not have the potential to exacerbate existing hazardous conditions related to soil or geologic unit instability. Therefore, impacts related to soil/geologic instability would be less than significant.

(2) Mitigation Measures

No significant impacts related to soil or geologic unit instability have been identified. Thus, no mitigation measures are required

(3) Level of Significance After Mitigation

Impacts related to soil or geologic unit instability would be less than significant.

Threshold (d) ***Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property caused in whole or in part by the project exacerbating the expansive soil conditions?***

(1) Impact Analysis

The soils encountered during the site exploration are primarily granular in nature and are considered to be "non-expansive." Such soils are not subject to measures to mitigate expansive soils. **Therefore, the Project would not exacerbate existing environmental conditions related to expansive soils, and impacts related to expansive soils would be less than significant.**

(2) Mitigation Measures

No significant impacts related to expansive soils have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to expansive soils would be less than significant.

Threshold (e) ***Would the Project Site have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?***

As discussed in the Initial Study (see **Appendix A** of the Draft EIR), the Project Site is located in a developed area of the City, which is served by a wastewater collection, conveyance, and treatment system operated by the City. **No septic tanks or alternative disposal systems are necessary or are proposed as part of the Project. Therefore, no impact would occur, and no further analysis is required.**

Threshold (f) ***Would the Project cause one or more distinct and prominent geologic or topographic features to be destroyed, permanently covered, or materially and adversely modified as a result of the project? Such features may include, but are not limited to hilltops, ridges, hillslopes, canyons, ravines, rock outcrops, water bodies, streambeds, and wetlands.***

(1) Impact Analysis

The Project Site does not contain any distinct or prominent geologic or topographic features, such as hilltops, ridges, canyons, ravines, rock outcrops, water bodies,

streambeds, or wetlands. The Project Site is level and is fully developed with an existing structure. **Thus, development of the Project would not result in the permanent covering, damaging, or destruction of any prominent geologic or topographic features. Therefore, no impacts related to alteration of a landform would occur.**

(2) Mitigation Measures

No significant impacts related to prominent geologic or topographic features have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to prominent geologic or topographic features would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

A total of 117 cumulative projects were identified in the study area, in addition to the update of the Central City North Community Plan (as part of the DTLA 2040 Plan). Four of these cumulative projects would be located within one block of the Project Site: Projects No. 18 (400 S. Alameda Street), No. 84 (926 E. 4th Street), No. 99 (527 Colyton Street), and No. 101 (1100 E. 5th Street), listed in Table III-1 in **Section III, Environmental Setting**, of the Draft EIR. In general, geotechnical impacts of proposed developments are site-specific and do not cause effects beyond the perimeter of the subject properties. In most cases involving hazards related to site-specific soil conditions, erosion, and ground-shaking during earthquakes, the impacts associated with developing a project at a specific location would be specific to that site and its users and would not be common or contribute to (or shared with, in an additive sense) the impacts on other sites.

However, the proximity of Cumulative Projects No. 101 (directly across 5th Street to the south of the Project Site) and No. 99 (approximately one block to the south of the Project Site) is such that it is possible, although not likely, that impacts associated with the development of one or both of these projects could have an effect on the Project Site. However, given that each of these cumulative projects would be subject to the same regulatory requirements as the Project, any potential impacts associated with each of these projects would be reduced to a less-than-significant level, as would be the case with the Proposed Project. Therefore, these cumulative projects, together with the Project, would not create an impact that is cumulatively considerable.

None of the cumulative projects is known to have elements or involve activities that would cause or accelerate geologic hazards off-site that would contribute to increased geological hazards in the Project area. In addition, the design and construction of the Project and the cumulative projects must conform to the Los Angeles and California Building Code seismic standards as approved by the Department of Building and Safety. In addition, development on each site would be subject to uniform site development and construction standards that are designed to protect public safety, which includes a geotechnical report. **Therefore, cumulative impacts related to geology and soils would be less than significant.**

(2) Mitigation Measures

No significant cumulative impacts related to geology and soils have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to geology and soils would be less than significant.

IV. Environmental Impact Analysis

F. Greenhouse Gas Emissions

1. Introduction

This section examines the direct and indirect impacts of the Project related to greenhouse gas (GHG) emissions and global climate change. The information and analysis in this section are primarily based on the following technical document (see **Appendix C** of the Draft EIR):

C. *Arts District Center, Air Quality and Greenhouse Gases Modeling Results, DKA Planning, May 2018.*

2. Environmental Setting

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Global warming, a related concept, is the observed increase in average temperature of Earth's surface and atmosphere. One identified cause of global warming is an increase of GHG emissions in the atmosphere. GHG emissions are those compounds in Earth's atmosphere that play a critical role in determining Earth's surface temperature.

Earth's natural warming process is known as the "greenhouse effect." It is called the greenhouse effect because Earth and the atmosphere surrounding it are similar to a greenhouse with glass panes in that the glass allows solar radiation (sunlight) into Earth's atmosphere but prevents radiative heat from escaping, thus warming Earth's atmosphere. Some levels of GHG emissions keep the average surface temperature of Earth close to a hospitable 60 degrees Fahrenheit. However, it is believed that excessive concentrations of anthropogenic GHG emissions in the atmosphere can result in increased global mean temperatures, with associated adverse climatic and ecological consequences.[1]

[1] *Intergovernmental Panel on Climate Change, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)].*

Scientists studying the particularly rapid rise in global temperatures have determined that human activity has resulted in increased emissions of GHG emissions, primarily from the burning of fossil fuels (from motor vehicle travel, electricity generation, consumption of natural gas, industrial activity, manufacturing, etc.), deforestation, agricultural activity, and the decomposition of solid waste. Scientists refer to the global warming context of the past century as the "enhanced greenhouse effect" to distinguish it from the natural greenhouse effect.[2]

Global GHG emissions due to human activities have grown since pre-industrial times. As reported by the United States Environmental Protection Agency (USEPA), global carbon emissions from fossil fuels increased by over 16 times between 1900 and 2008 and by about 1.5 times between 1990 and 2008. In addition, in the Global Carbon Budget 2014 report, published in September 2014, atmospheric carbon dioxide (CO_2) concentrations in 2013 were found to be 43 percent above the concentration at the start of the Industrial Revolution, and the present concentration is the highest during at least the last 800,000 years.[3] Global increases in CO_2 concentrations are due primarily to fossil fuel use, with land use change providing another significant but smaller contribution. With regard to emissions of non- CO_2 GHG, these have also increased significantly since 1990.[4] In particular, studies have concluded that it is very likely that the observed increase in methane (CH_4) concentration is predominantly due to agriculture and fossil fuel use.[5]

In August 2007, international climate talks held under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC) led to the official recognition by the participating nations that global emissions of GHG must be reduced. According to the "Ad Hoc Working Group on Further Commitments of Annex I Parties under the Kyoto Protocol," avoiding the most catastrophic events forecast by the United Nations Intergovernmental Panel on Climate Change (IPCC) would entail emissions reductions by industrialized countries in the range of 25 to 40 percent below 1990 levels. Because of the Kyoto Protocol's Clean Development Mechanism, which gives industrialized countries credit for financing emission-reducing projects in developing

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[2] *Center for Climate and Energy Solutions, Climate Change 101: Understanding and Responding to Global Climate Change.*

[3] *C. Le Quéré, et al., Global Carbon Budget 2014, (Earth System Science Data, 2015, doi:10.5194/essd–7–47–2015).*

[4] *USEPA, Global Greenhouse Gas Emissions Data, www.epa.gov/ghgemissions/global-greenhouse-gas- emissions-data, accessed March 17, 2017.*

[5] *USEPA, Atmospheric Concentrations of Greenhouse Gas, updated June 2015.*

countries, such an emissions goal in industrialized countries could ultimately spur efforts to cut emissions in developing countries as well.[6]

With regard to the adverse effects of global warming, as reported by the Southern California Association of Governments (SCAG), [g]lobal warming poses a serious threat to the economic well-being, public health and natural environment in southern California and beyond. The potential adverse impacts of global warming include, among others, a reduction in the quantity and quality of water supply, a rise in sea level, damage to marine and other ecosystems, and an increase in the incidences of infectious diseases. Over the past few decades, energy intensity of the national and state economy has been declining due to the shift to a more service-oriented economy. California ranked fifth lowest among the states in CO_2 emissions from fossil fuel consumption per unit of Gross State Product. However, in terms of total CO_2 emissions, California is second only to Texas in the nation and is the 12th largest source of climate change emissions in the world, exceeding most nations. The SCAG region, with close to half of the state's population and economic activities, is also a major contributor to the global warming problem."[7]

a) GHG Emissions Background

GHG emissions include CO_2, CH_4, nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3).[8] Carbon dioxide is the most abundant GHG. Other GHG emissions are less abundant but have higher global warming potential than CO_2. Thus, emissions of other GHG emissions are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions. A general description of the GHG emissions is provided in Table IV.F-1.

[6] *United Nations Framework Convention on Climate Change, Press Release—Vienna UN Conference Shows Consensus on Key Building Blocks for Effective International Response to Climate Change, August 31, 2007*

[7] *SCAG, The State of the Region—Measuring Regional Progress, December 2006, p. 121.*

[8] *As defined by California Assembly Bill (AB) 32 and Senate Bill (SB) 104.*

Table IV.F-1
Description of Identified GHG Emissions[a]

Greenhouse Gas	General Description
Carbon Dioxide (CO_2)	An odorless, colorless GHG, which has both natural and anthropocentric sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (human caused) sources of CO_2 are burning coal, oil, natural gas, and wood.
Methane (CH_4)	A flammable gas and is the main component of natural gas. When one molecule of CH_4 is burned in the presence of oxygen, one molecule of CO_2 and two molecules of water are released. A natural source of CH_4 is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain CH_4, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.
Nitrous Oxide (N_2O)	A colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, racecars, and as an aerosol spray propellant.
Hydrofluorocarbons (HFCs)	Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are non-toxic, non-flammable, insoluble, and chemically unreactive in the troposphere (the level of air at Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because they destroy stratospheric ozone, the production of CFCs was stopped as required by the Montreal Protocol in 1987. HFCs are synthetic man-made chemicals that are used as a substitute for CFCs as refrigerants. HFCs deplete stratospheric ozone, but to a much lesser extent than CFCs.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. The two main sources of PFCs are primary aluminum production and semi-conductor manufacturing.
Sulfur Hexafluoride (SF_6)	An inorganic, odorless, colorless, non-toxic, and non-flammable gas. SF_6 is used for insulation in electric power transmission and

Table IV.F-1
Description of Identified GHG Emissions[a]

Greenhouse Gas	General Description
	distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.
Nitrogen Trifluoride (NF_3)	An inorganic, non-toxic, odorless, non-flammable gas. NF_3 is used in the manufacture of semi-conductors, as an oxidizer of high-energy fuels, for the preparation of tetrafluorohydrazine, as an etchant gas in the electronic industry, and as a fluorine source in high power chemical lasers.

[a] *GHG emissions identified in this table are ones identified in the Kyoto Protocol and other synthetic gases recently added to the IPCC's Fifth Assessment Report.*

Source: Association of Environmental Professionals, Alternative Approaches to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents, Final, June 29, 2007; Environmental Protection Agency, Acute Exposure Guideline Levels (AEGLs) for Nitrogen Trifluoride; January 2009.

Global Warming Potential (GWP) is one type of simplified index based upon radiative properties used to estimate the potential future impacts of emissions of different gases upon the climate system. The GWP is based on a number of factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. The larger the GWP, the more that a given gas warms the Earth compared to CO_2over that time period. A summary of the atmospheric lifetime and GWP of selected gases is presented in Table IV.F-2.[9] As indicated on the table, the GWP ranges from 1 to 22,800.

(1) Projected Impacts of Global Warming in California

The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain significant scientific uncertainties in, for example, predictions of local effects of climate change, occurrence, frequency, and magnitude of extreme weather events, effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Due to the complexity of the Earth's climate system and inability to accurately model it, the uncertainty surrounding climate change may never be completely eliminated. Nonetheless, the IPCC's *Fifth Assessment Report, Summary for Policy Makers* states that, "it is *extremely likely* that more than half of the observed increase in global average

[9] *Atmospheric lifetime is defined as the time required to turn over the global Atmospheric burden. Source: Intergovernmental Panel on Climate Change, IPCC Third Assessment Report: Climate Change 2001 (TAR), Chapter 4: Atmospheric Chemistry and Greenhouse Gases, 2001, p. 247.*

surface temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse gas concentrations and other anthropogenic forc[es [*sic*] together."[10] A report from the National Academy of Sciences concluded that 97 to 98 percent of the climate researchers most actively publishing in the field support the tenets of the IPCC in that climate change is very likely caused by human (i.e., anthropogenic) activity.[11]

Table IV.F-2
Atmospheric Lifetimes and Global Warming Potential

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO_2)	50–200	1
Methane (CH_4)	12 (+/-3)	25
Nitrous Oxide (N_2O)	114	298
HFC-23: Fluoroform (CHF_3)	270	14,800
HFC-134a: 1,1,1,2-Tetrafluoroethane (CH_2FCF_3)	14	1,430
HFC-152a: 1,1-Difluoroethane ($C_2H_4F_2$)	1.4	124
PFC-14: Tetrafluoromethane (CF_4)	50,000	7,390
PFC-116: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800
Nitrogen Trifluoride (NF_3)	740	17,200

Source: IPCC, Climate Change 2007: Working Group I: The Physical Science Basis, Direct Global Warming Potentials, www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html, accessed May 14, 2018.

According to CARB, the potential impacts in California due to global climate change may include: loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more large forest fires; more drought years; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation.[12] Below is a

[10] *Intergovernmental Panel on Climate Change, Fifth Assessment Report, Summary for Policy Makers, page 5, 2013, http://ipcc.ch/report/ar5/syr/. Accessed November 2017.*

[11] *Anderegg, William R. L., J.W. Prall, J. Harold, S.H., Schneider, Expert Credibility in Climate Change, Proceedings of the National Academy of Sciences of the United States of America. 2010;107:12107-12109.*

[12] *California Environmental Protection Agency, Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, 2006, http://climatechange.ca.gov/climate_action_team/reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF. Accessed November 2017.*

summary of some of the potential effects that could be experienced in California as a result of global warming and climate change.

(a) Air Quality

Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, 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 exacerbate air quality. 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.[13] However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires.

In 2009, the California Natural Resources Agency (CNRA) published the *California Climate Adaptation Strategy* as a response to the Governor's Executive Order S-13-2008.[14] The CNRA report lists specific recommendations for state and local agencies to best adapt to the anticipated risks posed by a changing climate. In accordance with the *California Climate Adaptation Strategy*, the California Energy Commission (CEC) was directed to develop a website on climate change scenarios and impacts that would be beneficial for local decision makers.[15] The website, known as Cal-Adapt, became operational in 2011.[16] The information provided on the Cal-Adapt website represents a projection of potential future climate scenarios. The data are comprised of the average values (i.e., temperature, sea-level rise, snowpack) from a variety of scenarios and models and are meant to illustrate how the climate may change based on a variety of different potential social and economic factors. According to the Cal-Adapt website, the portion of the City in which the Project Site is located could result in an average increase in temperature of approximately 5.4 to 8.0°F by 2070–2099, compared to the baseline 1961–1990 period.

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[13] *California Environmental Protection Agency, Preparing California for Extreme Heat: Guidance and Recommendations, October 2013, https://toolkit.climate.gov/reports/preparing-california-extreme-heat-guidance-and-recommendations. Accessed November 2017.*

[14] *California Natural Resources Agency, Climate Action Team, 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008, 2009.*

[15] *California Natural Resources Agency, Climate Action Team, 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008, 2009.*

[16] *The Cal-Adapt website address is: http://cal-adapt.org.*

(b) Water Supply

Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, "Considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change."[17] For example, some studies identify little change in total annual precipitation in projections for California while others show significantly more precipitation.[18] Warmer, wetter winters would increase the amount of runoff available for groundwater recharge. However, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full. Conversely, reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge.[19]

The California Department of Water Resources report on climate change and effects on the State Water Project (SWP), the Central Valley Project, and the Sacramento-San Joaquin Delta, concludes "climate change will likely have a significant effect on California's future water resources…[and] future water demand." It also reports "much uncertainty about future water demand [remains], especially [for] those aspects of future demand that will be directly affected by climate change and warming. While climate change is expected to continue through at least the end of this century, the magnitude and, in some cases, the nature of future changes is uncertain."[20] It also reports that the relationship between climate change and its potential effect on water demand is not well understood, but "[i]t is unlikely that this level of uncertainty will diminish significantly in the foreseeable future." Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from

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[17] *Pacific Institute for Studies in Development, Environment and Security, Climate Change and California Water Resources: A Survey and Summary of the Literature, July 2003, page 5, http://www.pacinst.org/reports/climate_change_and_california_water_resources.pdf. Accessed November 2017.*

[18] *Pacific Institute for Studies in Development, Environment and Security, Climate Change and California Water Resources: A Survey and Summary of the Literature, July 2003, http://www.pacinst.org/reports/climate_change_and_california_water_resources.pdf. Accessed November 2017.*

[19] *California Natural Resources Agency, Safeguarding California: Reducing Climate Risk, an Update to the 2009 California Climate Adaptation Strategy, 2014. Accessed November 2017.*

[20] *California Department of Water Resources Climate Change Report, Progress on Incorporating Climate Change into Planning and Management of California's Water Resources, July 2006, page 2-54, http://baydeltaoffice.water.ca.gov/climatechange/DWRClimateChangeJuly06_update8-2-07.pdf. Accessed November 2017.*

reservoirs could result from only small changes in inflows.[21] In its *Fifth Assessment Report*, the IPCC states "Changes in the global water cycle in response to the warming over the 21st century will not be uniform. The contrast in precipitation between wet and dry regions and between wet and dry seasons will increase, although there may be regional exceptions."[22]

(c) Hydrology and Sea Level Rise

As discussed above, climate change 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. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

(d) Agriculture

California has a $30 billion agricultural industry that produces half 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 ozone 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 thus affect their quality.[23]

(e) Ecosystems and Wildlife

Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists expect that the average global surface temperature could rise by 2-11.5°F (1.1-6.4°C)

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[21] *California Department of Water Resources Climate Change Report, Progress on Incorporating Climate Change into Planning and Management of California's Water Resources, July 2006, page 2-75, http://baydeltaoffice.water.ca.gov/climatechange/DWRClimateChangeJuly06_update8-2-07.pdf. Accessed November 2017.*

[22] *Intergovernmental Panel on Climate Change, Fifth Assessment Report, Summary for Policy Makers, 2013, page 20.*

[23] *California Climate Change Center, Our Changing Climate: Assessing the Risks to California, 2006, http://meteora.ucsd.edu/cap/pdffiles/CA_climate_Scenarios.pdf. Accessed November 2017.*

by 2100, with significant regional variation.[24] Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Sea level could rise as much as 2 feet along most of the United States coastline. 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.[25]

b) Regulatory Framework

In response to growing scientific and political concern with global climate change, federal and state entities have adopted a series of laws to reduce emissions of GHG emissions to the atmosphere.

(1) Federal

(a) Federal Clean Air Act

The U.S. Supreme Court ruled in *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438 (2007), that CO_2 and other GHG emissions are pollutants under the federal Clean Air Act (CAA), which the USEPA must regulate if it determines they pose an endangerment to public health or welfare. The U.S. Supreme Court did not mandate that the USEPA enact regulations to reduce GHG emissions. Instead, the Court found that the USEPA could avoid taking action if it found that GHG emissions do not contribute to climate change or if it offered a "reasonable explanation" for not determining that GHG emissions contribute to climate change.

On April 17, 2009, the USEPA issued a proposed finding that GHG emissions contribute to air pollution that may endanger public health or welfare. On April 24, 2009, the proposed rule was published in the Federal Register under Docket ID No. EPA-HQ-OAR-2009-0171. The USEPA stated that high atmospheric levels of GHG emissions "are the unambiguous result of human emissions and are very likely the cause of the observed increase in average temperatures and other climatic changes." The USEPA further found that "atmospheric concentrations of greenhouse gases endanger public health and welfare within the meaning of Section 202 of the Clean Air Act." The findings were signed by the USEPA Administrator on December 7, 2009. The final findings were

[24] *National Research Council, Advancing the Science of Climate Change, 2010, http://dels.nas.edu/resources/static-assets/materials-based-on-reports/reports-in-brief/Science-Report-Brief-final.pdf. Accessed November 2017.*

[25] *Parmesan, C., and H. Galbraith, Observed Impacts of Global Climate Change in the U.S., Prepared for the Pew Center on Global Climate Change, November 2004, https://www.c2es.org/site/assets/uploads/2004/11/observed-impacts-climate-change-united-states.pdf. Accessed November 2017.*

published in the Federal Register on December 15, 2009. The final rule was effective on January 14, 2010.[26] While these findings alone do not impose any requirements on industry or other entities, this action is a prerequisite to regulatory actions by the USEPA, including, but not limited to, GHG emissions standards for light-duty vehicles.

On April 4, 2012, the USEPA published a proposed rule to establish, for the first time, a new source performance standard for GHG emissions. Under the proposed rule, new fossil fuel–fired electric generating units larger than 25 megawatts (MW) are required to limit emissions to 1,000 pounds of CO_2 per MW-hour (CO_2/MWh) on an average annual basis, subject to certain exceptions. Subsequently, on April 23, 2018, the USEPA issued a policy stating that CO_2 emissions from biomass-fired and other biogenic sources would be considered carbon neutral when used for energy production at stationary sources.

On April 17, 2012, the USEPA issued emission rules for oil production and natural gas production and processing operations, which are required by the CAA under Title 40 of the Code of Federal Regulations, Parts 60 and 63. The final rules include the first federal air standards for natural gas wells that are hydraulically fractured, along with requirements for several other sources of pollution in the oil and gas industry that currently are not regulated at the federal level.[27]

(b) Corporate Average Fuel Economy (CAFE) Standards

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the George W. Bush Administration issued Executive Order 13432 in 2007, directing the USEPA, the United States Department of Transportation (USDOT), and the United States Department of Energy (USDOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency for and GHG emissions from cars and light-duty trucks for model year 2011; in 2010, the USEPA and the NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Obama issued a memorandum directing the USEPA, USDOT, USDOE, and NHTSA to establish additional standards regarding fuel efficiency and GHG emissions reduction, clean fuels, and advanced vehicle infrastructure. In response

[26] *USEPA, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, Final Rule.*

[27] *USEPA, 2012 Final Rules for Oil and Natural Gas Industry, April 17, 2012, www.epa.gov/controlling-air- pollution-oil-and-natural-gas-industry/2012-final-rules-oil-and-natural-gas-industry, accessed January 3, 2017.*

to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG emissions and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards are projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if the standards were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021. On August 2, 2018, NHTSA announced it plans to revise adopted standards for model years 2022–2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011 the USEPA and the NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this regulatory program would reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.[28]

Building on the success of the first phase of standards, in August 2016, the USEPA and the NHTSA finalized Phase 2 standards for medium and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. The Phase 2 standards were expected to lower CO_2 emissions by approximately 1.1 billion metric tons and save vehicle owners fuel costs of about $170 billion.[29] However, on October 17, 2017, USEPA announced it would revisit these standards.

(c) Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy

[28] *The emission reductions attributable to the regulations for medium- and heavy-duty trucks were not included in the Project's emissions inventory due to the difficulty in quantifying the reductions. Excluding these reductions results in a more conservative (i.e., higher) estimate of emissions for the Project.*

[29] *U.S. EPA, EPA and NHTSA Adopt Standards to Reduce GHG and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond, August 2016.*

conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;

- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and

- While superseded by the USEPA and the NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks, and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of the EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."[30]

(2) State

(a) Executive Order S-3-05 and Executive Order B-30-15

Executive Order S-3-05, issued by Governor Schwarzenegger in June 2005, established GHG emissions targets for the state, as well as a process to ensure the targets are met. The order directed the Secretary for the California Environmental Protection Agency (CalEPA) to report every two years on the state's progress toward meeting the Governor's GHG emission reduction targets. The statewide GHG emissions reduction targets are as follows:

- By 2010, reduce to 2000 emission levels;[31]

- By 2020, reduce to 1990 emission levels;

- By 2030, reduce to 40 percent below 1990 levels; and

- By 2050, reduce to 80 percent below 1990 levels.

Executive Order B-30-15, issued by Governor Brown in April 2015, established an additional statewide policy goal to reduce GHG emissions 40 percent below their 1990

[30] *A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.*

[31] *The 2010 target to reduce GHG emissions to 2000 levels was not met. Source: Rubin, Thomas A.," Does California Really Need Major Land Use and Transportation Changes to Meet Greenhouse Gas Emissions Targets?," July 3, 2013.*

levels by 2030. Reducing GHG emissions by 40 percent below 1990 levels in 2030 and by 80 percent below 1990 levels by 2050 (consistent with Executive Order S-3-05) aligns with scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius.[32]

The State Legislature adopted equivalent 2020 and 2030 statewide targets in the California Global Warming Solutions Act of 2006 (also known as Assembly Bill [AB] 32) and in Senate Bill 32, respectively, both of which are discussed below. However, the Legislature has not yet adopted a target for the 2050 horizon year.

As a result of Executive Order S-3-05, the California Climate Action Team (CAT), led by the Secretary of CalEPA, was formed. The CAT is made up of representatives from a number of state agencies and was formed to implement global warming emission reduction programs and to report on the progress made toward meeting statewide targets established under the Executive Order. The CAT reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in the Executive Order.[33] The CAT stated that smart land use is an umbrella term for strategies that integrate transportation and land-use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development (TOD), and encourage high-density residential/commercial development along transit corridors. These strategies develop more efficient land-use patterns within each jurisdiction or region to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. “Intelligent transportation systems” is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and the movement of people, goods, and service.[34]

(b) Assembly Bill 32 (California Global Warming Solutions Act of 2006) and Senate Bill 32

AB 32 commits the state to achieving the following:

- By 2010, reduce to 2000 GHG emission levels;[35] and

[32] *CARB, Frequently Asked Questions about Executive Order B-30-15, 2030 Carbon Target and Adaptation FAQs, April 29, 2015.*

[33] *CalEPA, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.*

[34] *CalEPA, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006, p. 58.*

[35] *The 2010 target to reduce GHG emissions to 2000 levels was not met. Source: Rubin, Thomas A., “Does California Really Need Major Land Use and Transportation Changes to Meet Greenhouse Gas Emissions Targets?”, July 3, 2013.*

- By 2020, reduce to 1990 levels.

To achieve these goals, which are consistent with the California CAT GHG emissions reduction targets for 2010 and 2020, AB 32 mandates that the CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources consistent with the CAT strategies, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. In order to achieve the reduction targets, AB 32 requires CARB to adopt rules and regulations in an open public process that achieve the maximum technologically feasible and cost-effective GHG emissions reductions.[36]

SB 32, signed September 8, 2016, updates AB 32 (the Global Warming Solutions Act) to include an emissions reductions goal for the year 2030. Specifically, SB 32 requires the state board to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

(c) Climate Change Scoping Plan

In 2008, CARB approved the original *Climate Change Scoping Plan* as required by AB 32.[37] Subsequently, CARB approved updates to the *Climate Change Scoping Plan* in 2014 *(First Update)* and 2017 *(2017 Update)*, with the *2017 Update* considering SB 32 (adopted in 2016) in addition to AB 32.

The original *Climate Change Scoping Plan* proposed a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health.[38] The original *Climate Change Scoping Plan* identified a range of GHG reduction actions that included direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms, such as a cap-and-trade system, and an AB 32 implementation fee to fund the program.

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[36] *CARB's list of discrete early action measures that could be adopted and implemented before January 1, 2010, was approved on June 21, 2007. The three adopted discrete early action measures are: (1) a low- carbon fuel standard, which reduces carbon intensity in fuels statewide; (2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance; and (3) increased methane capture from landfills, which includes requiring the use of state-of-the-art capture technologies.*

[37] *Climate Change Proposed Scoping Plan was approved by CARB on December 11, 2008.*

[38] *CARB, Climate Change Scoping Plan, December 2008.*

The original *Climate Change Scoping Plan* called for a "coordinated set of solutions" to address all major categories of GHG emissions. Transportation emissions were addressed through a combination of higher standards for vehicle fuel economy, implementation of the Low Carbon Fuel Standard (LCFS), and greater consideration to reducing trip length and generation through land use planning and transit-oriented development. Buildings, land use, and industrial operations were encouraged and, sometimes, required to use energy more efficiently. Utility energy providers were required change to include more renewable energy sources through implementation of the Renewables Portfolio Standard (RPS).[39] Additionally, the original *Climate Change Scoping Plan* emphasized opportunities for households and businesses to save energy and money through increasing energy efficiency. It indicated that substantial savings of electricity and natural gas would be accomplished through "improving energy efficiency by 25 percent."

The original *Climate Change Scoping Plan* identified a number of specific issues relevant to the Project, including the following:

- The potential of using the green building framework as a mechanism, which could enable GHG emissions reductions in other sectors (i.e., electricity, natural gas), noting that:

  > *A Green Building strategy will produce greenhouse gas savings through buildings that exceed minimum energy efficiency standards, decrease consumption of potable water, reduce solid waste during construction and operation, and incorporate sustainable materials. Combined, these measures can also contribute to healthy indoor air quality, protect human health, and minimize impacts to the environment.*

- The importance of supporting the Department of Water Resources' work to implement the Governor's objective to reduce per capita water use by 20 percent by 2020. Specific measures to achieve this goal include water use efficiency, water recycling, and reuse of urban runoff. The original *Climate Change Scoping Plan* noted that water use requires significant amounts of energy, including approximately one-fifth of statewide electricity.

- Encouraging local governments to set quantifiable emission reduction targets for their jurisdictions and use their influence and authority to encourage reductions in emissions caused by energy use, waste and recycling, water and wastewater systems, transportation, and community design.

[39] *For a discussion of Renewables Portfolio Standard, refer to Subsection 2(h)(i), California Renewables Portfolio Standard.*

Forecasting the amount of emissions that would occur in 2020 if no actions are taken was necessary to assess the scope of the reductions California has to make to return to the 1990 emissions level by 2020 as required by AB 32. CARB originally defined the "business-as-usual" or BAU scenario as emissions in the absence of any GHG emission reduction measures discussed in the original *Climate Change Scoping Plan*. For example, in further explaining CARB's BAU methodology, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards. In the original *Climate Change Scoping Plan*, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent from the otherwise projected 2020 emissions level (i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations).[40]

Subsequent to adoption of the original *Climate Change Scoping Plan*, a lawsuit was filed challenging CARB's approval of the *Climate Change Scoping Plan Functional Equivalent Document* (*FED to the Climate Change Scoping Plan*). On May 20, 2011 (Case No. CPF-09-509562), the Court found that the environmental analysis of the alternatives in the *FED to the Climate Change Scoping Plan* was not sufficient under the California Environmental Quality Act (CEQA). CARB staff prepared a revised and expanded environmental analysis of the alternatives, and the *Supplemental FED to the Climate Change Scoping Plan* was approved on August 24, 2011 (*Supplemental FED*). The *Supplemental FED* indicated that there is the potential for adverse environmental impacts associated with implementation of the various GHG emission reduction measures recommended in the *Climate Change Scoping Plan*.

As part of the *Supplemental FED*, CARB updated the projected 2020 BAU emissions inventory based on then current economic forecasts (i.e., as influenced by the economic downturn) and emission reduction measures already in place, replacing its prior 2020 BAU emissions inventory. CARB staff derived the updated emissions estimates by projecting emissions growth, by sector, from the state's average emissions from 2006 through 2008. Specific emission reduction measures included were the million-solar-roofs program, the AB 1493 (Pavley I) motor vehicle GHG emission standards, and the LCFS.[41] In addition, CARB also factored into the 2020 BAU inventory emissions reductions associated with a 33-percent RPS for electricity generation. Based on the

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[40] *CARB, Climate Change Scoping Plan: A Framework for Change, p. 12, December 2008.*

[41] *Pavley I is the first GHG standards in the nation for passenger vehicles and took effect for model years starting in 2009 to 2016. Pavley I could potentially result in 27.7 million metric tonnes CO_2e reduction in 2020. Pavley II will cover model years 2017 to 2025 and potentially result in an additional reduction of 4.1 million metric tons CO_2e.*

new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 percent (down from 28.5 percent) from BAU conditions. When the 2020 emissions level projection also was updated to account for newly implemented regulatory measures discussed above, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16 percent (down from 28.5 percent) from the BAU conditions.[42,43]

In 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update).[44] The stated purpose of the First Update was to "highlight… California's success to date in reducing its GHG emissions and lay…the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.[45] The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32 and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.[46]

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050.[47] Those six areas were: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and (6) natural and working lands. The First Update identified key recommended actions for each sector that would facilitate achievement of the 2050 reduction target.

Based on CARB's research efforts, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050."[48] Those technologies include energy

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[42] *CARB, Supplement to the AB 32 Scoping Plan FED, Table 1.2-2.*

[43] *The emissions and reductions estimates found in the Supplemental FED to the Climate Change Scoping Plan fully replace the estimates published in the 2008 Climate Change Scoping Plan. See CARB, Resolution 11-27 (Aug. 24, 2011) (setting aside approval of 2008 Climate Change Scoping Plan and associated emissions forecasts and approving the Supplemental FED). The estimates in the 2008 document are 596 million metric tons CO_2e under 2020 BAU and a required reduction of 169 million metric tons CO_2e (28.4 percent).*

[44] *Health & Safety Code §38561(h) requires CARB to update the Scoping Plan every five years.*

[45] *CARB, First Update, May 2014, p. 4.*

[46] *CARB, First Update, May 2014, p. 34.*

[47] *CARB, First Update, May 2014, p. 6.*

[48] *CARB, First Update, May 2014, p. 32*

demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies.

The First Update discussed new residential and commercial building energy efficiency improvements, specifically identifying progress towards zero net energy buildings as an element of meeting mid-term and long-term GHG emissions reduction goals. The First Update expressed CARB's commitment to working with the California Public Utilities Commission (CPUC) and California Energy Commission (CEC) to facilitate further achievements in building energy efficiency.

In December 2017, CARB adopted California's 2017 *Climate Change Scoping Plan Update: The Strategy for Achieving California's 2030 Greenhouse Gas Target (2017 Scoping Plan Update*). The *2017 Scoping Plan Update* builds upon the framework established by the original *Climate Change Scoping Plan* and the First Update while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health. The 2017 Scoping Plan Update includes policies to require direct GHG emissions reductions at some of the state's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and-Trade program, which constrains and reduces emissions at covered sources.[49]

(d) Assembly Bill 197

Assembly Bill (AB) 197, signed September 8, 2016, is a bill linked to SB 32 that prioritizes efforts to cut GHG emissions in low-income or minority communities. AB 197 requires CARB to make available, and update at least annually, on its web site the emissions of GHGs, criteria pollutants, and toxic air contaminants for each facility that reports to CARB and air districts. In addition, AB 197 adds two members of the Legislature to the CARB board as ex officio, non-voting members and also creates the Joint Legislative Committee on Climate Change Policies to ascertain facts and make recommendations to the Legislature and the houses of the Legislature concerning the state's programs, policies, and investments related to climate change.

(e) Cap-and-Trade Program

The original *Climate Change Scoping Plan* identified a cap-and-trade program as one of the strategies for California to reduce GHG emissions. Under cap-and-trade, an overall

[49] *CARB, 2017 Scoping Plan Update, November 2017, p. 7*

limit on GHG emissions from capped sectors is established, and facilities subject to the cap are able to trade permits to emit GHG emissions within the overall limit. According to CARB, a cap-and- trade program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by the year 2020.[50]

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32 and the State Legislature extended the Cap-and-Trade Program through 2030 with the adoption of AB 398. The Cap-and-Trade Program is designed to reduce GHG emissions from major sources, such as refineries and power plants, (deemed "covered entities"). Covered entities subject to the Cap-and-Trade Program are sources that emit more than 25,000 metric tons CO2e (MTCO2e) per year. Triggering of the 25,000 MTCO2e per year "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Mandatory Reporting Rule or MRR).

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or in part (if eligible) and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender an allowance for each metric ton CO2e of GHG they emit.

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 and 2030 statewide emission limits will not be exceeded. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on a cumulative basis. As summarized by CARB in the First Update:

> *The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced.*

For example, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a commensurate reduction in GHG emissions from other covered entities. Such a focus on aggregate

[50] *With continuation of the Cap-and-Trade Program, the State can achieve a 40-percent reduction target by 2030.*

GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative.

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. Thus, the Cap-and-Trade Program assures that California will meet its 2020 and 2030 GHG emissions reduction mandates.

> *The Cap-and-Trade Program establishes an overall limit on GHG emissions from most of the California economy—the "capped sectors." Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved building and appliance efficiency standards, the [Low Carbon Fuel Standard] LCFS, and the 33 percent [Renewables Portfolio Standard] RPS. Whatever additional reductions are needed to bring emissions within the cap is accomplished through price incentives posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap. […][51]*
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> *[T]he Cap-and-Trade Regulation provides assurance that California's 2020 limit will be met because the regulation sets a firm limit on 85 percent of California's GHG emissions.[52]*

Overall, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory framework adopted by CARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the state's emissions forecasts and the effectiveness of direct regulatory measures.

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85 percent of California's GHG emissions.[53]

The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG

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[51] *CARB, First Update, May 2014, p. 88.*

[52] *CARB, First Update, May 2014, pp. 86–87.*

[53] *Center for Climate and Energy Solutions, California Cap-and-Trade, www.c2es.org/us-states-regions/key- legislation/california-cap-trade, accessed February 10, 2017.*

emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period.[54] Furthermore, the Cap-and-Trade Program also covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in state or imported. The point of regulation for transportation fuels is when they are "supplied" (i.e., delivered into commerce). Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all, if not all, of GHG emissions from CEQA projects associated with vehicle-miles traveled (VMT) are covered by the Cap-and-Trade Program.

AB 398 was enacted in 2017 to extend and clarify the role of the State's Cap-and-Trade Program from January 1, 2021, through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade Program to establish updated protocols and allocate proceeds to reduce GHG emissions.

(f) Energy-Related Sources

(i) California Renewables Portfolio Standard

The California RPS program (2002, SB 1078) required that 20 percent of the available energy supplies is from renewable energy sources by 2017. In 2006, SB 107 accelerated the 20 percent mandate to 2010. These mandates apply directly to investor-owned utilities. On April 12, 2011, California Governor Jerry Brown signed into law SB 2X, which modified California's RPS program to require that both public and investor-owned utilities in California receive at least 33 percent of their electricity from renewable sources by the year 2020. California SB 2X also requires regulated sellers of electricity to meet an interim milestone of procuring 25 percent of their energy supply from certified renewable resources by 2016.

The 2018 chaptering of Senate Bill (SB) 100 (De Leon) requires electricity providers to provide renewable energy for at least 60 percent of their delivered power by 2030 and 100 percent use of renewable energy and zero-carbon resources by 2045. SB 100 also increases existing renewable energy targets, in accordance with the RPS, to 44 percent by 2024 and 52 percent by 2027.

[54] *While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, fuel suppliers did not have a compliance obligation (i.e., they were not fully regulated) until 2015.*

In 2017, LADWP indicated that 29 percent of its electricity came from renewable resources in Year 2016. Therefore, under SB 2X, LADWP is required to increase its electricity from renewable resources by an additional 4 percent to comply with the RPS of 33 percent by the year 2020.[55]

(ii) Senate Bill 350

SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 is the implementation of some of the goals of Executive Order B-30-15. The objectives of SB 350 are: (1) to increase the procurement of electricity from renewable sources from 33 percent to 50 percent by December 31, 2030, and (2) to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.[56]

(iii) Senate Bill 1368

SB 1368, signed September 29, 2006, is a companion bill to AB 32 that requires the CPUC and the CEC to establish GHG emission performance standards for the generation of electricity. These standards also generally apply to power that is generated outside of California and imported into the state. SB 1368 provides a mechanism for reducing the emissions of electricity providers, thereby assisting CARB to meet its mandate under AB32. On January 25, 2007, the CPUC adopted an interim GHG Emissions Performance Standard, which is a facility-based emissions standard requiring that all new long-term commitments for baseload generation to serve California consumers be with power plants that have GHG emissions no greater than a combined cycle gas turbine plant. That level is established at 1,100 pounds of CO_2 per MWh. Furthermore, on May 23, 2007, the CEC adopted regulations that establish and implement an identical Emissions Performance Standard of 1,100 pounds of CO_2 per MWh (see CEC Order No. 07-523-7).

(g) Mobile Sources

(i) Assembly Bill 1493 (Pavley I)

AB 1493, passed in 2002, requires the development and adoption of regulations to achieve "the maximum feasible reduction of greenhouse gases" emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the state. CARB originally approved regulations to reduce

[55] *LADWP, 2015 Power Integrated Resource Plan, December 2016, Table D-1, LADWP's 2014 Power Content Label, p. D-19.*

[56] *SB 350 (2015–2016 Reg, Session) Stats 2015, ch. 547.*

GHG emissions from passenger vehicles in September 2004, with the regulations to take effect in 2009. On September 24, 2009, CARB adopted amendments to these "Pavley" regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016.[57] Although setting emission standards on automobiles is solely the responsibility of the USEPA, the federal CAA allows California to set state-specific emission standards on automobiles if the state first obtains a waiver from the USEPA. The USEPA granted California that waiver on July 1, 2009. A comparison between the AB 1493 standards and the Federal CAFE standards was completed by CARB and the analysis determined that California emission standards are 16 percent more stringent through the 2016 model year and 18 percent more stringent for 2020 model year.[58] California is also committed to further strengthening these standards beginning with 2020 model year vehicles to obtain a 45-percent GHG reduction in comparison to the 2009 model year.

(ii) Executive Order S-1-07 (California Low Carbon Fuel Standard)

Executive Order S-1-07, the LCFS (issued on January 18, 2007), requires a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020. Regulatory proceedings and implementation of the LCFS were directed to CARB. The LCFS was identified by CARB as a discrete early action item in the adopted *Climate Change Scoping Plan*. The LCFS program was re-adopted in 2015 and will continue to complement other AB 32 measures, transform and diversify the fuel pool, and is a key part of the State's petroleum reduction goals for 2030.

(iii) Advanced Clean Cars Regulations

In 2012, CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for model years 2015–2025.[59] The components of the Advance Clean Car program include the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the

[57] *CARB, Clean Car Standards—Pavley, Assembly Bill 1493, www.arb.ca.gov/cc/ccms/ccms.htm, last reviewed January 11, 2017.*

[58] *CARB, "Comparison of Greenhouse Gas Reductions for all Fifty United States under CAFE Standards and ARB Regulations Adopted Pursuant to AB 1493", January 23, 2008.*

[59] *CARB, California's Advanced Clean Cars Program, www.arb.ca.gov/msprog/acc/acc.htm, last reviewed by CARB January 18, 2017.*

2018 through 2025 model years.[60] In March 2017, CARB voted unanimously to continue with the vehicle greenhouse gas emission standards and the ZEV program for cars and light trucks sold in California through 2025.[61]

(iv) Senate Bill 375

Acknowledging the relationship between land use planning and transportation sector GHG emissions, SB 375 was passed by the State Assembly on August 25, 2008 and signed by the Governor on September 30, 2008. This legislation links regional planning for housing and transportation with the GHG reduction goals outlined in AB 32. Reductions in GHG emissions would be achieved by, for example, locating employment opportunities close to transit. Under SB 375, each Metropolitan Planning Organization (MPO) would be required to adopt a Sustainable Community Strategy (SCS) to encourage compact development that reduce passenger VMT and trips so that the region will meet a target, created by CARB, for reducing GHG emissions. If the SCS is unable to achieve the regional GHG emissions reduction targets, then the MPO is required to prepare an alternative planning strategy that shows how the GHG emissions reduction target could be achieved through alternative development patterns, infrastructure, and/or transportation measures.

(h) Building Standards

(i) California Appliance Efficiency Regulations (Title 20, Sections 1601 through 1608)

The 2014 Appliance Efficiency Regulations, adopted by the CEC, include standards for new appliances (e.g., refrigerators) and lighting, if they are sold or offered for sale in California. These standards include minimum levels of operating efficiency, and other cost- effective measures, to promote the use of energy- and water-efficient appliances.

(ii) California Building Energy Efficiency Standards (Title 24, Part 6)

California's Energy Efficiency Standards for Residential and Nonresidential Buildings, located at Title 24, Part 6 of the California Code of Regulations and commonly referred to as "Title 24," were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 requires the design of building shells and

[60] *CARB, California's Advanced Clean Cars Program, www.arb.ca.gov/msprog/acc/acc.htm, last reviewed by CARB, January 18, 2017.*

[61] *CARB, News Release: CARB finds vehicle standards are achievable and cost-effective, https://www.arb.ca.gov/newsrel/newsrelease.php?id=908, accessed May 14, 2018.*

building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.[62] The CEC adopted the 2016 Title 24 standards, which became effective on January 1, 2017, and are applicable to the Project.[63] The 2016 standards continue to improve upon the 2013 Title 24 standards for new construction of, and additions and alterations to, residential and non-residential buildings.[64] Compliance with Title 24 is enforced through the building permit process.

(iii) California Green Building Standards (CALGreen Code)

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, went into effect on January 1, 2017. Most mandatory measure changes in the 2016 CALGreen Code from the previous 2013 CALGreen Code were related to the definitions and to the clarification or addition of referenced manuals, handbooks, and standards. For example, several definitions related to energy that were added or revised affect electric vehicles chargers and charging and hot water recirculation systems. For new multi-family dwelling units, the residential mandatory measures were revised to provide additional electric vehicle charging space requirements, including quantity, location, size, single EV space, multiple EV spaces, and identification.[65] For nonresidential mandatory measures, the table (Table 5.106.5.3.3) identifying the number of required EV charging spaces has been revised in its entirety.[66] Compliance with Title 24 is enforced through the building permit process.

(iv) Senate Bill 97

On June 19, 2008, the Office of Planning and research (OPR) released a technical advisory on addressing climate change. This guidance document outlines suggested

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[62] *CEC, 2016 Building Energy Efficiency Standards, www.energy.ca.gov/title24/2016standards/, accessed May 14, 2018*

[63] *CEC, 2016 Building Energy Efficiency Standards, www.energy.ca.gov/title24/2016standards/, accessed February 10, 2017.*

[64] *CEC, 2016 Building Energy Efficiency Standards, www.energy.ca.gov/title24/2016standards/, accessed February 10, 2017.*

[65] *California Building Standards Commission, 2016 California Green Building Standards Code, California Code of Regulations, Title 24, Part 11, Chapter 4—Residential Mandatory Measures, effective January 1, 2017.*

[66] *California Building Standards Commission, 2016 California Green Building Standards Code, California Code of Regulations, Title 24, Part 11, Chapter 5—Nonresidential Mandatory Measures, effective January 1, 2017.*

components to CEQA disclosure, including quantification of GHG emissions from a project's construction and operation; determination of significance of the project's impact to climate change; and if the project is found to be significant, the identification of suitable alternatives and mitigation measures.

SB 97, passed in August 2007, is designed to work in conjunction with CEQA and AB 32. SB 97 requires OPR to prepare and develop guidelines for the mitigation of GHG emissions or the effects thereof, including, but not limited to, the effects associated with transportation and energy consumption. The Draft Guidelines Amendments for Greenhouse Gas Emissions (Guidelines Amendments) were adopted on December 30, 2009 and address the specific obligations of public agencies when analyzing GHG emissions under CEQA to determine a project's effects on the environment.

However, neither a threshold of significance nor any specific mitigation measures are included or provided in the Guidelines Amendments.[67] The Guidelines Amendments require a lead agency to make a good-faith effort, based on the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. The Guidelines Amendments give discretion to the lead agency whether to: (1) use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance- based standards. Furthermore, the Guidelines Amendments identify the following three factors that should be considered in the evaluation of the significance of GHG emissions:

1. The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting;

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and

3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[68]

The administrative record for the Guidelines Amendments also clarifies "that the effects of greenhouse gas emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis."[69]

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[67] *See 14 Cal. Code Regs. §§ 15064.7 (generally giving discretion to lead agencies to develop and publish thresholds of significance for use in the determination of the significance of environmental effects), 15064.4 (giving discretion to lead agencies to determine the significance of impacts from GHG emissions).*

[68] *14 Cal. Code Regs. § 15064.4(b).*

The California Natural Resources Agency is required to periodically update the Guidelines Amendments to incorporate new information or criteria established by CARB pursuant to AB 32. SB 97 applies to any environmental impact report (EIR), negative declaration, mitigated negative declaration, or other document required by CEQA, which has not been finalized.

(3) Regional

(a) South Coast Air Quality Management District

The Southern California Air Quality Management District (SCAQMD) adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of chlorofluorocarbons, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons by the year 2000;
- Develop recycling regulations for hydrochlorofluorocarbons (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

(b) Southern California Association of Governments

To implement SB 375 and reduce GHG emissions by correlating land use and transportation planning, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS) on April 7, 2016.[70] The 2016–2040 RTP/SCS reaffirms the land use policies that were incorporated into the 2012–2035 RTP/SCS. These foundational policies, which guided the development of the 2016–2040 RTP/SCS's strategies for land use, include the following:

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[69] *Letter from Cynthia Bryant, Director of the Governor's Office of Planning and Research to Mike Chrisman, California Secretary for Natural Resources, dated April 13, 2009.*

[70] *SCAG, Final 2016–2040 RTP/SCS.*

- Identify regional strategic areas for infill and investment;
- Structure the plan on a three-tiered system of centers development;[71]
- Develop "Complete Communities";
- Develop nodes on a corridor;
- Plan for additional housing and jobs near transit;
- Plan for changing demand in types of housing;
- Continue to protect stable, existing single-family areas;
- Ensure adequate access to open space and preservation of habitat; and
- Incorporate local input and feedback on future growth.

The 2016–2040 RTP/SCS recognizes that transportation investments and future land use patterns are inextricably linked, and continued recognition of this close relationship will help the region make choices that sustain existing resources and expand efficiency, mobility, and accessibility for people across the region. In particular, the 2016–2040 RTP/SCS draws a closer connection between where people live and work, and it offers a blueprint for how Southern California can grow more sustainably. The 2016–2040 RTP/SCS also includes strategies focused on compact infill development and economic growth by building the infrastructure the region needs to promote the smooth flow of goods and easier access to jobs, services, educational facilities, healthcare and more.

The 2016–2040 RTP/SCS states that the SCAG region is home to about 18.3 million people in 2012 and currently includes approximately 5.9 million homes and 7.4 million jobs.[72] By 2040, the integrated growth forecast projects that these figures will increase by 3.8 million people, with nearly 1.5 million more homes and 2.4 million more jobs. High Quality Transit Areas (HQTAs) will account for 3 percent of regional total land but are projected to accommodate 46 percent and 55 percent of future household and

[71] *Complete language: "Identify strategic centers based on a three-tiered system of existing, planned and potential relative to transportation infrastructure. This strategy more effectively integrates land use planning and transportation investment." A more detailed description of these strategies and policies can be found on pp. 90–92 of the SCAG 2008 Regional Transportation Plan, adopted in May 2008.*

[72] *2016–2040 RTP/SCS population growth forecast methodology includes data for years 2012, 2020, 2035 and 2040.*

employment growth respectively between 2012 and 2040.[73] The 2016–2040 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region's HQTAs. HQTAs are a cornerstone of land use planning best practice in the SCAG region because they concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability.

The 2016–2040 RTP/SCS is expected to reduce per capita transportation emissions by 8 percent by 2020 and 18 percent by 2035. This level of reduction would meet the region's GHG targets set by CARB of 8 percent per capita by 2020 and exceed the region's GHG target set by CARB of 13 percent per capita by 2035.[74] Furthermore, although there are no per capita GHG emission reduction targets for passenger vehicles set by CARB for 2040, the 2016–2040 RTP/SCS's GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2040.[75] The 2016–2040 RTP/SCS would result in an estimated 21 percent decrease in per capita GHG emissions by 2040. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an approximately 21-percent decrease in per capita GHG emissions by 2040 (an additional 3-percent reduction in the five years between 2035 [18 percent] and 2040 [21 percent]), the 2016–2040 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the state's GHG emission reduction goals.

(4) Local

(a) City of Los Angeles Green LA Action Plan/Climate LA Plan

The City began addressing the issue of global climate change by publishing *Green LA, An Action Plan to Lead the Nation in Fighting Global Warming* (LA Green Plan) in 2007. This document outlines the goals and actions the City has established to reduce the generation and emission of GHG emissions from both public and private activities. According to the LA Green Plan, the City is committed to the goal of reducing emissions of CO_2 to 35 percent below 1990 levels by year 2030. To achieve this, the City has been implementing the following:

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[73] *Defined by the 2016–2040 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 miles of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.*

[74] *SCAG, Final 2016–2040 RTP/SCS, Executive Summary, p. 8, April 2016.*

[75] *SCAG, Final Program Environmental Impact Report for 2016–2040, RTP/SCS, April 2016, Figure 3.8.4-1.*

- Increase the generation of renewable energy;
- Improve energy conservation and efficiency; and
- Change transportation and land use patterns to reduce dependence on automobiles.[76]

To facilitate implementation of the LA Green Plan, the City has a Climate LA Plan that lays out departmental programs to implement the LA Green Plan initiatives. The City also adopted the Los Angeles Green Building Code (LAGBC), as discussed below. In addition, LADWP will continue to implement programs to emphasize water conservation and will also pursue securing alternative supplies, including recycled water and storm water capture. Furthermore, the City implemented the Recovering Energy, Natural Resources and Economic Benefit from Waste for Los Angeles plan (RENEW LA plan) to meet solid waste reduction goals by expanding recycling to multifamily dwellings, commercial establishments, and restaurants. Under the RENEW LA plan, the City is also developing facilities that will convert solid waste to energy without incineration.[77] These measures would serve to reduce overall emissions from the City.

(b) City of Los Angeles Green Building Code

On December 15, 2011, the Los Angeles City Council approved Ordinance No. 181,481, which amended Chapter IX of the Los Angeles Municipal Code (LAMC), referred to as the Los Angeles Green Building Code (LAGBC), by adding a new Article 9 to incorporate various provisions of the 2010 CALGreen Code. On December 20, 2016, the Los Angeles City Council approved Ordinance No. 184,692, which further amended Chapter IX of the LAMC, by amending certain provisions of Article 9 to reflect local administrative changes and incorporating by reference portions of the 2016 CALGreen Code. Projects filing building permit applications on or after January 1, 2017 must comply with the provisions of the LAGBC.

(c) City of Los Angeles Sustainable City pLAn

The Sustainable City pLAn was adopted in 2015 and includes both short-term and long-term aspirations through the year 2035 in various topic areas, including: water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others.[78] Specific

[76] *City of Los Angeles, Green LA: An Action Plan to Lead the Nation in Fighting Global Warming, May 2007.*

[77] *City of Los Angeles, Recovering Energy Natural Resources and Economic Benefit from Waste for Los Angeles, June 2011.*

[78] *City of Los Angeles, Sustainable City pLAn, April 2015.*

targets include increasing construction of new housing units within 1,500 feet of transit by 2017, reducing vehicle miles traveled per capita by five percent by 2025, and increasing trips made by walking, biking or transit by at least 35 percent by 2025. The Sustainable City pLAn will be updated every four years.

(d) Traffic Study Policies and Procedures

The City of Los Angeles Department of Transportation (LADOT) has developed the Transportation Impact Study Guidelines (TISG) (December 2016) to provide the public, private consultants, and City staff with standards, guidelines, objectives, and criteria to be used in the preparation of a transportation impact study. The TSIG is consistent with the City's goals to emphasize the importance of sustainability, smart growth, and reduction of GHG emissions in addition to traditional traffic flow considerations when evaluating and mitigating impacts to the transportation system as a result of land use policy decisions. The TSIG prioritizes transportation demand management strategies and multi-modal strategies over automobile-centric solutions when mitigating project-related impacts to the City's transportation system. Through acknowledgement of an imminent update that will identify VMT reduction thresholds, the TSIG stands as an implementing mechanism of the City's strategy to conform to the mandates and requirements of AB 32, SB 375, and SB 743.

c) Existing Conditions

(1) Existing Statewide GHG Emissions

GHG emissions are the result of both natural and human-influenced activities. Regarding human-influenced activities, motor vehicle travel, consumption of fossil fuels for power generation, industrial processes, heating and cooling, landfills, agriculture, and wildfires are the primary sources of GHG emissions. Without human intervention, Earth maintains an approximate balance between the emission of GHG emissions into the atmosphere and the storage of GHG emissions in oceans and terrestrial ecosystems. Events and activities, such as the industrial revolution and the increased combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.), have contributed to the rapid increase in atmospheric levels of GHG emissions over the last 150 years. As reported by the CEC, California contributes approximately one percent of global and 8.2 percent of national GHG emissions.[79] California represents approximately 12 percent of the national population. Approximately 80 percent of GHGs in California are CO_2 produced from fossil fuel combustion. The current California GHG inventory compiles

[79] *California Energy Commission, Tracking Progress, Greenhouse Gas Emission Reductions. www.energy.ca.gov/renewables/tracking_progress/documents/Greenhouse_Gas_Emissions_Reductions.pdf, December 2017.*

statewide anthropogenic GHG emissions and carbon sinks/storage from years 2000 through 2016.[80] It includes estimates for CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. The GHG inventory for California for years 2010 through 2016 is presented in Table IV.F-3. As shown therein, the GHG inventory for California in 2016 was 429.35 million $MTCO_2e$, which meets and exceeds the 1990 inventory of 430.7 million $MTCO_2e$.

Table IV.F-3
California GHG Inventory
(million metric tons CO_2e)

	2010	2011	2012	2013	2014	2015	2016
Transportation	**165.07**	**161.51**	**161.22**	**160.90**	**162.28**	**166.14**	**169.38**
On Road	***151.20***	***148.03***	***147.71***	***147.07***	***148.04***	***151.52***	***154.64***
Passenger Vehicles	114.13	111.37	111.77	111.52	112.20	116.33	119.03
Heavy Duty Vehicles	37.07	36.65	35.93	35.55	35.83	35.19	35.62
Ships & Commercial Boats	***3.66***	***3.52***	***3.43***	***3.42***	***3.49***	***3.42***	***3.24***
Aviation (Intrastate)	***3.84***	***3.73***	***3.75***	***3.93***	***3.90***	***4.22***	***4.44***
Rail	***2.24***	***2.38***	***2.38***	***2.38***	***2.38***	***2.38***	***2.37***
Off Road	***2.03***	***2.13***	***2.23***	***2.33***	***2.43***	***2.53***	***2.63***
Unspecified	***2.09***	***1.72***	***1.71***	***1.77***	***2.04***	***2.07***	***2.07***
Industrial	**91.50**	**90.94**	**91.07**	**93.73**	**93.96**	**91.58**	**89.61**
Refineries and Hydrogen Production	***30.46***	***30.12***	***29.88***	***29.22***	***29.40***	***28.21***	***29.61***
General Fuel Use	***17.93***	***18.78***	***18.91***	***19.31***	***19.87***	***19.23***	***18.53***
Natural Gas	13.46	14.50	14.48	14.36	15.56	14.79	14.99
Other Fuels	4.47	4.28	4.43	4.94	4.31	4.45	3.53
Oil & Gas: Production & Processing	***16.80***	***16.73***	***16.73***	***19.11***	***19.47***	***19.58***	***17.93***
Fuel Use	15.01	14.91	14.87	16.99	17.18	17.22	15.66
Fugitive Emissions	1.80	1.82	1.86	2.12	2.29	2.36	2.27
Cement Plants	***5.57***	***6.14***	***6.92***	***7.20***	***7.61***	***7.56***	***7.60***
Clinker Production	3.46	4.08	4.65	4.93	5.27	5.17	5.15
Fuel Use	2.11	2.07	2.26	2.28	2.34	2.39	2.45
Cogeneration Heat Output	***12.61***	***11.15***	***10.81***	***10.99***	***9.64***	***8.98***	***8.00***
Other Fugitive and Process Emissions	***8.13***	***8.02***	***7.81***	***7.90***	***7.98***	***8.01***	***7.95***
Natural Gas Transmission & Distribution	3.94	3.92	3.88	3.82	3.87	3.94	3.99
Manufacturing	0.24	0.22	0.19	0.20	0.17	0.18	0.10
Wastewater Treatment	1.87	1.85	1.85	1.85	1.86	1.85	1.85
Other	2.08	2.02	1.90	2.03	2.08	2.04	2.01
Electric Power	**90.34**	**88.06**	**95.09**	**89.65**	**88.24**	**83.67**	**68.58**
In-State Generation	***46.75***	***41.20***	***51.03***	***49.47***	***51.72***	***49.93***	***42.30***
Natural Gas	40.59	35.92	45.77	45.66	46.43	45.16	38.28
Other Fuels	5.05	4.03	4.44	2.91	4.40	3.65	2.55
Fugitive and Process Emissions	1.10	1.25	0.82	0.90	0.90	1.13	1.48
Imported Electricity	***43.59***	***46.86***	***44.07***	***40.17***	***36.51***	***33.74***	***26.28***
Unspecified Imports	13.45	15.52	17.48	11.82	13.44	11.21	9.68
Specified Imports	30.14	31.34	26.59	28.35	23.07	22.52	16.60

[80] *A carbon inventory identifies and quantifies sources and sinks of greenhouse gases. Sinks are defined as a natural or artificial reservoir that accumulates and stores some carbon-containing chemical compound for an indefinite period.*

Table IV.F-3
California GHG Inventory
(million metric tons CO_2e)

	2010	2011	2012	2013	2014	2015	2016
Commercial and Residential	**45.05**	**45.50**	**42.89**	**43.54**	**37.37**	**37.94**	**39.36**
Residential Fuel Use	***29.19***	***29.64***	***27.34***	***28.14***	***22.87***	***23.29***	***24.20***
Natural Gas	26.99	27.51	25.76	26.52	21.58	21.90	22.80
Other Fuels	2.21	2.13	1.58	1.62	1.28	1.39	1.40
Commercial Fuel Use	***13.58***	***13.71***	***13.41***	***13.30***	***12.51***	***12.67***	***12.92***
Natural Gas	11.17	11.33	11.25	11.28	10.39	10.50	10.89
Other Fuels	2.41	2.38	2.16	2.02	2.12	2.16	2.03
Commercial Cogeneration Heat Output	***0.92***	***0.78***	***0.76***	***0.71***	***0.58***	***0.56***	***0.81***
Other Commercial and Residential	***1.36***	***1.37***	***1.38***	***1.40***	***1.41***	***1.42***	***1.43***
Agriculture	**34.27**	**34.89**	**36.08**	**34.61**	**35.95**	**34.41**	**33.84**
Livestock	***24.00***	***23.84***	***24.47***	***23.49***	***23.81***	***23.10***	***22.99***
Enteric Fermentation (Digestive Process)	12.13	11.98	12.10	11.78	11.85	11.40	11.35
Manure Management	11.86	11.86	12.38	11.71	11.96	11.70	11.64
Crop Growing & Harvesting	***7.50***	***7.40***	***7.73***	***7.42***	***7.48***	***6.91***	***6.89***
Fertilizers	5.78	5.67	5.93	5.65	5.72	5.28	5.25
Soil Preparation and Disturbances	1.64	1.65	1.73	1.69	1.68	1.56	1.56
Crop Residue Burning	0.08	0.08	0.08	0.08	0.08	0.08	0.08
General Fuel Use	***2.77***	***3.65***	***3.88***	***3.71***	***4.66***	***4.39***	***3.95***
Diesel	1.96	2.52	2.47	2.53	3.54	3.66	3.19
Natural Gas	0.65	0.66	0.70	0.69	0.63	0.64	0.72
Gasoline	0.16	0.48	0.71	0.49	0.49	0.10	0.04
Other Fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00
High GWP	**13.52**	**14.54**	**15.54**	**16.65**	**17.70**	**18.93**	**19.78**
Ozone Depleting Substance (ODS) Substitutes	***13.20***	***14.21***	***15.25***	***16.38***	***17.42***	***18.37***	***19.24***
Electricity Grid SF6 Losses	***0.24***	***0.25***	***0.24***	***0.18***	***0.14***	***0.42***	***0.37***
Semiconductor Manufacturing	***0.08***	***0.08***	***0.06***	***0.08***	***0.14***	***0.14***	***0.16***
Recycling and Waste	**8.37**	**8.47**	**8.49**	**8.52**	**8.59**	**8.73**	**8.81**
Landfills	***8.11***	***8.19***	***8.20***	***8.22***	***8.28***	***8.40***	***8.47***
Composting	***0.26***	***0.27***	***0.29***	***0.30***	***0.31***	***0.33***	***0.34***
Included Inventory Emissions	***448.11***	***443.91***	***450.38***	***447.59***	***444.10***	***441.40***	***429.35***

Source: California GHG Inventory for 2000–2016—by Category as Defined in the Climate Change Scoping Plan million metric tons of CO_2e—(based upon IPCC Fourth Assessment Report's Global Warming Potentials).

(2) Existing Project Site Emissions

The Project Site includes 91,200 square feet of mixed live/work and commercial uses. As shown in Table IV.F-4, the existing development at the Project Site generates about 1,312 metric tons of CO_2e annually, with the majority of emissions generated by mobile sources traveling to and from the existing development on-site.

Table IV.F-4
Existing Project Site Uses Annual Greenhouse Gas Emissions
(metric tons CO2e)

Source Category	Carbon Dioxide (CO_2)	Methane (CH_4)	Nitrous Oxide (N_2O)	Carbon Dioxide Equivalent (CO_2e)
Area	<1	0	0	<1
Energy	400	<1	<1	401
Mobile	807	<1	0	808
Waste	10	1	0	25
Water	71	<1	<1	78
Total	**1,287**	**1**	**<1**	**1,312**

Source: DKA Planning, 2018

3. Project Impacts

a) Methodology

Because there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the Project's impacts related to GHG emissions focuses on its consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the Project's GHG-related impacts on the environment.

However, for informational purposes, the analysis also calculates the amount of GHG emissions that would be attributable to the Project using recommended air quality models, as described below. The primary purpose of quantifying the Project's GHG emissions is to satisfy State CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. The estimated emissions inventory is also used to determine if there would be a reduction in the Project's incremental contribution of GHG emissions as a result of compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions. The significance of the Project's GHG emissions impacts is not based on the amount of GHG emissions resulting from the Project.

The California Climate Action Registry (Climate Registry) General Reporting Protocol provides basic procedures and guidelines for calculating and reporting GHG emissions from a number of general and industry-specific activities.[81] The General Reporting

[81] *California Climate Action Registry, General Reporting Protocol Version 3.1, January 2009.*

Protocol is based on the "Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard" developed by the World Business Council for Sustainable Development and the World Resources Institute through "a multi-stakeholder effort to develop a standardized approach to the voluntary reporting of GHG emissions."[82] Although no numerical thresholds of significance have been developed, and no specific protocols are available for land use projects, the General Reporting Protocol provides a basic framework for calculating and reporting GHG emissions from the project. The information provided in this section is consistent with the General Reporting Protocol's reporting requirements.

The General Reporting Protocol recommends the separation of GHG emissions into three categories that reflect different aspects of ownership or control over emissions. They include the following:

- Scope 1: Direct, onsite combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- Scope 2: Indirect, offsite emissions associated with purchased electricity or purchased steam.
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy (e.g., energy used to convey, treat, and distribute water and wastewater).[83]

The General Reporting Protocol provides a range of basic calculations methods. However, the General Reporting Protocol calculations are typically designed for existing buildings or facilities. These retrospective calculation methods are not directly applicable to planning and development situations where buildings do not yet exist.

CARB recommends consideration of indirect emissions to provide a more complete picture of the GHG emissions footprint of a facility. Annually reported indirect energy usage aids the conservation awareness of a facility and provides information to CARB to be considered for future strategies.[84] For example, CARB has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, OPR has noted that lead agencies "should make a good-

[82] *Ibid.*

[83] *Embodied energy is a scientific term that refers to the quantity of energy required to manufacture and supply to the point of use a product, material, or service.*

[84] *CARB, Initial Statement of Reasons for Rulemaking, Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32), Planning and Technical Support Division Emission Inventory Branch, October 19, 2007.*

faith effort, based on available information, to calculate, model, or estimate… GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities."[85] Therefore, direct and indirect emissions have been calculated for the Project.

A fundamental difficulty in the analysis of GHG emissions is the global nature of the existing and cumulative future conditions. Changes in GHG emissions can be difficult to attribute to a particular planning program or project because the planning effort or project may cause a shift in the locale for some type of GHG emissions, rather than causing "new" GHG emissions. As a result, there is an inability to conclude whether a project's GHG emissions represent a net global increase, reduction, or no change in GHG emissions that would exist if the project were not implemented. The analysis of the Project's GHG emissions is particularly conservative in that it assumes all of the GHG emissions are new additions to the atmosphere.

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. CalEEMod was developed in collaboration with the air districts of California, who provided data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) to account for local requirements and conditions. The model is considered by SCAQMD to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.[86]

(1) Construction

The Project's construction emissions were calculated using CalEEMod Version 2016.3.1. Details of the modeling assumptions and emission factors are provided in **Appendix C** of the Draft EIR. CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule, included in **Appendix C** of the Draft EIR, and included the mobile- source and fugitive dust emissions factors derived from CalEEMod.

The calculations of the emissions generated during Project construction activities reflect the types and quantities of construction equipment that would be used to remove

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[85] *OPR Technical Advisory, p. 5.*

[86] *California Air Pollution Control Officers Association, California Emissions Estimator Model, CalEEMod™, www.caleemod.com, accessed May 25, 2018.*

existing pavement, grade, and excavate the Project Site; construct the proposed building and related improvements; and plant new landscaping within the Project Site.

In accordance with SCAQMD's guidance, GHG emissions from construction were amortized (i.e., averaged annually) over the lifetime of the Project. Because emissions from construction activities occur over a relatively short-term period of time, they contribute a relatively small portion of the overall lifetime GHG emissions for the Project. In addition, GHG emissions reduction measures for construction equipment are relatively limited. Thus, SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime, so that GHG emissions reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies.[87] As a result, the Project's total construction GHG emissions were divided by 30 to determine an approximate annual construction emissions estimate comparable to operational emissions.

(2) Operation

Similar to construction, the SCAQMD-recommended CalEEMod is used to calculate potential GHG emissions generated by new land uses on the Project Site, including area sources, electricity, natural gas, mobile sources, stationary sources (i.e., emergency generators), solid waste generation and disposal, and water usage/wastewater generation.

Area source emissions include landscaping equipment that are based on the size of the land uses (e.g., square footage or dwelling unit), the GHG emission factors for fuel combustion, and the GWP values for the GHG emissions emitted.

GHG emissions associated with electricity demand are based on the size of the land uses, the electrical demand factors for the land uses, the GHG emission factors for the electricity utility provider, and the GWP values for the GHG emissions emitted. As with electricity, the emissions of GHG emissions associated with natural gas combustion are based on the size of the land uses, the natural gas combustion factors for the land uses in units of million British thermal units (MMBtu), the GHG emission factors for natural gas combustion, and the GWP values for the GHG emissions emitted.

Mobile source GHG emissions are calculated based on an estimate of the Project's annual VMT, which is derived using CalEEMod based on the trip generation provided in the Transportation Study prepared for the Project. The CalEEMod-derived VMT values account for the daily and seasonal variations in trip frequency and length associated

[87] *SCAQMD Governing Board Agenda Item 31, December 5, 2008.*

with new residential, employee, and visitor trips to and from the Project Site and other activities that generate a vehicle trip.

Stationary source GHG emissions are based on proposed stationary sources (i.e., emergency generators) that would be provided on the Project Site.

GHG emissions associated with solid waste disposal are based on the size of the Project's proposed land uses, the waste disposal rate for the land uses, the waste diversion rate, the GHG emission factors for solid waste decomposition, and the GWP values for the GHG emissions emitted.

GHG emissions related to water usage and wastewater generation are based on the size of the land uses, the water demand factors, the electrical intensity factors for water supply, treatment, and distribution, electrical intensity factors for wastewater treatment, the GHG emission factors for the electricity utility provider, and the GWP values for the GHG emissions emitted.

GHG emissions calculations for the Project include credits or reductions for consistency with applicable Project Design Features set forth in this Draft EIR. The analysis of Project GHG emissions at buildout uses assumptions in CARB's EMFAC2014 model and also takes into account actions and mandates expected to be in force in 2022 (e.g., Pavley I Standards, full implementation of California's 33 percent RPS by 2030 and 50 percent by 2050 and the California LCFS). In addition, because mobile source GHG emissions are directly dependent on the number of vehicle trips, a decrease in the number of project-generated trips as a result of project features (e.g., close proximity to transit) would provide a proportional reduction in mobile source GHG emissions compared to a generic project without such locational benefits. Calculation of Project GHG emissions conservatively did not include actions and mandates that are not already in place but are expected to be enforced in 2022 (e.g., Pavley II, which could further reduce GHG emissions from use of light-duty vehicles by 2.5 percent). Similarly, emissions reductions regarding the Cap-and-Trade Program were not included in this analysis as they applied to other future reductions in non-transportation sectors. As for the Cap-and-Trade Program's benefits for the transportation sector, the analysis utilizes CARB's assumptions in EMFAC2014 for any short-term reductions in GHG emissions. By not speculating on potential regulatory conditions, the analysis takes a conservative approach that likely overestimates the Project's GHG emissions at buildout, because the state is expected to implement a number of policies and programs aimed at reducing GHG emissions from the land use and transportation sectors to meet the state's long-term climate goals.

There are no GHG emissions thresholds adopted by the SCAQMD that are applicable to the Project. In 2008, SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds. Within its October 2008 document, the SCAQMD proposed the use of a percent emission reduction target to determine significance for commercial/ residential projects that emit greater than 3,000 MTCO2e per year. Under this proposal, climate change impacts of commercial/residential projects that emit fewer than 3,000 MTCO2e per year would be assumed to be less than significant. However, the proposed screening thresholds were not adopted by the SCAQMD, and therefore, are not analyzed in the Draft EIR.

(3) Consistency with Applicable Plans and Policies

A consistency analysis has been provided that describes the Project's compliance with or exceedance of performance-based standards, and consistency with applicable plans and policies adopted for the purpose of reducing GHG emissions, included in the applicable portions of the *Climate Change Scoping Plan*, the 2016–2040 RTP/SCS, the LA Green Plan/Climate LA Plan, and the Sustainable City pLAn.

As part of the *Climate Change Scoping Plan*, a statewide emissions inventory was developed as required by AB 32 which directs CARB to develop and track GHG emissions reductions to document progress towards the state GHG target. The emissions inventory also takes into account GHG emissions reduction measures developed by CARB to achieve state targets. Consistency with the *Climate Change Scoping Plan* is evaluated by comparing the Project's GHG reduction measures to those contained in the Scoping Plan.

As noted in CEQA Guidelines Section 15064.4(b)(3), consistency with such plans and policies "must reduce or mitigate the project's incremental contribution of greenhouse gas emissions." To demonstrate such incremental reductions, this section estimates reductions of project-related GHG emissions resulting from consistency with plans. Consistent with evolving scientific knowledge, approaches to GHG quantification may continue to evolve in the future.

While there are many ways to quantify the efficiency of the GHG reduction measures provided for in the plans and policies, this analysis compares the Project's GHG emissions to the emissions that would be generated by the Project in the absence of any GHG reduction measures (i.e., the No Action Taken [NAT] Scenario. This approach is consistent with the concepts used in CARB's 2017 Climate Change Scoping Plan. This methodology is used to analyze consistency with applicable GHG reduction plans and policies and demonstrate the efficacy of the measures contained therein, but it is not a threshold of significance.

The analysis in this section includes potential emissions under NAT scenarios and from the Project at build-out based on actions and mandates expected to be in force in 2020. Early-action measures identified in the Climate Change Scoping Plan that have not been approved were not credited in this analysis. By not speculating on potential regulatory conditions, the analysis takes a conservative approach that likely overestimates the Project's GHG emissions at build-out. The NAT scenario is used to establish a comparison with Project-generated GHG emissions. The NAT scenario does not consider site-specific conditions, Project Design Features, or prescribed mitigation measures. As an example, a NAT scenario would apply a base ITE trip-generation rate for the Project and would not consider site-specific benefits resulting from the proposed mix of uses or close proximity to public transportation.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the State CEQA Guidelines (Appendix G), a project would have a significant impact related to GHG emissions if the project would do the following:

(a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;

(b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHG emissions.

Section 15064.4 of the CEQA Guidelines recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project: 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 plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines 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, 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]).[88] 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.[89] 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.[90] 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."[91] 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.[92]

In the absence of any adopted numeric threshold, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b) by

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[88] *See, generally, Section 15130(f); see also Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, dated April 13, 2009.*

[89] *14 CCR § 15064(h)(3).*

[90] *Ibid.*

[91] *Ibid.*

[92] *See, for example, San Joaquin Valley Air Pollution Control District, CEQA Determinations of Significance tor Projects Subject to ARB's GHG Cap-and-Trade Regulation, APR—2030 (June 25, 2014), in which the SJVAPCD "determined that GHG emissions increases that are covered under ARB's Cap-and-Trade regulation cannot constitute significant increases under CEQA…" Further, the South Coast Air Quality Management District (SCAQMD) has taken this position in CEQA documents it has produced as a lead agency. The SCAQMD has prepared three Negative Declarations and one Draft Environmental Impact Report that demonstrate the SCAQMD has applied its 10,000 $MTCO_2e$/yr. significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See: SCAQMD, Final Negative Declaration for: Ultramar Inc. Wilmington Refinery Cogeneration Project, SCH No. 2012041014 (October 2014); SCAQMD, Final Negative Declaration tor Phillips 66 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity Project, SCH No. 2013091029 (December 2014); Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (December 2014); and Draft Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project, SCH No. 2014121014 (April 2014).*

considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. For this Project, the most directly applicable adopted regulatory plan to reduce GHG emissions is the 2016–2040 RTP/SCS, which is designed to achieve regional GHG reductions from the land use and transportation sectors as required by SB 375 and the state's long-term climate goals. This analysis also considers consistency with regulations or requirements adopted by the AB 32 *Climate Change Scoping Plan*, the City's LA Green Plan, and the Sustainable City pLAn.

(2) SCAQMD Thresholds

On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO2e per year for stationary source/industrial projects where the SCAQMD is the lead agency. However, this interim GHG significance threshold is not applicable to the Project as the Project is a residential/hotel/commercial project, and the City is the Lead Agency. The SCAQMD has yet to adopt a GHG significance threshold for land use development projects (e.g., residential/commercial projects).

(3) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) does not identify any criteria to evaluate GHG emissions impacts. Thus, the potential for the Project to result in impacts from GHG emissions is based on Appendix G. For the reasons set forth above, to answer both of the Appendix G questions, the City will consider whether the project is consistent with AB 32, SB 32, SB 375 (through demonstration of conformance with the 2016–2040 RTP/SCS), the LA Green Plan, and the Sustainable City pLAn. As discussed above, OPR has noted that lead agencies "should make a good-faith effort to calculate or estimate GHG emissions from a project.[93] GHG emissions are quantified below, consistent with OPR guidelines.

c) Project Design Features

The following Project Design Features (PDFs) are applicable to the Project with regard to GHG emissions:

GHG-PDF-1 The Project shall prohibit the use of natural gas-fueled fireplaces in the proposed live/work units.

[93] *OPR Technical Advisory, p. 5.*

GHG-PDF-2 Twenty percent of the total code-required parking spaces shall be capable of supporting future electric vehicle charging equipment. Plans will indicate the proposed type and location(s) of EVSE and also include raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to simultaneously charge all electric vehicles at all designated EV charging locations at their full rated amperage. Plan design will be based upon Level 2 or greater EVSE at its maximum operating capacity. Only raceways and related components are required to be installed at the time of construction. When the application of the 20 percent results in a fractional space, the Applicant will round up to the next whole number. A label stating "EV CAPABLE" will be posted in a conspicuous place at the service panel or subpanel and next to the raceway termination point.

GHG-PDF-3 Water conservation measures shall include:

- High-efficiency toilets (with flush volume of 1.06 gallons of water per flush or less) throughout, including ultra-low-flow urinals in all nonresidential restrooms, as appropriate.
- Residential lavatory faucets with a maximum flow rate of 1.2 gallons per minute and kitchen faucets with a maximum flow rate of 1.5 gallons per minute.
- High-efficiency washers, whether within individual units (with water factor of 6.0 or less) and/or in common laundry rooms (commercial washers with water factor of 7.5 or less). Equipment is required to be Energy Star-certified.
- High-efficiency dishwasher within individual units, using 3.5 gallons per cycle or less. Equipment is required to be Energy Star-certified.
- No-flush or waterless urinals in all nonresidential restrooms as appropriate.
- Nonresidential lavatory faucets with a maximum flow rate of 0.4 gallon per minute and of a self-closing design (i.e., that would automatically turn off when not in use.
- Nonresidential kitchen faucets (except restaurant kitchens) with a maximum flow rate of 1.5 gallons per minute. Restaurant kitchen

faucets shall have pre-rinse self-closing spray heads with a maximum flow rate of 1.6 gallons per minute.

- Installation of tankless and on-demand water heaters in commercial kitchens and restrooms, where appropriate.
- Water-saving pool filter.
- Pool/spa recirculating filtration equipment.
- Pool splash troughs around the perimeter that drain back into the pool.
- Leak detection system for swimming pools and Jacuzzi.
- Minimum irrigation system distribution uniformity of 75 percent.
- Use of proper hydro-zoning, turf minimization, zoned irrigation and use of native/drought-tolerant plant materials.
- Use of landscape contouring to minimize precipitation runoff.

In addition, the Project would comply with all applicable state and local regulatory requirements, including the provisions set forth in the LAGBC. In addition, as discussed in **Section IV.L, Transportation/Traffic**, of the Draft EIR, a Transportation Demand Management (TDM) Program would be developed and would include strategies to promote non-auto travel and reduce the use of single-occupant vehicle trips, pursuant to Mitigation Measure TR-MM-1. Furthermore, the Project would also include sustainability features related to water conservation and waste reduction, as set forth above.

a) Analysis of Project Impacts

Would the Project:

Threshold (a) ***Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?***

Threshold (b): ***Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG?***

(1) Impact Analysis

(a) Consistency with Applicable Plans and Policies

The discussion below describes the extent the Project complies with or exceeds the performance-based standards included in the regulations outlined in the *Climate Change Scoping Plan*, the 2016–2040 RTP/SCS, the LA Green Plan, and the Sustainable City pLAn. As shown herein, the Project would be consistent with the applicable GHG reduction plans and policies.

(i) Statewide: Climate Change Scoping Plan

The goal to reduce GHG emissions to 1990 levels by 2020 (Executive Order S-3-05) was codified by the Legislature as the 2006 Global Warming Solutions Act (AB 32). In 2008, CARB approved a *Climate Change Scoping Plan* as required by AB 32, which has been updated over time to reflect updated strategies.[94] In addition, SB 32 was approved in 2016, calling for deeper GHG emissions reductions by 2030. The *2017 Climate Change Scoping Plan* addresses the 2030 horizon and has a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program. The following discussion demonstrates how the pertinent reduction actions relate to and reduce project-related GHG emissions.

Provided in Table IV.F-5 is an evaluation of the Project's consistency with applicable reduction actions/strategies by emissions source category outlined in the *2017 Climate Change Scoping Plan Update*.[95] As discussed therein, the Project would be consistent with the GHG reduction-related actions and strategies of the 2017 *Climate Change Scoping Plan Update*. The 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the *2017 Climate Change Scoping Plan Update*. Provided in Table IV.F-6 is an evaluation of the Project's consistency with applicable reduction actions/strategies in the 2017 Scoping Plan Update. As discussed therein, the Project would be consistent with the GHG reduction-related actions and strategies of the *2017 Climate Change Scoping Plan Update.*

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[94] *Climate Change Proposed Scoping Plan was approved by CARB on December 11, 2008.*

[95] *An evaluation of stationary sources is not necessary as the stationary sources emissions will be created by emergency generators that would only be used in an emergency.*

Table IV.F-5
Consistency Analysis—*Climate Change Scoping Plan* and First Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
Area (Less than 1 percent of project inventory)		
SCAQMD Rule 445 (Wood Burning Devices): Requires use of natural gas to power all cooking stoves and fireplaces.	SCAQMD	**Consistent.** Project Design Feature GHG-PDF-1 would prohibit hearths (woodstove and fireplaces) installed in the live/work units. All cooking stoves would either be electric or natural gas, not wood-burning.
Energy (41 percent of project inventory)		
California Renewables Portfolio Standard (RPS) program: Senate Bill 2X modified California's RPS program to require that both public and investor-owned utilities in California receive at least 33 percent of their electricity from renewable sources by the year 2020. California Senate Bill 2X also requires regulated sellers of electricity to meet an interim milestone of procuring 25 percent of their energy supply from certified renewable resources by 2016.	LADWP	**Consistent.** LADWP's commitment to achieve 35 percent renewables by 2020 would exceed the requirement under the RPS program of 33 percent renewables by 2020. In 2017, LADWP indicated that 29 percent of its electricity came from renewable resources in Year 2016.[a] As LADWP would provide electricity service to the Project Site, the Project would use electricity that is produced consistent with this performance-based standard. Electricity-related GHG emissions provided in Table IV.F-10 assume that LADWP will receive at least 33 percent of their electricity from renewable sources by the 2020.
Senate Bill 350 (SB 350): The Clean Energy and Pollution Reduction Act of 2015 increases the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by 2030 and also requires the State Energy Resources Conservation and Development Commission to	State Energy Resources Conservation and Development Commission and LADWP	**Consistent.** LADWP would be required to generate electricity that would increase renewable energy resources to 50 percent by 2030. As LADWP would provide electricity service to the Project Site, the Project by 2030 would use electricity consistent with the requirements of SB 350. Project buildout would occur in Year 2021 and, therefore, the estimated GHG emissions from electricity usage provided

Table IV.F-5
Consistency Analysis—*Climate Change Scoping Plan* and First Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.[b]		herein conservatively do not include implementation of SB 350 with a compliance date of 2030. Electricity GHG emissions presented in Table IV.F-10 would be further reduced by 17 percent by Year 2030, as the electricity provided to the Project Site would meet the requirements under SB 350. As required under SB 350, doubling of the energy efficiency savings from final end uses of retail customers by 2030 would primarily rely on the existing suite of building energy efficiency standards under the California Code of Regulations (CCR), Title 24, Part 6 (consistency with this regulation is discussed below) and utility-sponsored programs such as rebates for high-efficiency appliances, HVAC systems and insulation. The Project would support this action/strategy because it includes compliance with specific requirements of the Los Angeles Green Code (consistency with this regulation is discussed below).
Senate Bill 1368 (SB 1368): GHG Emissions Standard for Baseload Generation prohibits any retail seller of electricity in California from entering into a long-term financial commitment for baseload generation if the GHG emissions are higher than those from a combined-cycle natural gas power plant.	State, CEC, and LADWP	**Consistent.** LADWP meets the requirements of SB 1368. As LADWP would provide electricity service to the Project Site, the Project would use electricity that meets the requirements under SB 1368.

Table IV.F-5
Consistency Analysis—*Climate Change Scoping Plan* and First Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
California Code of Regulations (CCR), Title 20: The 2012 Appliance Efficiency Regulations, adopted by the California Energy Commission (CEC), include standards for new appliances (e.g., refrigerators) and lighting, if they are sold or offered for sale in California.	State and CEC	**Consistent.** The Appliance Efficiency Regulations apply to new appliances and lighting that are sold or offered for sale in California. The Project would include new appliances and lighting that comply with this energy efficiency standard. In addition, **Section IV.M.4, Energy Conservation**, of the Draft EIR, demonstrates that the Project efficiently uses energy and does not result in wasteful energy use.
CCR, Title 24, Building Standards Code: The 2013 Building Energy Efficiency Standards contained in Title 24, Part 6 (also known as the California Energy Code), requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The California Green Building Standards Code (Part 11, Title 24) established mandatory and voluntary standards on planning and design for sustainable site development, energy efficiency (extensive update of the California Energy Code), water conservation, material conservation, and internal air contaminants.	State and CEC	**Consistent.** Consistent with regulatory requirements, the Project must comply with applicable provisions of the 2016 Los Angeles Green Code that in turn requires compliance with mandatory standards included in the California Green Building Standards. The 2016 Title 24 standards are 28 percent more efficient (for electricity) than residential construction built to the 2013 Title 24 standards and 5 percent more efficient (for electricity) for non-residential construction built to 2013 Title 24 standards.[c] The 2016 Title 24 standards are more efficient than the 2020 Projected Emissions under Business-as-Usual in CARB's *Climate Action Scoping Plan*. The standards promote the use of better windows, insulation, lighting, ventilation systems and other features that reduce energy consumption in homes and businesses. Thus, the Project has incorporated energy efficiency standards that are substantially more effective

Table IV.F-5
Consistency Analysis—*Climate Change Scoping Plan* and First Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
		than the measures identified in the *Climate Action Scoping Plan* to reduce GHG emissions.
Energy Independence and Security Act of 2007 (EISA): EISA requires manufacturing for sale within the United States to phase out incandescent light bulbs between 2012 and 2014 resulting in approximately 25 percent greater efficiency for light bulbs and requires approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020.	Federal/ Manufacturers	**Consistent.** EISA would serve to reduce the use of incandescent light bulbs for the Project and, thus, reduce energy usage associated with lighting. Electricity GHG emissions provided in Table IV.F-10 account for a 25-percent reduction in lighting electricity consumption with implementation of this regulation.
Assembly Bill 1109 (AB 1109): The Lighting Efficiency and Toxic Reduction Act prohibits a person from manufacturing for sale in the state specified general purpose lights that contain levels of hazardous substances, as it requires the establishment of minimum energy efficiency standards for all general purpose lights. The standards are structured to reduce average statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting by 2018.[d]	State/ Manufacturers	**Consistent.** As with the EISA, discussed above, the Project would meet the requirements under AB 1109 because it incorporates energy efficient lighting and electricity consumption that complies with local and state green building programs.
Cap-and-Trade Program: The program establishes an overall limit on GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, and cement production). Facilities subject to the cap are	State/ Manufacturers	**Consistent.** As required by AB 32 and the Climate Change Scoping Plan, the Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in- state or

Table IV.F-5
Consistency Analysis—*Climate Change Scoping Plan* and First Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
able to trade permits to emit GHG emissions within the overall limit.		imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. Therefore, annual GHG emissions associated with the Project's electricity usage presented in Table IV.F-10 would be covered by the Cap-and-Trade Program (as LADWP would be a covered entity) and would be consistent with AB 32 and the Climate Change Scoping Plan.
Mobile (53 percent of project inventory)		
Assembly Bill 1493 (AB 1493) "Pavley Standards": AB 1493 requires the development and adoption of regulations to achieve "the maximum feasible reduction of greenhouse gases" emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the State. In compliance with AB 1493, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles and light duty trucks of model year 2009 through 2016. Model years 2017 through 2025 are addressed by California's Advanced Clean Cars program (discussed below).	State, CARB	**Consistent.** The Pavley regulations reduced GHG emissions from California passenger vehicles by about 22 percent in 2012 and are expected to reduce GHG emissions by about 30 percent in 2016, all while improving fuel efficiency. GHG emissions related to vehicular travel by the Project would benefit from this regulation because vehicle trips associated with the Project would be affected by AB 1493. Mobile source emissions generated by the Project would be reduced with implementation of AB 1493 consistent with reduction of GHG emissions under AB 32. Mobile source GHG emissions provided in Table IV.F-10 were calculated using CalEEMod that includes implementation of AB 1493 into mobile source emission factors.
Executive Order S-01-07: The Low Carbon Fuel Standard requires a 10-percent or greater reduction by 2020 in the average fuel carbon	State, CARB	**Consistent.** GHG emissions related to vehicular travel by the Project would benefit from this regulation because fuel used by Project-related

Table IV.F-5
Consistency Analysis—*Climate Change Scoping Plan* and First Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
intensity for transportation fuels in California regulated by CARB. CARB identified the LCFS as a Discrete Early Action item under AB 32, and the final resolution (09-31) was issued on April 23, 2009 (CARB 2009).[e,f]		vehicles would be compliant with LCFS. Mobile source GHG emissions provided in Table IV.F-10 were calculated using CalEEMod that includes implementation of the LCFS into mobile source emission factors.
Advanced Clean Cars Program: In 2012, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model year 2017 through 2025. The program combines the control of smog, soot, and GHG emissions with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.	State, CARB	**Consistent.** Standards under the Advanced Clean Cars Program will apply to all passenger and light duty trucks used by customers, employees, and deliveries to the Project. GHG emissions related to vehicular travel by the Project would benefit from this regulation and mobile source emissions generated by the Project would be reduced with implementation of standards under the Advanced Clean Cars Program consistent with reduction of GHG emissions under AB 32. Mobile source GHG emissions, provided in Table IV.F-10 conservatively do not include this additional 34-percent reduction in mobile source emissions, as the CalEEMod model does not yet account for this regulation. The Project would further support this regulation since the Project would provide at least 20 percent of the total code-required parking spaces for the Project to be capable of supporting future EVSE as dictated by Project Design Feature GHG-PDF-2, and the Project would provide at least 5 percent of the total code-required parking spaces with EV charging stations as dictated by the LAGBC.

Table IV.F-5
Consistency Analysis—*Climate Change Scoping Plan* and First Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
Senate Bill (SB) 375: SB 375 requires integration of planning processes for transportation, land-use and housing. Under SB 375, each Metropolitan Planning Organization would be required to adopt a Sustainable Community Strategy (SCS) to encourage compact development that reduces passenger vehicle miles traveled and trips so that the region will meet a target, created by CARB, for reducing GHG emissions.	State, CARB Regional, SCAG	**Consistent.** SB 375 requires SCAG to direct the development of the SCS for the region, which is discussed further below. The Project represents an infill development within an existing urbanized area that would concentrate new residential and commercial retail and restaurant uses within an HQTA. Therefore, the Project would be consistent with SCAG's 2016–2040 RTP/SCS. Furthermore, the 2016–2040 RTP/SCS would result in an estimated 18-percent decrease in per capita GHG emissions from passenger vehicles by 2035 and 21-percent decrease in per capita GHG emissions from passenger vehicles by 2040. As Project-related transportation emissions are reduced by approximately 30 percent (see Table IV.F-11 and **Appendix C** of the Draft EIR), which is greater than the reduction anticipated in the 2016-2040 RTP/SCS, the Project would be consistent with SB 375 and the 2016-2040 RTP/SCS, as discussed further in Table IV.F-7.
Solid Waste (Two percent of project inventory)		
California Integrated Waste Management Act of 1989 and Assembly Bill 341: The California Integrated Waste Management Act of 1989 requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction,	State	**Consistent.** GHG emissions related to solid waste generation from the Project would benefit from this regulation as it would decrease the overall amount of solid waste disposed of at landfills. The decrease in solid waste would then in return decrease the amount of methane released from the decomposing solid waste. Project-related GHG emissions from solid waste

Table IV.F-5
Consistency Analysis—*Climate Change Scoping Plan* and First Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
recycling, and composting activities; and (2) diversion of 50 percent of all solid waste on and after January 1, 2000, through source reduction, recycling, and composting facilities.[g] ***AB 341 (2011)*** amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter.[h]		generation provided in Table IV.F-10 include a 50-percent reduction in solid waste generation source emissions per goals of the City. The Applicant would only contract for waste disposal services with a company that recycles solid waste in compliance with AB 341. In addition, the Project would provide recycling bins at appropriate locations to promote recycling of paper, metal, glass and, other recyclables.
Water (Three percent of project inventory)		
CCR, Title 24, Building Standards Code: The California Green Building Standards Code (Part 11, Title 24) includes water efficiency requirements for new residential and non-residential uses, in which buildings shall demonstrate a 20-percent overall water use reduction.	State	**Consistent.** Water usage rates were calculated consistent with the requirements under City Ordinance No. 184,248, 2013 California Plumbing Code, CALGreen, 2014 Los Angeles Plumbing Code, and 2016 Los Angeles Green Building Code and reflect approximately a 20 percent reduction in water usage as compared to the base demand. Project-related GHG emissions from water related sources, provided in Table IV.F-10 accounts for compliance with water efficiency requirements. **Section II, Project Description**, of the Draft EIR provides a specific list of water conservation measures. Examples include: residential bathroom faucets with a maximum flow rate of 1.0 gallons per minute, kitchen faucets with a maximum flow rate of 1.5

Table IV.F-5
Consistency Analysis—*Climate Change Scoping Plan* and First Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
		gallons per minute, Energy Star-certified and high efficiency clothes washers and dishwashers, non-residential kitchen faucets (except restaurant kitchens) with a maximum flow rate of 1.5 gallons per minute, and installation of tankless and on-demand water heaters in commercial kitchens and restrooms, when appropriate, among others. The Project would have an overall water use reduction of 20 percent and would meet the requirements of the California Green Building Standards.
Senate Bill X7-7: The Water Conservation Act of 2009 sets an overall goal of reducing per-capita urban water use by 20 percent by December 31, 2020. The state is required to make incremental progress toward this goal by reducing per-capita water use by at least 10 percent by December 31, 2015. This in an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water; it also reduces emissions from wastewater treatment.	State	**Consistent.** As discussed above under Title 24, the Project would meet this performance-based standard. In addition, **Section II, Project Description**, of the Draft EIR, provides a specific list of water conservation measures consistent with Green Building Code requirements. Examples include: residential bathroom faucets with a maximum flow rate of 1.2 gallons per minute, kitchen faucets with a maximum flow rate of 1.5 gallons per minute, Energy Star-certified and high-efficiency clothes washers and dishwashers, nonresidential kitchen faucets (except restaurant kitchens) with a maximum flow rate of 1.5 gallons per minute, and installation of tankless and on-demand water heaters in commercial kitchens and restrooms, when appropriate, among others. The Project thereby includes measures consistent with the GHG

Table IV.F-5
Consistency Analysis—*Climate Change Scoping Plan* and First Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
		reductions sought by SB X7-7 related to water conservation and related GHG emissions.
Construction (1 percent of project inventory)		
CARB In-Use Off-Road Regulation: CARB's in-use off- road diesel vehicle regulation ("Off-Road Diesel Fleet Regulation") requires the owners of off-road diesel equipment fleets to meet fleet average emissions standards pursuant to an established compliance schedule.	CARB	**Consistent.** The Project would use construction contractors that would comply with this regulation.
CARB In-Use On-Road Regulation: CARB's in-use on- road heavy-duty vehicle regulation ("Truck and Bus Regulation") applies to nearly all privately and federally owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds.	CARB	**Consistent.** The Project would use construction contractors that would comply with this regulation.

[a] *California Energy Commission, Utility Annual Power Content Labels for 2016, www.energy.ca.gov/pcl/labels/.*
[b] *Senate Bill 350 (2015–2016 Reg, Session) Stats 2015, Ch. 547.*
[c] *CEC, Adoption Hearing, 2016 Building Energy Efficiency Standards.*
[d] *2007b. Assembly Bill 1109 (2007–2008 Reg. Session) Stats. 2007, Ch. 534.*
[e] *CARB, Initial Statement of Reason for Proposed Regulation for The Management of High Global Warming Potential Refrigerant for Stationary Sources, October 23, 2009.*
[f] *Carbon intensity is a measure of the GHG emissions associated with the various production, distribution, and use steps in the "lifecycle" of a transportation fuel.*
[g] *Cal. Pub. Res. Code § 41780(a).*
[h] *Cal. Pub. Res. Code § 41780.01(a).*
Source: DKA Planning, 2018.

Table IV.F-6
Consistency Analysis—2017 Scoping Plan Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
Senate Bill 350 (SB 350): The Clean Energy and Pollution Reduction Act of 2015 increases the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by 2030.[a] Required measures include: • Increase RPS to 50 percent of retail sales by 2030. • Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030. • Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in IRPs to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly owned utilities meet GHG emissions reductions planning targets through a	CPUC, CEC, CARB	**Consistent.** LADWP is required to generate electricity that would increase renewable energy resources to 33 percent by 2020 and 50 percent by 2030. As LADWP would provide electricity service to the Project Site, by 2030 the Project would use electricity consistent with the requirements of SB 350. It is assumed that LADWP will receive at least 33 percent of electricity from renewable sources by year 2020 and 50 percent by the year 2030 (with a straight line interpolation for the Project buildout year of 2021). As required under SB 350, doubling of the energy efficiency savings from final end uses of retail customers by 2030 would primarily rely on the existing suite of building energy efficiency standards under CCR Title 24, Part 6 (consistency with this regulation is discussed below) and utility-sponsored programs such as rebates for high-efficiency appliances, HVAC systems, and insulation. The Project would comply with this this action/strategy being located within the LADWP service area and would comply with CalGreen and Title 24 energy efficiency standards.

Table IV.F-6
Consistency Analysis—2017 Scoping Plan Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
combination of measures as described in IRPs.		
Implement Mobile Source Strategy (Cleaner Technology and Fuels) • At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025. • At least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030. • Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Cars regulations. • Medium- and heavy-duty GHG Phase 2. • Innovative Clean Transit: Transition to a suite of to-be- determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO_x standard.	CARB, CalSTA, SGC, CalTrans CEC, OPR, Local agencies	**Consistent.** The CARB approved the Advanced Clean Cars Program in 2012 that establishes an emissions control program for model year 2017 through 2025. Standards under the Advanced Clean Cars Program likely will apply to all passenger and light duty trucks used by customers, employees, and deliveries to the Project, depending on the outcome of ongoing negotiations between CARB and EPA regarding federal standards. The Program also requires auto manufacturers to produce an increasing number of zero emission vehicles in the 2018 through 2025 model years. Extension of the Advanced Clean Cars Program has not yet been adopted, but it is expected that measures will be introduced to increase GHG emissions reductions stringency on light duty autos and continue adding zero emission and plug in vehicles through 2030. CARB is also developing the Innovative Clean Transit measure to encourage purchase of advanced technology buses such as alternative fueled or battery powered buses. This would allow fleets to phase in cleaner technology in the near future. CARB is also in the process of developing proposals for new approaches and strategies to

Table IV.F-6
Consistency Analysis—2017 Scoping Plan Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
• Last Mile Delivery: New regulation that would result in the use of low NO_x or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030. • Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."		achieve zero emission trucks under the Advanced Clean Local Trucks (Last Mile Delivery) Program.[b,c] GHG emissions generated by Project-related vehicular travel would benefit from this regulation, and mobile source emissions generated by the Project would be reduced with implementation of standards under the Advanced Clean Cars Program, consistent with reduction of GHG emissions under AB 32. Mobile source GHG emissions provided in Table IV.F-10 conservatively do not include this additional 34-percent reduction in mobile source emissions as the CalEEMod model does not yet account for this regulation. Although the Innovative Clean Transit and Advanced Clean Local Truck Programs have not yet been established, the Project would also benefit from these measures once adopted. SB 375 requires SCAG to direct the development of the SCS for the region, which is discussed further below. The Project represents an infill development within an existing urbanized area that would concentrate new residential, commercial and hotel uses within an HQTA. Therefore, the Project would be consistent with SCAG's 2016–2040 RTP/SCS. Furthermore, the

Table IV.F-6
Consistency Analysis—2017 Scoping Plan Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
		2016–2040 RTP/SCS would result in an estimated 18-percent decrease in per capita GHG emissions from passenger vehicles by 2035 and 21-percent decrease in per capita GHG emissions from passenger vehicles by 2040. Project-related transportation emissions would be reduced by approximately 30 percent (see Table IV.F-11 and **Appendix C** of the Draft EIR), which is greater than the reduction anticipated in the 2016-2040 RTP/SCS, and therefore, the Project would be consistent with SB 375 and the 2016–2040 RTP/SCS.
Increase Stringency of SB 375 Sustainable Communities Strategy (2035 Targets)	CARB	**Consistent** Under SB 375, the CARB sets regional targets for GHG emission reductions from passenger vehicle use. In 2010, the CARB established targets for 2020 and 2035 for each region. As required under SB 375, the CARB is required to update regional GHG emissions targets every 8 years, which is due to be updated in 2018. As part of the 2018 updates, the CARB has proposed a passenger vehicle related GHG reduction of 19 percent for 2035 for the SCAG region, which is more stringent than the current reduction target of 13 percent for 2035. The Project would be consistent with SB 375 for developing an infill project within an existing urbanized area. This would concentrate new residential, commercial and retail uses within an

Table IV.F-6
Consistency Analysis—2017 Scoping Plan Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
		HQTA. Project-related transportation emissions would be reduced by approximately 30 percent (see **Appendix C** of the Draft EIR), which is greater than the reduction anticipated in the 2016-2040 RTP/SCS, and therefore, the Project would be consistent with SB 375 and the 2016–2040 RTP/SCS.
By 2019, adjust performance measures used to select and design transportation facilities. • Harmonize project performance with emissions reductions, and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection, etc.).	CalSTA and SGC, OPR, CARB, GoBiz, IBank, DOF, CTC, Caltrans	**Not Applicable.** The Project would not involve construction of transportation facilities. The Project would benefit from this station by encouraging use of mass transit resulting in a reduction of Project-related vehicle trips to and from the Project Site.
By 2019, develop pricing policies to support low- GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR/SGC, CARB	**Consistent.** The Project would support this policy since the Applicant would provide electric vehicle charging stations at 5 percent of total code required parking spaces for the Project, in accordance with the LAGBC. In addition, electric vehicle supply wiring (EV ready) would be available in at least 20 percent of the total code-required parking spaces for the Project, consistent with Project Design Feature GHG-PDF-2 .
Implement California Sustainable Freight Action	CARB	**Not Applicable.** The Project land uses would not include freight transportation or warehousing.

Table IV.F-6
Consistency Analysis—2017 Scoping Plan Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
Plan: • Improve freight system efficiency. • Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.		Therefore, the Project would not interfere or impede the implementation of the Sustainable Freight Action Plan.
Adopt a Low Carbon Fuel Standard with a CI reduction of 18 percent.	CARB	**Consistent.** This regulatory program applies to fuel suppliers, not directly to land use development. GHG emissions related to vehicular travel associated with the Project would benefit from this regulation because fuel used by Project-related vehicles would be required to comply with LCFS. Mobile source GHG emissions provided in Table IV.F-10 were calculated using CalEEMod that includes implementation of the LCFS into mobile source emission factors. The current LCFS, adopted in 2007, requires a reduction of at least 10 percent in the carbon intensity (CI) of California's transportation fuels by 2020. The CARB has proposed an amendment to the LCFS regulation to target a 20 percent reduction in CI from a 2010 baseline by 2030. The amendments were released in March 2018 with the public comment period ending in April 2018. The proposed amendments would be potentially

Table IV.F-6
Consistency Analysis—2017 Scoping Plan Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
		adopted in September 2018 with a Board hearing and voted.
Implement the Short-Lived Climate Pollutant Strategy by 2030: • 40 percent reduction in methane and hydrofluorocarbon emissions below 2013 levels. • 50 percent reduction in black carbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, SWRCB, Local air districts	**Consistent.** Senate Bill 605 (SB 605) was adopted in 2014 that directs CARB to develop a comprehensive Short-Lived Climate Pollutant (SLCP) strategy. Senate Bill 1383 was later adopted in 2016 to require CARB to set statewide 2030 emission reduction targets of 40 percent for methane and hydrofluorocarbons and 50 percent black carbon emissions below 2013 levels.[e] The Project would comply with the CARB SLCP Reduction Strategy, which limits the use of hydrofluorocarbons for refrigeration uses.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	CARB, CalRecycle, CDFA, SWRCB, Local air districts	**Not Applicable.** This strategy calls on regulators to reduce GHG emissions from landfills and is not applicable to a development project. Under SB 1383, the California Department of Resources Recycling and Recovery (CalRecycle) is responsible for achieving a 50 percent reduction in the level of statewide disposal of organic waste from the 2014 level by 2020 and 75-percent reduction by 2025. As of March 2018, CalRecycle is currently holding workshops to review draft regulatory language. Adoption of the regulations to achieve SB 1383 targets is expected in early 2019.[f]
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	**Not Applicable.** This applies to State regulators and is not applicable to a development project.

Table IV.F-6
Consistency Analysis—2017 Scoping Plan Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
		The current Cap-and-Trade Program would end on December 31, 2020. Assembly Bill 398 (AB 398) was enacted in 2017 to extend and clarify the role of the state's Cap-and-Trade Program from January 1, 2021, through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade Program to establish updated protocols and allocation of proceeds to reduce GHG emissions.
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink: • Protect land from conversion through conservation easements and other incentives. • Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity. • Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments. • Establish scenario projections to serve as the foundation for the Implementation Plan.	CNRA and departments within, CDFA, CalEPA, CARB	**Not Applicable.** This applies to State regulators and is not applicable to a development project. This regulatory program applies to Natural and Working Lands, not directly related to development of the Project. However, the Project would not interfere or impede implementation of the Integrated Natural and Working Lands Implementation Plan.
Establish a carbon accounting framework for natural and working lands as described	CARB	**Not Applicable.** This applies to State regulators and is not applicable to a development project**.**

Table IV.F-6
Consistency Analysis—2017 Scoping Plan Update

Actions and Strategies	Responsible Party(ies)	Project Consistency Analysis
in SB 859 by 2018		This regulatory program applies to Natural and Working Lands, not directly related to development of the Project. However, the Project would not interfere or impede implementation of the Integrated Natural and Working Lands Implementation Plan.
Implement Forest Carbon Plan	CNRA, CAL FIRE, CalEPA and departments within	**Not Applicable.** This applies to State regulators and is not applicable to a development project**.** This regulatory program applies to state and federal forest land, not directly related to development of the Project. However, the Project would not interfere or impede implementation of the Forest Carbon Plan.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	**Not Applicable.** This applies to State regulators and is not applicable to a development project**.** Funding and financing mechanisms are the responsibility of the state and local agencies. The Project would not conflict with funding and financing mechanisms to support GHG reductions.

[a] *Senate Bill 350 (2015–2016 Regular Session) Stats 2015, Ch. 547.*
[b] *CARB, Advance Clean Cars, Midterm Review, www.arb.ca.gov/msprog/acc/acc-mtr.htm.*
[c] *CARB, Advanced Clean Local Trucks (Last mile delivery and local trucks), www.arb.ca.gov/msprog/actruck/actruck.htm.*
[d] *CARB, LCFS Rulemaking Documents, www.arb.ca.gov/fuels/lcfs/rulemakingdocs.htm.*
[e] *CARB, Reducing Short-Lived Climate Pollutants in California, www.arb.ca.gov/cc/shortlived/shortlived.htm.*
[f] *CARB, Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions, www.calrecycle.ca.gov/climate/slcp/.*

Source: California Air Resources Board (CARB), California's 2017 Climate Change Scoping Plan, November 2017.

Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets.

Based on the analysis in Tables IV.F-5 and IV.F-6, the Project would be consistent with the State's Climate Change Scoping Plan Update.

(i) Regional: 2016–2040 RTP/SCS

The 2016–2040 RTP/SCS is expected to help California reach its GHG reduction goals, with reductions in per capita transportation emissions of 9 percent by 2020 and 16 percent by 2035.[96] Furthermore, although there are no per capita GHG emission reduction targets for passenger vehicles set by CARB for 2040, the 2016–2040 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2040.[97] The 2016–2040 RTP/SCS would result in an estimated 8-percent decrease in per capita passenger vehicle GHG emissions by 2020, 18-percent decrease in per capita passenger vehicle GHG emissions by 2035, and 21-percent decrease in per capita passenger vehicle GHG emissions by 2040. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an approximately 21-percent decrease in per capita passenger vehicle GHG emissions by 2040 (an additional 3-percent reduction in the five years between 2035 [18 percent] and 2040 [21 percent]), the 2016–2040 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the state's GHG emission reduction goals.

As shown in **Appendix C** of the Draft EIR, the Project would result in a VMT reduction of approximately 70 percent as compared to the Project without implementation of VMT reducing measures. As estimated by CalEEMod and as shown in **Appendix C** of the Draft EIR, the Project results in a reduction in GHG emissions from mobile sources as compared to the Project without implementation of VMT reducing measures. This would be consistent with the reduction in transportation emission per capita provided in the 2016–2040 RTP/SCS. This reduction is attributable to the Project characteristics as being an infill project near transit that supports multi-modal transportation options.

The Project would also be consistent with the following key GHG reduction strategies in SCAG's 2016–2040 RTP/SCS, which are based on changing the region's land use and travel patterns:

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96 *CARB, Regional Greenhouse Gas Emission Reduction Targets Pursuant to SB 375, Resolution 10-31.*

97 *SCAG, Final 2016–2040, RTP/SCS, April 2016, p. 153.*

- Compact growth in areas accessible to transit;
- More multi-family housing;
- Jobs and housing closer to transit;
- New housing and job growth focused in HQTAs; and
- Biking and walking infrastructure to improve active transportation options and transit access.

The Project represents an infill development within downtown Los Angeles that would concentrate new residential, hotel, and commercial uses within an HQTA, which is defined by the 2016–2040 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 miles of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours (see Table IV.H-3 in **Section IV.H, Land Use and Planning**, of the Draft EIR for an analysis of the Project's consistency with applicable goals of SCAG's 2016–2040 RTP/SCS). The Project Site is located approximately 0.5 miles south of the Metro Gold Line Little Tokyo/Arts District Station and 0.25 miles from the Metro Rapid 720 bus stop at Alameda Street and 6th Street (refer to Figure II-3 in **Section II, Project Description**, of the Drat EIR. In addition, the Project Site is currently served by local bus service on Alameda Street, 4th Street, and other local arterials. Additional transit lines include LADOT DASH bus lines.

In addition, in accordance with Mitigation Measure TR-MM-1 presented in **Section IV.L, Transportation/Traffic**, of the Draft EIR, the Applicant would develop and implement a TDM Program that includes strategies to promote non-auto travel and reduce the use of single-occupant vehicle trips. Further detail is included in **Section IV.L, Transportation/Traffic**. In addition, the Project would also provide bicycle storage areas for Project residents, employees, and guests. The Project would provide residents, employees, and guests with convenient access to public transit and opportunities for walking and biking, which would facilitate a reduction in VMT and related vehicular GHG emissions. These and other measures would further promote a reduction in VMT and subsequent reduction in GHG emissions, which would be consistent with the goals of SCAG's 2016–2040 RTP/SCS.

At the regional level, the 2016–2040 RTP/SCS is an applicable plan adopted for the purpose of reducing GHG emissions. In order to assess the Project's potential to conflict with the 2016–2040 RTP/SCS, this section also analyzes the Project's land use assumptions for consistency with those utilized by SCAG in its Sustainable Communities Strategy. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as SCAG's 2016-2040 RTP/SCS, if they are compatible with the general intent of

the plans and would not preclude the attainment of their primary goals. Table IV.F-7 includes a discussion of the Project's consistency with the Actions and Strategies set forth in the 2016–2040 RTP/SCS.[98] As demonstrated in Table IV.F-7, the Project would be consistent with the 2016–2040 RTP/SCS.

Table IV.F-7
Consistency with the 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
Land Use Strategies		
Reflect the changing population and demands, including combating gentrification and displacement, by increasing housing supply at a variety of affordability levels.	Local jurisdictions	**Consistent.** The Project would include live/work residences that would add to the supply and diversity of housing in metropolitan Los Angeles County. These residences would include four types of housing options that would cater to the artistic community and potentially provide more affordable options to buying/renting both a residence and a workspace.
Focus new growth around transit.	Local Jurisdictions	**Consistent.** The Project is an infill development that would be consistent with the 2016-2040 RTP/SCS's focus on concentrating growth near transit facilities in an effort to reduce the population's dependence on vehicles. The Project Site is located approximately 0.5 miles

[98] *As discussed in the 2016–2040 RTP/SCS, the actions and strategies included in the 2016–2040 RTP/SCS remain unchanged from those adopted in the 2012–2035 RTP/SCS.*

Table IV.F-7
Consistency with the 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
		south of the Metro Gold Line Little Tokyo/Arts District Station and 0.25 miles from the Metro Rapid 720 bus stop at Alameda Street and 6th Street (refer to Figure II-3 in **Section II, Project Description**). In addition, the Project Site is currently served by local bus service on Alameda Street, 4th Street, and other local arterials. Additional transit lines include LADOT DASH bus lines.
Plan for growth around livable corridors, including growth on the Livable Corridors network.	SCAG, Local Jurisdictions	**Consistent.** The Project is an infill development that would be consistent with the 2016-2040 RTP/SCS's focus on concentrating growth along the 2,980 miles of Livable Corridors in the region. The Project Site is located approximately 0.5 miles south of the Metro Gold Line Little Tokyo/Arts District Station and 0.25 miles from the Metro Rapid 720 bus stop at Alameda Street and 6th Street (refer to Figure II-3 in **Section II [Project Description])**. In addition, the Project Site is currently served

Table IV.F-7
Consistency with the 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
		by local bus service on Alameda Street, 4th Street, and other local arterials. Additional transit lines include LADOT DASH bus lines.
Provide more options for short trips through Neighborhood Mobility Areas and Complete Communities.	SCAG, Local Jurisdictions	**Consistent.** The Project would help further jobs/housing balance objectives that can improve the use of Neighborhood Electric Vehicles for short trips. The Project is also generally consistent with the Complete Communities initiative that focuses on creation of mixed-use districts in growth areas.
Support local sustainability planning, including developing sustainable planning and design policies, sustainable zoning codes, and Climate Action Plans.	Local Jurisdictions	**Not Applicable.** While this strategy calls on local governments to adopt General Plan updates, zoning code amendments, and Climate Action Plans to further sustainable communities, the Project would not interfere with such policymaking and would be consistent with those policy objectives.
Protect natural and farm lands, including developing conservation strategies.	SCAG, Local Jurisdictions	**Consistent.** The Project and surrounding areas are part of a developed urban area of the City.

Table IV.F-7
Consistency with the 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
		Neither the Project Site nor the surrounding areas contain any natural lands or farm lands.
Transportation Strategies		
Preserve our existing transportation system.	SCAG, County Transportation Commissions, Local Jurisdictions	**Not Applicable.** While this strategy calls on investing in the maintenance of our existing transportation system, the Project would not interfere with such policymaking.
Manage congestion through programs like the Congestion Management Program, Transportation Demand Management, and Transportation Systems Management strategies.	County Transportation Commissions, Local Jurisdictions	**Consistent.** The Project is an infill development that would minimize congestion impacts on the region because of its proximity to public transit, mixed-use character, and general density of population and jobs.
Promote safety and security in the transportation system.	SCAG, County Transportation Commissions, Local Jurisdictions	**Not Applicable.** While this strategy aims to improve the safety of the transportation system and protect users from security threats, the Project would not interfere with such policymaking.
Complete our transit, passenger rail, active transportation, highways and arterials, regional express lanes, goods movement, and airport ground transportation systems.	SCAG, County Transportation Commissions, Local Jurisdictions	**Not Applicable.** This strategy calls for transportation planning partners to implement major capital and operational projects that are designed to address regional

Table IV.F-7
Consistency with the 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
		growth. The Project would not interfere with this larger goal of investing in the transportation system.
Technological Innovation and 21st Century Transportation		
Promote zero-emission vehicles.	SCAG, Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the Project would include both electric vehicle charging stations in the parking structure and additional pre-wiring for future potential electric vehicle charging infrastructure.
Promote neighborhood electric vehicles.	SCAG, Local Jurisdictions	**Consistent.** While this action/strategy is not necessarily applicable on a project-specific basis, the Project would include both electric vehicle charging stations in the parking structure and additional pre-wiring for future potential electric vehicle charging infrastructure (refer to PDF GHG-2).
Implement shared mobility programs.	SCAG, Local Jurisdictions	**Not Applicable.** While this strategy is designed to integrate new technologies for last-mile and alternative transportation programs, the Project would not interfere with these emerging

Table IV.F-7
Consistency with the 2016-2040 RTP/SCS

Actions and Strategies	Responsible Party(ies)	Consistency Analysis[a]
		programs.
Source: Southern California Association of Governments; 2016–2040 RTP/SCS, Chapter 5: The Road to Greater Mobility and Sustainable Growth; April 2016.		

In sum, the Project is the type of land use development that is encouraged by the 2016-2040 RTP/SCS to reduce VMT and expand multi-modal transportation options in order for the region to achieve the GHG reductions from the land use and transportation sectors required by SB 375, which, in turn, advances the state's long-term climate policies.[99] By furthering implementation of SB 375, the Project supports regional land use and transportation GHG reductions consistent with state regulatory requirements.

Therefore, the Project would be consistent with the 2016–2040 RTP/SCS and the GHG reduction-related actions and strategies contained therein.

(ii) Local: LA Green Plan/Climate LA Plan

The Project would be consistent with the LA Green Plan. The LA Green Plan outlines the goals and actions the City has established to reduce the generation and emission of GHG emissions from both public and private activities. Table IV.F-8 evaluates the Project's consistency with applicable GHG-reducing actions from the LA Green Plan. As discussed below, the Project is consistent with the applicable goals and actions of the LA Green Plan. To facilitate implementation of the LA Green Plan, the City adopted the Los Angeles Green Building Code. The 2016 Los Angeles Green Building Code (Chapter IX, Article 9, of the Los Angeles Municipal Code, as amended pursuant to City Ordinance No. 184,692), incorporated by reference the mandatory requirements of the 2016 California Green Building Standards Code (discussed above under AB 32 Climate Change Scoping Plan).

[99] *As discussed above, SB 375 legislation links regional planning for housing and transportation with the GHG reduction goals outlined in AB 32.*

Table IV.F-8
Consistency with Applicable GHG Emissions Goals and Actions of the LA Green Plan

Action		Description	Consistency Analysis
Focus Area: Energy			
E6	Present a comprehensive set of green building policies to guide and support private sector development.	The City initiated an effort to establish green building requirements, paired with incentives, for medium- to large- private projects. Buildings account for a majority of electricity use. Each building site relates to a wide range of environmental issues faced by the City, so addressing each site in a comprehensive manner will provide a variety of environmental benefits.	**Consistent.** While this action primarily applies to the City, the Project would be designed and operated to meet the applicable requirements of the state Green Building Standards Code and the City's Green Building Code.
Focus Area: Water			
W1	Meet all additional demand for water resulting from growth through water conservation and recycling.	The Mayor's Office and LADWP developed the *Securing LA's Water Supply* plan, which is an aggressive, multi-faceted approach to developing a locally sustainable water supply. The plan includes a set of key short-term and long-term strategies to secure our water future, such as: Short-Term Conservation Strategies: • Enforcing prohibited uses of water (levying fines and sanctions against water abusers and increase water conservation awareness). • Expanding the list of prohibited uses of water (possible further	**Consistent.** While this action primarily applies to the City and LADWP, the Project would incorporate water conservation features to reduce indoor water use by at least 20 percent. Specifically, **Section II, Project Description**, of the Draft EIR, provides a list of water conservation measures. Examples include: Energy Star-certified appliances in residential units and use of ultra low flow toilets and hand wash faucets in public facilities. Further detail is provided in

Table IV.F-8
Consistency with Applicable GHG Emissions Goals and Actions of the LA Green Plan

Action		Description	Consistency Analysis
		restrictions on watering landscape and washing/rinsing vehicles without a self-closing nozzle). • Extending outreach efforts, water conservation incentives, and rebates. • Encouraging regional conservation measures (encourage all water agencies in the region to adopt water conservation ordinances which include prohibited uses and enforcement). Long-Term Conservation Strategies: • Increasing water conservation through reduction of outdoor water use and new technology. • Maximizing water recycling. • Enhancing stormwater capture • Accelerating cleanup of the groundwater basin. • Expanding groundwater storage.	**Section IV.M.2, Utilities and Service Systems - Water**, of the Draft EIR.
W2	Reduce per capita water consumption by 20%.	[See W1, above.]	[See W1, above.]
Focus Area: Transportation			
T4	Complete the	This action reduces vehicle	**Consistent.** While

Table IV.F-8
Consistency with Applicable GHG Emissions Goals and Actions of the LA Green Plan

Action		Description	Consistency Analysis
	Automated Traffic Surveillance and Control System (ATSAC).	emissions that result from idling at intersections. By reducing vehicle stops, delays and travel time through improved traffic signal timing, vehicles can travel a longer distance at a consistent rate of speed, improving fuel economy.	the City has implemented this action, the Project would include implementation of Mitigation Measures TR-MM-1 and TR-MM-2, set forth in **Section IV.L, Transportation/Traffic**, of the Draft EIR, which would be beneficial to traffic flow, transit service, pedestrian circulation, and overall mobility in the Project area and increase intersection capacity in the system to improve fuel economy.
T6	Make transit information easily available, understandable, and translated into multiple languages.	A Los Angeles Department of Transportation (LADOT) partnership with the Personnel Department will enable DOT to determine in which additional languages transit information should be provided. Facilitating access to transit information increases the likelihood of transit use, which can reduce single occupancy vehicle trips and help alleviate traffic congestion, and most importantly, reducing associated greenhouse gas emissions.	**Consistent.** While this action primarily applies to the City, the Project would not impair the ability of the City to make transit information easily available, understandable, and translated into multiple languages. Furthermore, the Project would implement a TDM Program pursuant to Mitigation Measure TR-MM-1 presented in Section **IV.L, Transportation/Traff**

Table IV.F-8
Consistency with Applicable GHG Emissions Goals and Actions of the LA Green Plan

Action		Description	Consistency Analysis
			ic, of the Draft EIR. The TDM Program would include promotion and support of transit and rideshare.
T8	Promote walking and biking to work, within neighborhoods, and to large events and venues.	Promoting alternate modes of travel will reduce the carbon emissions associated with single occupancy vehicles (SOVs). As described in Action Items LU1 and LU2 below, the City is promoting high-density and mixed-use housing close to major transportation arteries. Such developments will also support the advancement of Action Item T8, by improving accessibility for those who wish to walk and bike to work.	**Consistent.** While this action primarily applies to the City, the proposed Project would promote a pedestrian-friendly community by connecting the Project with the downtown Los Angeles community through the provision of ground- level neighborhood-serving commercial retail and restaurant uses to activate the streets in the surrounding area. The Project Site is also located in an HQTA as designated by the 2016–2040 RTP/SCS and near regional and local transit services. The Project would provide residents and visitors with convenient access to public transit and opportunities for walking and biking, including the installation of 52 short-term and 168

Table IV.F-8
Consistency with Applicable GHG Emissions Goals and Actions of the LA Green Plan

Action		Description	Consistency Analysis
			long-term bicycle parking spaces in accordance with LAMC requirements.
Focus Area: Land Use			
LU1	Promote high-density housing close to major transportation arteries.	With 469 square miles, Los Angeles is a vast and sprawling city. Yet many neighborhoods are walkable, with stores and services clustered near dense residential housing. As the city continues to redevelop and grow, there is an unprecedented opportunity to rethink the urban environment. Accommodating continued growth requires taking advantage of infill opportunities and increasing density along transit corridors.	**Consistent.** The Project represents a mixed-use infill development that would provide up to 129 live/work residential units and up to 72,469 square feet of commercial retail and restaurant uses within an HQTA. The Project Site is located near regional and local public transit services. The Project would provide bicycle storage areas for Project residents, employees, and guests. Furthermore, the Project is located within direct access to the I-110, US-101, and I-10 freeways.
LU2	Promote and implement transit- oriented development (TOD).	Transit Oriented Districts (TODs) represent opportunities for creating cohesive, vibrant, walkable communities where fragmented, auto- dependent corridors now exist. TODs are a positive alternative to low-density traditional land use patterns that typically segregate housing, jobs and neighborhood services from	**Consistent.** While this action primarily applies to the City, the proposed Project would concentrate new residential and commercial uses in close proximity to public transit opportunities (e.g., light rail and bus routes). The study

Table IV.F-8
Consistency with Applicable GHG Emissions Goals and Actions of the LA Green Plan

Action		Description	Consistency Analysis
		one another. In contrast, TODs cluster these community elements in close proximity, so a greater portion of trips can be made by transit, bike, or on foot.	area is well served by public transit, including both bus and rail service.
Action		**Description**	**Consistency Analysis**
Focus Area: Waste			
Ws T1	Reduce or recycle 70 percent of trash by 2015.	Source reduction and recycling programs not only conserve natural resources and landfill space, but also confer climate benefits.	**Consistent.** While this action primarily applies to the City, the Project would provide adequate storage areas in accordance with the City's Space Allocation Ordinance (Ordinance No. 171,687), which requires that developments include a recycling area or a room of specified size on the Project Site.
Source: DKA Planning, 2018.			

The Project would comply with performance-based standards included in the Green Building Code. In order to meet reduction goals in the LA Green Plan, LADWP will continue to implement programs to emphasize water conservation and will pursue securing alternative supplies, including recycled water and storm water capture. With regard to solid waste, the City implemented the RENEW LA plan to meet solid waste reduction goals by expanding recycling to multifamily dwellings, commercial establishments, and restaurants. The Project would be indirectly affected by these actions and would further reduce water and solid waste generation, thereby meeting the goals of the LA Green Plan. In addition, LADWP is required to procure a minimum of 33 percent of its energy portfolio from renewable sources by 2020 and would continue to

implement programs consistent with the LA Green Plan. **Therefore, the Project would be consistent with the LA Green Plan.**

(iii) Local: City of Los Angeles Sustainable City pLAn

As discussed above, the Sustainable City pLAn includes both short-term and long- term aspirations through the year 2035 in various topic areas, including: water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others. The Sustainable City pLAn provides information as to what the City will do with buildings and infrastructure in their control. Specific targets related to housing and development and mobility and transit include the decrease of vehicle miles traveled per capita by 5 percent by 2025, and increasing trips made by walking, biking or transit by at least 35 percent by 2025. The Project would generally comply with these aspirations as the Project is an infill development consisting of residential, hotel, and commercial uses on the Project Site, which is located near regional and local transit services. The Project would be well-served by transit and would implement a TDM Program that would encourage transit use. Furthermore, the Project would comply with CALGreen, implement various project design features to reduce energy usage and conserve water, and comply with the City's Solid Waste Management Policy Plan, the RENEW LA Plan, and the Exclusive Franchise System Ordinance (Ordinance No. 182,986) in furtherance of the aspirations included in the Sustainable City pLAn with regard to energy-efficient buildings and waste and landfills. The Project would also provide secure short- and long-term bicycle storage areas for Project residents and guests. **Therefore, the Project would be consistent with the Sustainable City pLAn**.

(iv) Conclusion

In summary, the plan consistency analysis provided above demonstrates that the Project complies with or exceeds the plans, policies, regulations and GHG reduction actions/strategies outlined in the *Climate Change Scoping Plan and Update*, the 2016–2040 RTP/SCS, the LA Green Plan, and the Sustainable City pLAn. The Project would also be consistent with reducing emissions below a NAT scenario, as discussed later in this section (refer to Table IV.F-11). Consistency with the above plans, policies, regulations and GHG reduction actions/strategies would reduce the project's incremental contribution of GHG emissions. **Thus, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHG emissions. Furthermore, because the Project is consistent and does not conflict with these plans, policies, and regulations, the Project's incremental increase in GHG emissions as described above would not**

result in a significant impact on the environment. Therefore, Project-specific impacts with regard to climate change would be less than significant.

(b) Project Emissions

As described above, compliance with a GHG emissions reduction plan renders a project less than significant. In support of the consistency analysis which describes the Project's compliance with or exceedance of performance-based standards included in the regulations and policies outlined in the applicable portions of the *Climate Change Scoping Plan*, the 2016–2040 RTP/SCS, the LA Green Plan, and the Sustainable City pLAn, quantitative calculations are provided below.

The Project would result in direct and indirect GHG emissions generated by different types of emissions sources, including the following:

- Construction: emissions associated with demolition of the existing buildings parking areas, shoring, excavation, grading, and construction-related equipment and vehicular activity;
- Area source: emissions associated with landscape equipment;
- Energy source (building operations): emissions associated with space heating and cooling, water heating, energy consumption, and lighting;
- Stationary source: emissions associated with stationary equipment (e.g., emergency generators);
- Mobile source: emissions associated with vehicles accessing the project site;
- Solid Waste: emissions associated with the decomposition of the waste, which generates methane based on the total amount of degradable organic carbon; and
- Water/Wastewater: emissions associated with energy used to pump, convey, deliver, and treat water.

The Project would generate an incremental contribution to and a cumulative increase in GHG emissions. A specific discussion regarding potential GHG emissions associated with the construction and operational phases of the Project is provided below.

(i) Construction

Project construction is anticipated to be completed in 2021 with occupancy in 2021. A summary of construction details (e.g., schedule, equipment mix, and vehicular trips) and CalEEMod modeling output files are provided in **Appendix C** of the Draft EIR. The GHG emissions associated with construction of the Project were calculated for each year of

construction activity. A summary of GHG emissions for each year of construction is presented in Table IV.F-5.

As presented in Table IV.F-9, construction of the Project is estimated to generate a total of 2,489 MTCO2e. As recommended by the SCAQMD, the total GHG construction emissions were amortized over the 30-year lifetime of the Project (i.e., total construction GHG emissions were divided by 30 to determine an annual construction emissions estimate that can be added to the Project's operational emissions) in order to determine the Project's annual GHG emissions inventory.[100] This results in annual Project construction emissions of 83 MTCO2e. A complete listing of the construction equipment by on-site and off-site activities, duration, and emissions estimation model input assumptions used in this analysis is included within the emissions calculation worksheets that are provided in **Appendix C** of the Draft EIR.

Table IV.F-9
Combined Construction-Related Emissions
(MTCO2e)

Year	$MTCO_2$[a]
2018	726
2019	948
2020	806
2021	9
Total	**2,489**
Amortized Over 30 Years	**83**

[a] *CO2e was calculated using CalEEMod and the results are provided in Section 2.0 of the Construction CalEEMod output file within **Appendix C** of the Draft EIR.*

Source: DKA Planning, 2018.

(ii) Operation

Area Source Emissions

Area source emissions were calculated using the CalEEMod emissions inventory model, which includes hearths and landscape maintenance equipment. As discussed above, Project Design Feature GHG-PDF-1 prohibits the use of natural gas-fueled fireplaces in the proposed residential units. Thus, the reduction in GHG emissions from Project Design Feature GHG-PDF-1 was calculated and is shown in Table IV.F-10. As shown in Table IV.F-10, the Project would result in a total of approximately 2 MTCO2e per year from area sources.

[100] *SCAQMD Governing Board Agenda Item 31, December 5, 2008.*

Electricity and Natural Gas Generation Emissions

GHG emissions are emitted as a result of activities in buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits CO_2 and other GHG emissions directly into the atmosphere; when this occurs in a building, it is a direct emission source associated with that building. GHG emissions are also emitted during the generation of electricity from fossil fuels. When electricity is used in a building, the electricity generation typically takes place off-site at the power plant; electricity use in a building generally causes emissions in an indirect manner.

Table IV.F-10
Annual GHG Emissions Summary (Buildout)[a]
(metric tons of carbon dioxide equivalent [MTCO2e])

Year	$MTCO_2$[a]
Area[b]	2
Energy[c] (electricity and natural gas)	3,612
Mobile	4,656
Solid Waste[d]	212
Water/Wastewater[e]	253
Construction	83
Total Emissions	***8,819***
Less Existing Emissions	*1,312*
Net Total Emissions	**7,507**

[a] *CO_2e was calculated using CalEEMod and the results are provided in Section 2.0 of the Operation CalEEMod output file within **Appendix C** of the Draft EIR.*
[b] *Area source emissions are from landscape equipment and two outdoor fireplaces.*
[c] *Energy source emissions are based on CalEEMod default electricity and natural gas usage rates.*
[d] *Solid waste emissions are calculated based on CalEEMod default solid waste generation rates.*
[e] *Water/Wastewater emissions are calculated based on CalEEMod default water consumption rates.*

Source: DKA Planning, 2018.

Electricity and natural gas emissions were calculated using the CalEEMod emissions inventory model, which multiplies an estimate of the energy usage by applicable emissions factors chosen by the utility company. GHG emissions from electricity use are directly dependent on the electricity utility provider. In this case, GHG intensity factors for LADWP were selected in CalEEMod. The carbon intensity (lbs/MWh) for electricity generation was calculated for the Project buildout year based on LADWP projections for years 2015 and 2026. A straight-line interpolation was performed to estimate the LADWP carbon intensity factor for the Project buildout year. LADWP's carbon intensity projections also take into account SB 350 RPS requirements for renewable energy.

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building, such as in plug-in appliances. CalEEMod calculates energy use from systems covered by Title 24 (e.g., HVAC system, water heating system, and lighting system); energy use from lighting; and energy use from office equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting.

CalEEMod electricity and natural gas usage rates are based on the CEC-sponsored California Commercial End-Use Survey (CEUS) and the California Residential Appliance Saturation Survey (RASS) studies.[101] The data are specific for climate zones; therefore, Zone 11 was selected for the Project Site based on the zip code tool. Since these studies are based on older buildings, adjustments have been made to account for changes to Title 24 building codes but do not reflect 2016 Title 24 standards. For the Project scenario, an adjustment was made to account for the 2016 Title 24 standards. The 2016 Title 24 standards would be applicable to the Project as the Project would be built after January 1, 2017, when the 2016 Title 24 standards went into effect. The 2016 Title 24 standards are anticipated to be 28 percent more efficient (for electricity) than the 2013 Title 24 standards for residential construction and 5 percent more efficient (for electricity) for non-residential construction.[102]

As shown in Table IV.F-10, Project GHG emissions from electricity and natural gas usage would result in a total of 3,612 MTCO2e per year. This accounts for a six percent reduction in energy source emissions with implementation of Project Design Feature GHG-PDF-1 as compared to the Project without implementation of this Project Design Feature.

Mobile Source Emissions

Mobile-source emissions were calculated using the SCAQMD-recommended CalEEMod emissions inventory model. CalEEMod calculates the emissions associated with on-road mobile sources associated with residents, employees, visitors, and delivery vehicles visiting the Project Site based on the number of daily trips generated and VMT.

Mobile source operational GHG emissions were calculated using CalEEMod and are based on the Project trip-generation estimates. As discussed in **Section IV.L, Transportation/Traffic**, of the Draft EIR, to calculate daily trips, the number of residential units and amount of building area for the commercial retail and restaurant uses were multiplied by the applicable trip-generation rates based on the Institute of

[101] *CEC, Commercial End-Use Survey, March 2006, and California Residential Appliance Saturation Survey, October 2010.*

[102] *CEC, 2016 Building Energy Efficiency Standards, Frequently Asked Questions.*

Transportation Engineers (ITE)'s *Trip Generation, 9th Edition*. The Project trip-generation accounts for the incorporation of Mitigation Measure TR-MM-1, which requires the Project to implement a TDM Program.

The Project represents an infill development within an existing urbanized area that would concentrate new residential and commercial retail and restaurant uses within an HQTA.[103] The Project Site is located approximately 0.5 miles south of the Metro Gold Line Little Tokyo/Arts District Station and 0.25 miles from the Metro Rapid 720 bus stop at Alameda Street and 6th Street (refer to Figure II-3 in **Section II, Project Description,** of the Draft EIR). In addition, the Project Site is currently served by local bus service on Alameda Street, 4th Street, and other local arterials. Additional transit lines include LADOT DASH bus lines. The Project would provide bicycle storage areas for Project residents and visitors. The Project would also incorporate characteristics that would reduce trips and VMT as compared to standard ITE trip generation rates. The Project characteristics listed below are consistent with the CAPCOA guidance document, *Quantifying Greenhouse Gas Mitigation Measures*, which provides emission reduction values for transportation related design techniques.[104] These techniques would reduce vehicle trips and VMT associated with the Project relative to the standard ITE trip generation rates, which would result in a comparable reduction in VMT and associated GHG emissions. Techniques applicable to the Project include the following (a brief description of the Project's relevance to the measure is also provided):

> **CAPCOA Measure LUT-1 – Increase Density:** Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies, such as enhanced transit services. The Project would increase the Project Site's density from 10 live/work units and 45,600 industrial uses (employing approximately 50 people [approximately 50 employees per acre]) to 129 live/work condominium units, 113 hotel rooms and 72,469 square feet of commercial space, employing approximately 211 employees per acre.

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103 *The Project Site is also located in Transit Priority Area as defined by Public Resources Code Section 20199. Public Resources Code Section 21099 defines a "transit priority area" as an area within 0.5 miles of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." Public Resources Code Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Also refer to the City's ZIMAS System regarding the location of the Project Site within a Transit Priority Area. www.zimas.lacity.org, accessed August 21, 2018.*

104 *CAPCOA, Quantifying Greenhouse Gas Mitigation Measures, 2010.*

CAPCOA Measure LUT-3 – Increase Diversity of Urban and Suburban Developments (Mixed-Use): The Project would introduce new uses on the Project Site, including new residential, hospitality and commercial uses. The Project would co-locate complementary residential, hospitality, and commercial uses in proximity to other existing off site residential and commercial uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation (i.e., walking and biking), which would result in corresponding reductions in transportation-related emissions.

CAPCOA Measure LUT-4 – Increase Destination Accessibility: The Project Site is located within Downtown Los Angeles, a primary job center, also easily accessible by public transportation. Access to multiple destinations, and other commercial and retail uses in proximity to the Project Site would reduce vehicle trips and VMT compared to the statewide average and encourage walking and non-automotive forms of transportation and would result in corresponding reductions in transportation-related emissions as a result of the Project.

CAPCOA Measure LUT-5 – Increase Transit Accessibility: The Project Site is located approximately 0.5 miles south of the Metro Gold Line Little Tokyo/Arts District Station and 0.25 miles from the Metro Rapid 720 bus stop at Alameda Street and 6th Street (refer to Figure II-3 in **Section II, Project Description**). In addition, the Project Site is currently served by local bus service on Alameda Street, 4th Street, and other local arterials. Additional transit lines include LADOT DASH bus lines. The Project would also provide bicycle parking spaces for resident and commercial uses to encourage utilization of alternative modes of transportation.

CAPCOA Measure LUT-9 – Improve Design of Development: The Project would enhance the pedestrian environment by developing ground floor live/work spaces, commercial retail and improved streetscape, which would enhance walkability in the Project vicinity. The Project would also locate a development with a high level of street access, which improves street accessibility and connectivity.

CAPCOA Measure SDT-2 – Traffic Calming Measures: Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift results in a decrease in VMT. Streets within a half mile of the Project Site are equipped with sidewalks, and several of the intersections include marked crosswalks and/or count-down signal timers that calm traffic.

CalEEMod calculates VMT based on the type of land use, trip purpose, and trip type percentages for each land use subtype in the project (primary, diverted, and pass-by). As shown in Table IV.F-10, the Project GHG emissions from mobile sources would result in a total of 4,656 MTCO2e per year. This estimate reflects reductions attributable to the Project's characteristics (e.g., infill project near transit that supports multi-modal transportation options), as described above.

Solid Waste Generation Emissions

Emissions related to solid waste were calculated using the CalEEMod emissions inventory model, which multiplies an estimate of the waste generated by applicable emissions factors provided in Section 2.4 of the USEPA's AP-42, Compilation of Air Pollutant Emission Factors. CalEEMod solid waste generation rates for each applicable land use were selected for this analysis. As shown in Table IV.F-10, the Project scenario is expected to result in a total of 212 MTCO2e per year from solid waste that accounts for a 50-percent recycling/diversion rate.

Water Usage and Wastewater Generation Emissions

GHG emissions are related to the energy used to convey, treat, and distribute water, and treat wastewater. Thus, these emissions are generally indirect emissions from the production of electricity to power these systems. Three processes are necessary to supply potable water; these include (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, energy is used as the wastewater is treated and reused as reclaimed water.

Emissions related to water usage and wastewater generation were calculated using the CalEEMod emissions inventory model, which multiplies an estimate of the water usage by the applicable energy intensity factor to determine the embodied energy necessary to supply potable water.[105] GHG emissions are then calculated based on the amount of electricity consumed multiplied by the GHG intensity factors for the utility provider. In this case, embodied energy for Southern California supplied water and GHG intensity factors for LADWP were selected in CalEEMod. Water usage rates were calculated consistent with the requirements under City Ordinance No. 184,248, 2016 California Plumbing Code, 2016 CALGreen, 2017 Los Angeles Plumbing Code, and 2017 Los Angeles Green Building Code, and reflect an approximately 20 percent reduction as compared to the base demand.

[105] *The intensity factor reflects the average pounds of CO_2e per megawatt generated by a utility company.*

As shown in Table IV.F-10, Project GHG emissions from water/wastewater usage would result in a total of 253 MTCO2e per year, which reflects a 20-percent reduction in water/wastewater emissions consistent with building code requirements and provided in **Section II, Project Description**, of the Draft EIR as compared to the Project without sustainability features related to water conservation.

Combined Construction and Operational Emissions

As shown in Table IV.F-10, when taking into consideration implementation of project design features provided throughout this Draft EIR, including the requirements set forth in the City's Green Building Code and the full implementation of current state mandates, the GHG emissions for the Project in 2021 would equal 83 MTCO2e per year (amortized over 30 years) during construction and 8,716 MTCO2e per year during operation of the Project with a combined total of 8,798 MTCO2e per year.

Estimated Reduction of Project Related GHG Emissions Resulting from Consistency with Plans

As noted earlier, one approach to demonstrating a project's consistency with GHG plans is to show how a project would reduce its incremental contribution through a NAT comparison. The analysis in this section includes potential emissions under a NAT scenario and from the Project at build-out based on actions and mandates expected to be in force in 2020.

As shown in Table IV.F-11, the emissions for the Project and its associated CARB 2020 NAT scenario are estimated to be 8,819 and 13,411 $MTCO_2e$ per year, respectively, which shows the Project would reduce emissions by 34 percent from CARB's 2020 NAT scenario.[106]

The analysis in the Draft EIR demonstrates that compliance with state, regional and local GHG reduction plans would result in a reduction of the Project's incremental contribution of GHG emissions.

[106] *The existing GHG emissions are 1,312 $MTCO_2e$. As such, the Project's net total GHG emissions would be 7,507 $MTCO_2e$. However, the Project's 8,819 $MTCO_2e$ GHG emissions are reflected here for the purposes of the NAT scenario.*

Table IV.F-11
Estimated Reduction of Project-Related GHG Emissions Resulting from Consistency with Plans

Scenario and Source	NAT Scenario*	As Proposed Scenario	Reduction from NAT Scenario	Change from NAT Scenario
Area Sources	2	2	-	0%
Energy Sources	6,228	3,612	-2,616	-42%
Mobile Sources	6,633	4,656	-1,977	-30%
Waste Sources	212	212	-	0%
Water Sources	253	253	-	0%
Construction	83	83	-	0%
Total Emissions	**13,411**	**8,819**	**-4,592**	**-34%**

Daily construction emissions amortized over 30-year period pursuant to SCAQMD guidance. Annual construction emissions derived by taking total emissions over duration of activities and dividing by construction period.

** NAT scenario does not assume 30% reduction in in mobile source emissions from Pavley emission standards (19.8%), low carbon fuel standards (7.2%), vehicle efficiency measures 2.8%); does not assume 42% reduction in energy production emissions from the State's renewables portfolio standard (33%), natural gas extraction efficiency measures (1.6%), and natural gas transmission and distribution efficiency measures (7.4%).*

Source: DKA Planning, 2018.

Post-2020 Analysis

Recent studies show that the state's existing and proposed regulatory framework will put the state on a pathway to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050 if additional appropriate reduction measures are adopted.[107] Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new

[107] *Energy and Environmental Economics (E3). "Summary of the California State Agencies' PATHWAYS Project: Long-term Greenhouse Gas Reduction Scenarios" (April 2015); Greenblatt, Jeffrey, Energy Policy, "Modeling California Impacts on Greenhouse Gas Emissions" (Vol. 78, pp. 158–172). The California Air Resources Board, California Energy Commission, California Public Utilities Commission, and the California Independent System Operator engaged E3 to evaluate the feasibility and cost of a range of potential 2030 targets along the way to the state's goal of reducing GHG emissions to 80 percent below 1990 levels by 2050. With input from the agencies, E3 developed scenarios that explore the potential pace at which emission reductions can be achieved, as well as the mix of technologies and practices deployed. E3 conducted the analysis using its California PATHWAYS model. Enhanced specifically for this study, the model encompasses the entire California economy with detailed representations of the buildings, industry, transportation and electricity sectors.*

technologies and other regulations not analyzed in the studies could allow the state to meet the 2050 target. Subsequent to the findings of these studies, SB 32 was passed on September 8, 2016, and would require the state board to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. As discussed above, the new plan, outlined in SB 32, involves increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

As discussed above, SCAG's 2016-2040 RTP/SCS establishes a regulatory framework for achieving GHG reductions from the land use and transportation sectors pursuant to SB 375 and the state's long-term climate policies. The 2016-2040 RTP/SCS ensures VMT reductions and other measures that reduce regional emissions from the land use and transportation sectors. Specifically, the 2016–2040 RTP/SCS would result in an estimated 8 percent decrease in per capita GHG emissions by 2020, an 18-percent decrease in per capita GHG emissions by 2035, and a 21-percent decrease in per capita GHG emissions by 2040. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an approximately 21-percent decrease in per capita GHG emissions by 2040 (an additional 3-percent reduction in the five years between 2035 [18 percent] and 2040 [21 percent]), the 2016–2040 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the state's GHG emission reduction goals.

The Project is the type of land use development that is encouraged by the RTP/SCS to reduce VMT and expand multi-modal transportation options in order for the region to achieve the GHG reductions from the land use and transportation sectors required by SB 375, which, in turn, advances the state's long-term climate policies. By furthering implementation of SB 375, the Project supports regional land use and transportation GHG reductions consistent with state climate targets for 2020 and beyond. In addition, as demonstrated above in Table IV.F-10, the Project would be consistent with the Actions and Strategies set forth in the 2016–2040 RTP/SCS. Therefore, the Project would be consistent with the 2016–2040 RTP/SCS.

Conclusion

Thus, given the Project's consistency with state, SCAG, and City GHG emission reduction goals and objectives, the Project is consistent with applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs. **In the absence of adopted standards and established significance thresholds, and given this consistency, it is concluded that the Project's incremental contribution to greenhouse gas emissions and their effects on climate change would not be cumulatively considerable.**

(2) Mitigation Measures

No significant impacts related to GHG emissions have been identified. No mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to GHG emissions would be less than significant.

b) Cumulative Impacts

(1) Impact Analysis

As explained above, the analysis of a project's GHG emissions is inherently a cumulative impacts analysis because climate change is a global problem and the emissions from any single project alone would be negligible. Accordingly, the analysis above took into account the potential for the Project to contribute to the cumulative impacts of global climate change.

The analysis shows that the Project is consistent with CARB's *Climate Change Scoping Plan*, particularly its emphasis on the identification of emission reduction opportunities that promote economic growth while achieving greater energy efficiency and accelerating the transition to a low-carbon economy. The analysis also shows that the Project would be consistent with the 2016–2040 RTP/SCS, which would serve to reduce regional GHG emissions from the land use and transportation sectors by 2020 and 2035. In addition, the Project would comply with the LA Green Plan, which emphasizes improving energy conservation and energy efficiency, increasing renewable energy generation, and changing transportation and land use patterns to reduce auto dependence. Furthermore, the Project would generally comply with the aspirations of the Sustainable City pLAn, which includes specific targets related to housing and development, and mobility and transit. Given the Project's consistency with statewide, regional, and local plans adopted for the reduction of GHG emissions, it is concluded that the Project's incremental contribution to greenhouse gas emissions and their effects on climate change would not be cumulatively considerable. **For these reasons, the Project's cumulative contribution to global climate change is less than significant.**

(2) Mitigation Measures

No significant impacts related to GHG emissions have been identified. No mitigation measures are required.

(3) Level of Significance After Mitigation

Project and cumulative impacts related to GHG emissions would be less than significant.

IV. Environmental Impact Analysis

G. Hazards and Hazardous Materials

1. Introduction

This section addresses the potential for the Project to result in impacts related to hazards and hazardous materials. The analysis and information presented in this section is based primarily on the following report, which is included in **Appendix F** of the Draft EIR:

F. *Phase I Environmental Site Assessment, The Art District Center, 1129 East 5th Street, Los Angeles, California, prepared by GeoDesign, Inc., June 26, 2014.*

2. Environmental Setting

a) Regulatory Framework

A variety of laws and regulations governing the management and control of hazardous substances have been established at the federal, state, and local levels to protect the environment.

(1) Hazardous Materials and Waste Management

The use and storage of hazardous materials and wastes are governed by various federal, state, and local regulations whose jurisdictions and responsibilities sometimes overlap.

(a) Federal

The Federal Resource Conservation and Recovery Act (RCRA) (Title 40 of the Code of Federal Regulations [CFR]) gives the U.S. Environmental Protection Agency (USEPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste by "large-quantity generators" (1,000 kilograms/month or more). Under RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous wastes are stored for more than 90 days or treated or disposed at a facility, any treatment, storage, or disposal unit must be permitted under the RCRA. Additionally, all hazardous waste transporters are

required to be permitted and must have an identification number. The RCRA allows individual states to develop their own program for the regulation of hazardous waste, as long as it is at least as stringent as the RCRA. In California, the California EPA's (CalEPA) Department of Toxic Substances Control (DTSC) administers and enforces RCRA.

The Federal Occupational Safety and Health Act of 1970, which is implemented by the Federal Occupational Safety and Health Administration (OSHA), contains provisions with respect to hazardous materials handling. Federal OSHA requirements, as set forth in Title 29 of the CFR, are designed to promote worker safety, worker training, and a worker's right–to-know. OSHA has delegated the authority to administer OSHA regulations to the State of California.

The Hazardous Materials Transportation Act of 1975 specifies additional requirements and regulations with respect to the transport of hazardous materials, which are codified in Title 49 of the CFR. Title 49 of the CFR requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Drivers are also required to be trained in function and commodity specific requirements. In addition, vehicles transporting certain types or quantities of hazardous materials must display placards (warning) signs. As previously indicated, transporters of hazardous wastes must be permitted and have an identification number.

(b) State

At the state level, authority for the statewide administration and enforcement of the RCRA rests with CalEPA's DTSC. While DTSC has primary state responsibility in regulating the generation, storage and disposal of hazardous materials, DTSC may further delegate enforcement authority to local jurisdictions. In addition, DTSC is responsible and/or provides oversight for contamination cleanup and administers statewide hazardous waste reduction programs. DTSC operates programs to accomplish the following: (1) deal with the aftermath of improper hazardous waste management by overseeing site cleanups; (2) prevent releases of hazardous waste by ensuring that those who generate, handle, transport, store, and dispose of wastes do so properly; and (3) evaluate soil, water, and air samples taken at sites.

The California OSHA (Cal/OSHA) program is administered and enforced by the Division of Occupational Safety and Health (DOSH). Cal/OSHA is very similar to the Federal OSHA program. For example, both programs contain rules and procedures related to exposure to hazardous materials during demolition and construction activities. In addition, Cal/OSHA requires employers to implement a comprehensive, written Injury

and Illness Prevention Program (IIPP). An IIPP is an employee safety program for potential workplace hazards, including those associated with hazardous materials.

The Hazardous Waste Source Reduction and Management Review Act of 1989 require generators of 12,000 kilograms/year of typical/operational hazardous waste to conduct an evaluation of their waste streams every four years and to select and implement viable source reductions alternatives. This Act does not apply to non-typical hazardous waste (such as asbestos and polychlorinated biphenyls). The California Vehicle Code also states that every motor carrier transporting hazardous materials (for which the display of hazardous materials placards are required or in excess of 500 pounds, transported for a fee, which would require placarding if shipped in greater amounts in the same manner) must have a Hazardous Materials Transportation License issued by the California Highway Patrol.

The management of medical wastes is further governed by regulations of the Medical Waste Management Act. Under these regulations, medical waste generators are required to be registered. Furthermore, all medical waste transporters doing business in California must report information regarding business ownership, location, vehicles, and clients to the California Department of Public Health (CDPH). Only medical waste transporters listed with the CDPH are allowed to transport medical waste. All medical waste transporters must carry paperwork issued by the CDPH in each vehicle while transporting medical waste.

(c) Local

At the local level, the Los Angeles Fire Department (LAFD) monitors the storage of hazardous materials in the City for compliance with local requirements. Specifically, businesses and facilities which store more than threshold quantities of hazardous materials as defined in Chapter 6.95 of the California Health and Safety Code are required to file an Accidental Risk Prevention Program with the LAFD. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations. The LAFD also has delegated authority to administer and enforce Federal and State laws and local ordinances for underground storage tanks (USTs). Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by LAFD Inspectors.

(2) Underground Storage Tanks

USTs are regulated under Subtitle I of the RCRA and its implementing regulations, which establish construction standards for new UST installations, as well as standards

for upgrading existing USTs and associated piping. After 1998, all non-conforming tanks were required to be either upgraded or closed.

The State's UST program regulations include, among others, permitting USTs, installation of leak detection systems and/or monitoring of USTs for leakage, UST closure requirements, release reporting/corrective action, and enforcement. Oversight of the statewide UST program is assigned to the State Water Resources Control Board (SWRCB), which has delegated authority to the Regional Water Quality Control Board (RWQCB) and typically on the local level, to the fire department. The LAFD administers and enforces federal and state laws and local ordinances for USTs within its service area. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by LAFD Inspectors.

(3) Asbestos-Containing Materials

The USEPA has enacted requirements on the use, handling, and disposal of asbestos-containing materials (ACM) under the Toxic Substances Control Act (TSCA). These regulations include the phase out of friable asbestos and ACM in new construction materials beginning in 1979. Thus, any building, structure, surface asphalt driveway, or parking lot constructed prior to 1979 could potentially contain ACM.

The EPA has also established National Emission Standards for Hazardous Air Pollutants (NESHAP) that govern the use, removal, and disposal of ACM as a hazardous air pollutant. The NESHAP regulations mandate the removal of friable ACM before a building is demolished and include notification requirements prior to demolition. Responsibility for implementing these requirements has been delegated to the State of California, which in turn has delegated the responsibility to the South Coast Air Quality Management District (SCAQMD).

California classifies ACM as hazardous waste if it is friable and contains one percent or more asbestos. Non-friable bulk asbestos-containing waste is considered non-hazardous regardless of its asbestos content and is not subject to regulation. The CalEPA DTSC regulates the packaging, on-site accumulation, transportation, and disposal of asbestos when it is a hazardous waste. In California, any facility known to contain asbestos is required to have a written asbestos management plan (also known as an Operations and Maintenance Program [O&M Program]).

SCAQMD implements the NESHAP through its Rule 1403, Asbestos Emissions from Renovation/Demolition Activities. Rule 1403 regulates asbestos as a toxic material and controls the emissions of asbestos from demolition and renovation activities by specifying agency notifications, appropriate removal procedures, and handling and clean-up procedures. Rule 1403 applies to owners and operators involved in the

demolition or renovation of ACM-containing structures, asbestos storage facilities, and waste disposal sites. Rule 1403 regulations require that the following actions be taken: (1) a survey of the facility prior to issuance of a permit by SCAQMD; (2) notification of SCAQMD prior to construction activity; (3) asbestos removal in accordance with prescribed procedures; (4) placement of collected asbestos in leak-tight containers or wrapping; and (5) proper disposal.

(4) Lead-Based Paint

While adults can be affected by excessive exposure to lead, the primary concern is the adverse health effects on children. If not detected early, children with high levels of lead can suffer from damage to the brain and nervous system; behavior and learning problems such as hyperactivity, slowed growth, hearing problems; and headaches. Adults can suffer from lead-related effects such as reproductive problems (in both men and women), high blood pressure and hypertension, nerve disorders, memory and concentration problems, and muscle and joint pain.

The demolition of buildings containing lead-based paints (LBPs) is subject to a comprehensive set of California regulatory requirements that are designed to assure the safe handling and disposal of these materials. Cal/OSHA has established limits of exposure to lead contained in dusts and fumes, which provides for exposure limits, exposure monitoring, and respiratory protection and mandates good working practices by workers exposed to lead, particularly since demolition workers are at greatest risk of adverse health exposure. Lead-contaminated debris and other wastes must also be managed and disposed of in accordance with applicable provisions of the California Health and Safety Code.

(5) Oil and Gas

The Project Site is located within a City-defined Methane Zone. Section 91.7103 of the Los Angeles Municipal Code (LAMC), also known as the Los Angeles Methane Seepage Regulations, sets forth minimum requirements to control methane for buildings and paved areas that are located in a City-designated methane zone or a methane buffer zone. Requirements for new construction within such zones may include site testing for methane gas, installing a barrier (i.e., a membrane shield) between the building and underlying earth, installing a vent system(s) beneath the barrier and/or within the building and installing a gas (methane) detection system.

Worker exposure to methane is regulated by OSHA. This section regulates worker exposure to a “hazardous atmosphere” within confined spaces where the presence of flammable gas vapor or mist is in excess of 10 percent of the lower explosive limit. Cal/OSHA regulates worker exposure to airborne contaminants (such as hydrogen

sulfide) during construction; which compounds are considered a health risk and the exposure limits associated with such compounds; and the protective equipment, workplace monitoring, and medical surveillance required for compliance.

b) Existing Conditions

(1) Historic Land Use

(a) Project Site

According to available historical sources, in 1894, the northeastern portion of the Project Site was developed with two residences, and a small ditch labeled as "zanja" was located on the northwestern portion of the Project Site. By 1906, the southeastern and central-western portions of the Project Site were developed with portions of the existing structure. The southeastern portion of the Project Site was occupied by a planing mill. The facility utilized steam power fueled by wood shavings. A drying kiln and a room labeled as "oil storage" existed in the central-western portion of the Project Site. The western portion of the Project Site was occupied by a lumber pile and an iron and cement warehouse. The Project Site appears to have been developed to its current approximate configuration by 1920.

Between approximately 1929 and 1960, the southwestern portion of the Project Site was occupied by a paper products manufacturing and printing facility. Between approximately 1967 and 1970, the central-western portion of the Project Site was utilized as a refrigerator sales and service facility. The remaining portions of the Project Site have since been utilized for general warehousing, office, and residential uses.[1]

(b) Surrounding Properties

As early as 1894, the Project Site has been bounded by Seaton Street to the west, 5th Street to the south, and Colyton Street to the east. A blacksmith shop, a contractor's stable, several residences, and vacant land surrounded the site. The ditch labeled as "zanja" extended north from the Project Site. By 1906, a woodworking company existed on the property across the street to the north and a lumberyard existed on the property to the south across 5th Street.

Between approximately 1920 and 1933, properties near the Project Site were generally developed to their current approximate configurations with commercial warehouses, a

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[1] *Phase I Environmental Site Assessment, The Art District Center, 1129 East 5th Street, Los Angeles, California, prepared by GeoDesign, Inc., June 26, 2014.*

freight/trucking depot, and a semi-trailer manufacturing facility. The former semi-trailer manufacturing facility was redeveloped as a freight trucking, fueling, and truck repair facility by 1954. By 1960, this facility was used by the Yellow Cab Company.

Since approximately 1937, historical uses of the property southwest of the Project Site have included automotive services and fueling. Between approximately 1950 and 1970, a railroad spur was located along East 5th Street. Around this time, the adjacent warehouses to the north and east were used to store industrial chemicals, solvents, and raw paint materials.

(2) Existing Uses

(a) Project Site

The Project Site is currently owned by Capital KCS, LLC and developed with a two-story building. The lower level is primarily used as a commercial office and warehouse space. The second story is primarily used as residential and art studio space. The approximately 91,000-square-foot structure was constructed in phases between approximately 1906 and 1920 with a concrete slab foundation, wood beam framework, and brick/concrete exterior walls. The Project Site is not listed on any federal or state regulatory clean-up list.

(b) Surrounding Properties

The Project Site is directly bounded to the north by commercial/industrial property; to the east by Colyton Street, across which is commercial/industrial property; to the south by East 5th Street, across which is commercial/industrial property; and to the west by Seaton Street, across which is commercial/industrial property.

(3) Sensitive Receptors

Pursuant to 23 CFR 772, sensitive receptors are considered to be areas with potential to contain children under 14, the elderly over 65, or the sick/disabled, including, but not limited to, churches, schools, residential uses, day care centers, and hospitals. The nearest hazards-sensitive receptors consist of a single live/work unit located approximately 50 feet to the east of the Project Site across Colyton Street and residential multi-family lofts located approximately 400 feet southeast of the Project Site across 5th and Hewitt Streets. The nearest school, at which children under 14 are present, is the Metropolitan High School, located at 727 Wilson Street, approximately 2,000 feet to the south, with several intervening buildings. There are additional residential uses and schools. However, these are located further in distance from the Project Site than those identified above.

(4) Site Reconnaissance

As part of the Phase I Environmental Site Assessment (ESA) (included in **Appendix F** of the Draft EIR), GeoDesign, Inc. performed a site reconnaissance, from which key observations are described below.

(a) General Site Conditions

As discussed previously, the Project Site is fully developed with a two-story building that is currently being used for commercial offices, warehousing, art studios, and residential live/work units. All portions of the Project Site are covered with either the building or asphalt or concrete pavement. The current uses contained within the building on the Project Site do not indicate a risk of a recognized environmental condition (REC) being present.

(b) Project Site Structure

As noted, the building on the Project Site was constructed in phases between approximately 1906 and 1920 with a concrete slab foundation, wood beam framework, and brick/concrete exterior walls. An electrical cable-pulley freight elevator is located near the eastern portion of the Project Site. Petroleum-like staining or odors were not observed near the elevator or its motor.

(c) Potable Water Supply

Potable water is supplied to the Project Site by the Los Angeles Department of Water and Power (LADWP).

(d) Sewage Disposal System

Sewage generated at the Project Site is discharged to the City of Los Angeles (City) municipal sewer system.

(e) Hazardous Substances and Petroleum Products

Several small-quantity (one quart to one gallon) containers of cleaning products and paint were observed stored at the Project Site. These containers appeared in good conditions with no evidence of spills or leakage. Hazardous substances or petroleum products were otherwise not observed on the site. As part of the site reconnaissance work, four subsurface borings were advanced to depths ranging between approximately 67 and 77 feet below ground surface. Soil cuttings generated during drilling were visually observed by GeoDesign field personnel with environmental training. Visual or olfactory evidence of contamination was not observed during the geotechnical exploration. Low levels of metal concentrations were detected through the laboratory analysis of the soil cuttings. However, no hydrocarbons were detected.

(f) Storage Tanks

Evidence of USTs or above-ground storage tanks (ASTs) was not observed on the Project Site.

(g) Drums

Drums typically used for the storage of hazardous/corrosive materials were not observed on the Project Site.

(h) Unidentified Substance Containers

Unidentified substance containers suspected of containing hazardous substances or petroleum products were not observed on the Project Site.

(i) Odors

Strong, pungent, or noxious odors were not observed on the Project Site.

(j) Pools of Liquid

Pools of liquid were not observed on the Project Site.

(k) PCB-Containing Equipment

Electrical or hydraulic equipment known to contain polychlorinated biphenyls (PCBs) or likely to contain PCBs was not observed on the Project Site.

(l) Pits, Ponds, and Lagoons

Pits, ponds, or lagoons were not observed on the Project Site.

(m) Stained Soil or Stained Pavement

Stained soil or stained pavement was not observed on the Project Site.

(n) Stressed Vegetation

Stressed vegetation was not observed on the Project Site.

(o) Solid Waste

Solid waste was not observed to be stored on the Project Site.

(p) Wastewater

Wastewater was not observed to be stored or treated on the Project Site.

(q) Wells

Four geotechnical soil borings were completed by GeoDesign at the Project Site. Upon completion of drilling, these borings were converted to soil vapor wells, which were used to evaluate the potential presence of methane in soil vapor at the Project Site. As indicated in the Phase I ESA (see **Appendix F** of the Draft EIR), methane was not detected by GeoDesign at these locations. Water wells, drywells, monitoring wells, irrigation wells, injection wells, abandoned wells, or other wells were not observed on the Project Site.

(r) Septic Systems

Evidence of an on-site septic system or cesspool was not observed on the Project Site.

(s) Fill

Evidence of fill was not observed on the Project Site.

(t) Heating and Cooling Systems

Heating and cooling systems within the building on the Project Site are powered with electricity and/or natural gas.

(u) Interior Stains or Corrosion

Interior stains or corrosion was not observed in the building on the Project Site.

(v) Interior Drains or Sumps

Sumps were not observed in the building on the Project Site. Interior drains are located in restrooms, kitchens, and janitorial closets within this building. These drains discharge to the City's sanitary sewer system.

(w) Surface Water Drainage

Surface water at the Project Site is expected to flow into several exterior catch basins and drains adjoining the building located on-site. The catch basins drain to the City's stormwater conveyance system.

(x) ACMs

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. OSHA regulation 29 CFR 1926.1101 requires certain construction materials to be *presumed* to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building constructed prior to 1981 and have not been

appropriately tested are “presumed asbestos-containing material” (PACM). Because the existing structure on the Project Site was constructed between 1906 and 1920, there is a potential for ACM to be present on-site.

(y) LBP

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm2 (or 5,000 µg/g or 0.5 percent by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as “Title X”, to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a “hazard,” although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the USEPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

Because the building on the Project Site was constructed between 1906 and 1920, the potential exists for LBP to be present at the Project Site.

(5) Summary and Conclusion

The site investigation revealed no spills, stains, or other indications that a surficial release has occurred at the Project Site. Additionally, no strong, pungent, or noxious odors were evident during the site reconnaissance and no pools of liquid, pits, ponds, or lagoons were observed on the site. No drains, sumps, or clarifiers, other than those associated with stormwater drainage, were observed on the Project Site. No stressed vegetation was observed on-site. No additional environmental hazards, including landfill activities or radiological hazards, were observed. Therefore, the Phase I ESA concluded that no evidence of RECs in connection with the Project Site are present.

3. Project Impacts

a) Methodology

To assist in evaluating the potential impacts associated with hazards and hazardous materials that could occur as a result of construction and/or operation of the Project, a Phase I ESA was prepared by GeoDesign, Inc. for the Project Site (included in **Appendix F** of the Draft EIR). The Phase I ESA included a review of local, state, and federal records and databases, including historic City directories, building permits, and fire insurance maps, to evaluate present and historic uses on the Project Site, and site reconnaissance to determine if any RECs exist at the Project Site.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In 2015, the California Supreme Court in *CBIA v. BAAQMD* 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.[2] The revised thresholds are intended to comply with this decision. Specifically, the decision held that an impact from the existing environment to the project, including future users and/or residents, is not an impact for the purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project. For example, if construction of the project on a hazardous waste site will cause the potential dispersion of hazardous waste in the environment, the EIR should assess the impacts of that dispersion to the environment, including to the project's residents.

In accordance with Appendix G of the CEQA Guidelines (Appendix G) and the *CBIA v. BAAQMD* decision, a project would have a significant impact related to hazards and hazardous materials if Project would do one or more of the following:

(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, would create a significant hazard to the public or the environment caused in whole or in part from the project's exacerbation of existing environmental conditions;

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[2] *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, Case No. S213478.*

(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 have the potential to exacerbate current environmental conditions so as to result in a safety hazard for people residing or working in the project area;

(f) For a project within the vicinity of a private airstrip, would the project have the potential to exacerbate current environmental conditions so as to result in a safety hazard for people residing or working in the project area;

(g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or

(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 caused in whole or in part from the project's exacerbation of existing environmental conditions.

(2) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) identifies the following criteria to evaluate hazards and hazardous materials:

(a) Risk of Upset/Emergency Preparedness

- The regulatory framework;
- The probable frequency and severity of consequences to people or property as a result of a potential accidental release or explosion of a hazardous substance;
- The degree to which the project may require a new, or interfere with an existing, emergency response or evacuation plan, and the severity of the consequences; and
- The degree to which project design will reduce the frequency or severity of a potential accidental release or explosion of a hazardous substance.

(b) Human Health Hazards

- The regulatory framework for the health hazard;

- The probable frequency and severity of consequences to people from exposure to the health hazard; and
- The degree to which project design would reduce the frequency of exposure or severity of consequences of exposure to the health hazard.

In assessing impacts related to hazards and hazardous materials in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

c) Project Design Features

No Project Design Features (PDFs) related to hazards and hazardous materials are proposed.

d) Analysis of Project Impacts

Threshold (a) ***Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

(1) Impact Analysis

(a) Construction

Construction of the Project would involve the temporary transport, use, or disposal of potentially hazardous materials, including paints, adhesives, surface coatings, cleaning agents, fuels, and oils. All of these materials would be used in a short-term nature during construction activities. Additionally, all potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, which would ensure that impacts are less than significant.

Additionally, any emissions from the use of such materials would be minimal and localized to the Project Site. **Since construction of the Project would comply with applicable regulations and would not expose persons to substantial risk resulting from the release of hazardous materials or exposure to health hazards in excess of regulatory standards, no significant impact associated with the potential release of hazardous substances during construction of the Project would occur.**

(b) Operation

The Project would include the development of hotel, live/work, art gallery, retail, restaurant, and Artist CoLab uses, which would involve the limited use of hazardous materials. Specifically, operation of the live/work uses would involve the use and storage of small quantities of potentially hazardous materials in the form of cleaning solvents, paints, and pesticides for landscaping. Hazardous materials to be used, stored, and disposed of by the Project's hotel, art gallery, retail, Artist CoLab, and restaurant uses would vary depending on the specific use but could include cleaning solvents, waxes, dyes, toners, paints, bleach, grease, and petroleum products. With implementation of hazardous waste reduction efforts on-site (i.e., those required under the Los Angeles Green Building Code (LAGBC) and through source reduction, recycling, on-site treatment, etc.), as well as the proper treatment and disposal of such wastes at licensed resource recovery facilities, the Project would not generate significant amounts of hazardous wastes.

The transport of hazardous materials and wastes to and from the Project (i.e., paints, adhesives, surface coatings, cleaning agents, fuels, and oils) would be required to occur in accordance with federal, state, and local regulations, including but not limited to the RCRA, Title 49 of the CFR, the California Vehicle Code, and the California Health and Safety Code. In accordance with such regulations, the transport of hazardous materials and wastes would only be performed by transporters who have received training and appropriate licensing. Additionally, hazardous waste transporters would be required to complete and carry with them a hazardous waste manifest. Placarding of vehicles carrying hazardous materials would also occur in accordance with Title 49 of the CFR. Therefore, the Project would not create a significant hazard to the public or the environment through the routine transport of hazardous materials.

Use and disposal of hazardous materials would be required to comply with applicable City, state, and federal regulations related to the handling, storage and disposal of hazardous materials, including but not limited to the RCRA, Title 49 of the CFR, the California Vehicle Code, and the California Health and Safety Code. Compliance with such regulations would ensure that the Project would not create a significant hazard to the public or the environment.

Overall, through required compliance with federal, state, and local regulations, the transport of hazardous materials and wastes during Project construction and operation would not create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials consistent with existing regulatory framework. Therefore, Project impacts related to the transport, use, storage, and disposal of hazardous materials would be less than significant.

(2) Mitigation Measures

No significant impacts related to the routine transport, use, or disposal of hazardous materials have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant.

Threshold (b) Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

(1) Impact Analysis

(a) ACMs and LBP

As discussed previously, the structures on the Project Site were constructed prior to 1920. Therefore, ACMs are presumed to exist on-site. Prior to the issuance of any demolition and/or alteration permits, the Project Applicant would be required to provide a letter to the City Angeles Department of Building and Safety from a qualified asbestos abatement consultant indicating that no ACMs are present on the Project Site. If ACMs are discovered on-site during demolition, proper abatement regulations are required to be followed. Because the Project would be required to comply with SCAQMD Rule 1403, which regulates the removal of ACMs to ensure that asbestos fibers are not released into the air during demolition activities, as well as other applicable state and federal regulations, impacts from ACMs would be less than significant. Further, demolition and removal of the existing buildings would be required to comply with CCR Title 8, Section 1532 et seq., which requires that all LBP be abated and removed by a licensed lead contractor. In addition, standard handling and disposal practice would be implemented pursuant to Cal/OSHA regulations. Prior to issuance of a demolition permit, a LBP survey shall be performed and approved by the Department of Building and Safety. **Thus, through compliance with existing regulations, the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of ACMs or LBP. Therefore, impacts related to ACMs and LBP would be less than significant.**

(b) Storage Tanks and Containers

As described above, no storage tanks or containers are known to exist on the Project Site. **Thus, the Project would not create a significant hazard to the public or the**

environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials from storage tanks or containers. Therefore, impacts related to on-site storage of hazardous materials would be less than significant.

(c) Soil Contamination

As discussed previously, little evidence of soil contamination was encountered at the Project Site during either site reconnaissance or soil boring investigation work. Low levels of metals, below applicable regulatory limits, were detected via laboratory analysis of the soil cuttings from Boring B-4. In its Phase I ESA, GeoDesign concluded that no RECs associated with current or historic use of the Project Site and the surrounding land uses pose a risk at the Project Site. However, given the known historic industrial uses of the Project Site and the difficulty of performing a complete subsurface investigation of the currently developed property, the possibility that subsurface contamination exists at the Project Site cannot be completely discounted. Accordingly, it is possible that **the Project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving contaminated soil. Therefore, Project impacts related to soil contamination would be potentially significant.**

(2) Mitigation Measures

To ensure that impacts related to potential soil contamination would be less than significant, the following mitigation measure is required:

HAZ-MM-1 A Soil Management Plan (SMP) shall be prepared and submitted to the Department of Building and Safety prior to issuance of a grading permit to review and address any impacted soil that may be encountered during excavation and grading. The SMP shall provide for the sampling, testing, and timely disposal of such soil and shall specify the testing parameters and sampling frequency. Any impacted soils shall be properly treated and disposed of in accordance with applicable SCAQMD, DTSC, and LARWQCB requirements.

(3) Level of Significance After Mitigation

Overall, through required compliance with federal, state, and local regulations and implementation of Mitigation Measure HAZ-MM-1, the Project would not 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. Therefore, Project impacts related to the upset or accidental release of hazardous materials would be less than significant with mitigation.

Threshold (c) ***Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

As discussed in the Initial Study (included in **Appendix A** of the Draft EIR), the Project Site is located within 0.25 miles of the following schools:

- Korpus School of Art and Gallery, 1300 Factory Place (900 feet south); and
- Southern California Institute of Architecture, 960 E. 3rd Street (900 feet northeast).

However, pursuant to 23 CFR 772, sensitive receptors are considered to be areas with potential to contain children under 14, the elderly over 65, or the sick/disabled including, but not limited to, churches, schools, residential uses, day care centers, and hospitals. Neither of these institutions serves children under 14. The nearest school, at which children under 14 are present, is the Metropolitan High School, located at 727 Wilson Street, approximately 2,000 feet to the south, with several intervening buildings. **Thus, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, no impact would occur with respect to schools. No further analysis is required.**

Threshold (d) ***Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, would the Project create a significant hazard to the public or the environment caused in whole or in part from the Project's exacerbation of existing environmental conditions?***

(1) Impact Analysis

California Government Code Section 65962.5 requires various state agencies, including, but not limited to, DTSC and the SWRCB, to compile lists of hazardous waste disposal facilities, unauthorized releases from underground storage tanks, contaminated drinking water wells and solid waste facilities where there is known migration of

hazardous waste, and submit such information to the Secretary for Environmental Protection on at least an annual basis. The Project Site is not included on any list compiled pursuant to Government Code Section 65962.5.[3] Thus, construction and operation of the Project would not create a significant hazard to the public or the environment, as a result of being on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, development of the Project would not cause or exacerbate a significant hazard to the public or the environment. **Therefore, no impacts related to this issue would occur.**

(2) Mitigation Measures

No impacts related to the Project Site's location on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 have been identified. Thus, no mitigation measures would be required.

(3) Level of Significance After Mitigation

No impacts related to the Project Site's location on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 would occur.

Threshold (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 have the potential to exacerbate current environmental conditions so as to result in a safety hazard for people residing or working in the Project area?***

As discussed in in the Initial Study (included in **Appendix A** of the Draft EIR), no public or public use airports are located within two miles of the Project Site. The Project Site is not located within an area covered by an airport land use plan. **Therefore, the Project would have no impact with respect to Threshold (e). No further analysis is required.**

[3] *Department of Toxic Substances Control, Envirostor, https://www.envirostor.dtsc.ca.gov, accessed May 3, 2018.*

Threshold (f) ***For a project within the vicinity of a private airstrip, would the Project have the potential to exacerbate current environmental conditions so as to result in a safety hazard for people residing or working in the Project area?***

As discussed in in the Initial Study (included in **Appendix A** of the Draft EIR), the Project Site is not located within the vicinity of a private airstrip. **Therefore, the Project would have no impact with respect to Threshold (f). No further analysis is required.**

Threshold (g) ***Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

(1) Impact Analysis

(a) Construction

The removal of the existing on-site building and the construction of the Project would occur within the property boundaries of the Project Site. Temporary pedestrian or vehicular public right-of-way closures may be necessary during the construction phase for construction staging, equipment access, and pedestrian safety. However, partial lane closures would not significantly affect emergency vehicles as the drivers of which would normally have a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Additionally, if partial closures to streets surrounding the Project Site become necessary, under the Project's Construction Traffic Management Plan (see Project Design Feature TR-PDF-2 in **Section 4.L, Transportation/Traffic**, of the Draft EIR), flagmen would be used to facilitate the traffic flow until such temporary street closures are complete. **As such, construction of the Project would not substantially impede public access, travel upon a public right-of-way, or interfere with an adopted emergency response or evacuation plan, and impacts would be less than significant.**

(b) Operation

The Project would include hotel, live/work, retail, restaurant, art gallery, and Artist CoLab land uses and would be required to establish, implement, and maintain on file an emergency response plan, which would be inspected annually by the LAFD. As part of this emergency response plan, evacuation signs would be located in every elevator lobby above and below ground, in other conspicuous floor locations, and in each employee gathering area (including "back of house" office areas) and restaurant, as required by City Code. All emergency plans, procedures, and evacuation signs would be submitted to the LAFD for inspection and approval prior to their implementation and

would be properly maintained. **Thus, operation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts in this regard would be less than significant.**

Overall, through implementation of the Project's Construction Traffic Management Plan and compliance with City requirements governing the placement of evacuation signs and the establishment of an emergency response plan, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, Project impacts related to emergency evacuation and response plans would be less than significant.

(2) Mitigation Measures

No significant impacts related to emergency response have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to emergency response would be less than significant.

Threshold (h) ***Would the Project 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 caused in whole or in part from the Project's exacerbation of existing environmental conditions?***

As discussed in in the Initial Study (included in **Appendix A** of the Draft EIR), the Project Site is not located within a Very High Fire Hazard Severity Zone.[4] The Project Site is not located within a designated Fire Buffer Zone or Mountain Fire District.[5] The nearest potential area for fire hazard is the base of the Elysian Hills, approximately two miles north of the Project Site. **Therefore, the Project would have no impact with respect to Threshold (h). No further analysis is required.**

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[4] *City of Los Angeles, ZIMAS Parcel Profile Reports, website: http://zimas.lacity.org, accessed July 7, 2017.*

[5] *City of Los Angeles, Safety Element, Exhibit D, Selected Wildfire Hazard Areas in the City of Los Angeles: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf.*

e) Cumulative Impacts

(1) Impact Analysis

A total of 117 cumulative projects were identified in the study area (see Table III-1 in **Section III, Environmental Setting** of the Draft EIR). In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to those of many of the cumulative projects. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects, which itself is a conservative assumption, would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

Cumulative growth in the Project area includes these specific known development projects, as well as general ambient growth projected to occur, such as that envisioned in the Community Plan Update. Some of this growth is anticipated to occur on or around properties in the Project area known to contain hazardous or potentially hazardous conditions, such as hazardous waste generation or handling, or the presence of leaking underground storage tanks. While impacts associated with hazards and hazardous materials are typically site-specific and do not cumulatively affect off-site areas, conditions such as contaminated groundwater can affect down-gradient properties. In addition, operation of many of the cumulative projects can reasonably be expected to involve the limited use of potentially hazardous materials typical of those used in residential and commercial developments, including cleaning agents, paints, pesticides, and other materials used for landscaping. Further, some of the cumulative projects propose manufacturing and warehouse uses that may also utilize, handle, store, or generate hazardous materials.

However, regardless of the number and location of the cumulative projects, the Project, together with the cumulative development, would not create an impact that is cumulatively considerable, as each development project would have to comply with site-specific development standards, as well as federal, state, and local hazardous materials handling and transporting regulations. The Project would implement Mitigation Measure HAZ-MM-1 to address the potential presence of subsurface soil contamination; each of the other cumulative projects would be required to address such contamination in a similar fashion, should it be present or potentially present. As a result, it is reasonably expected that all potentially hazardous materials present or used at the cumulative development project sites would be stored and disposed of in accordance with

manufacturers' specifications and handled in compliance with applicable standards and regulations. Compliance with these standards and regulations would ensure that cumulative development in the Project area would not result in a cumulatively significant impact with respect to the usage or release of hazards or hazardous materials.

Similarly, as with the Project, the cumulative development projects would be required to prepare and implement construction traffic management plans and would be required to comply with City requirements governing the placement of evacuation signs and the establishment of emergency response plans. Compliance with these requirements would ensure that cumulative development in the Project area would not result in a cumulatively significant impact with respect to the implementation of emergency response or evacuation plans.

As such, cumulative impacts related to hazards and hazardous materials for the concurrent development of the Project and cumulative projects would be less than significant, and the Project's overall contribution would not be cumulatively considerable.

(2) Mitigation Measures

Implementation of Mitigation Measure HAZ-MM-1 is necessary to address the potential presence of subsurface soil contamination at the Project Site. This would be a Project-specific impact. The Project's contribution to all other cumulative impacts related to hazards and hazardous materials would be less than significant. Thus, no additional mitigation measures are required.

(3) Level of Significance After Mitigation

Implementation of Mitigation Measure HAZ-MM-1 would ensure that the Project's Project-specific impact with respect to potential soil contamination would be less than significant. No significant cumulative impacts related to hazards and hazardous materials would occur.

IV. Environmental Impact Analysis

H. Land Use and Planning

1. Introduction

This section provides an analysis of the Project's potential land use impacts based upon two criteria: physical compatibility with surrounding land uses and consistency with applicable land use policies of agencies with jurisdiction over the Project Site. In addition, the potential cumulative land use impacts of the Project, in combination with all known cumulative development projects, are evaluated in this section.

2. Environmental Setting

a) Regulatory Framework

(1) Senate Bill 375

On September 30, 2008, Senate Bill (SB) 375 was instituted to help achieve Assembly Bill (AB) 32 goals through regulation of cars and light trucks. SB 375 aligns three policy areas of importance to local government: (1) regional long-range transportation plans and investments; (2) regional allocation of the obligation for cities and counties to zone for housing; and (3) achievement of greenhouse gas (GHG) emission reduction targets for the transportation sector set forth in AB 32.[1] It establishes a process for the California Air Resources Board (CARB) to develop GHG emission reduction targets for each region (as opposed to individual local governments or households). SB 375 also requires Metropolitan Planning Organizations (MPO) to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses California Environmental Quality Act (CEQA) streamlining as an incentive to encourage residential or mixed-use residential projects, which help achieve AB 32 goals to reduce GHG emissions.

[1] *AB 32 was signed into law in 2006 and focuses on achieving GHG emissions equivalent to Statewide levels in 1990 by 2020.*

On September 23, 2010, CARB adopted regional targets for the reduction of GHG emissions applying to the years 2020 and 2035.[2] For the area under the Southern California Association of Governments (SCAG) jurisdiction, including the Project area, CARB adopted regional targets for the reduction of GHG emissions by eight percent for 2020 and by 13 percent for 2035. On February 17, 2011, CARB's Executive Officer approved the final targets.[3]

(2) Regional Plans

(a) Southern California Association of Governments 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

The SCAG functions as the MPO for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The SCAG region encompasses a population exceeding 18 million persons in an area of more than 38,000 square miles. As the federally designated MPO, SCAG is mandated to research and create plans for transportation, growth management, and air quality.

On April 7, 2016, SCAG adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS). The 2016-2040 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards (NAAQS) as set forth by the Federal Clean Air Act (CAA). As such, the 2016-2040 RTP/SCS contains a regional commitment for the broad deployment of zero- and near-zero-emission transportation technologies in the 2023-2040 timeframe and clear steps to move toward this objective. This is especially critical for the goods movement system. The development of a zero- or near-zero-emission freight transportation system is necessary to maintain economic growth in the region, to sustain quality of life, and to meet federal air quality requirements. The 2016-2040 RTP/SCS puts forth an aggressive strategy for technology development and deployment to achieve this objective. This strategy will have many co-benefits, including energy security, cost certainty, increased public support for infrastructure, GHG emissions reduction, and economic development.

The 2016-2040 RTP/SCS includes a consideration of the economic impacts and opportunities provided by the transportation infrastructure plan set forth in the document, considering the economic and job creation impacts of the direct investment

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[2] *California Air Resources Board, Notice of Decision: Regional Greenhouse Gas Emissions Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375, https://www.arb.ca.gov/cc/sb375/notice%20of%20decision.pdf.*

[3] *CARB, Executive Order No. G-11-024, Relating to Adoption of Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.*

in transportation infrastructure, and also the efficiency gains in terms of worker and business economic productivity and goods movement.

The 2016-2040 RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play, and how they will move around. It is designed to promote safe, secure, and efficient transportation systems to provide improved access to opportunities, such as jobs, education, and healthcare. Its emphasis on transit and active transportation is designed to allow residents to lead a healthier, more active lifestyle. Its goal is to create jobs, ensure the region's economic competitiveness through strategic investments in the goods movement system, and improve environmental and health outcomes for its 22 million residents by 2040.

(b) South Coast Air Quality Management District Air Quality Management Plan

The Project Site is located within the South Coast Air Basin (Basin) and within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). In conjunction with SCAG, SCAQMD is responsible for formulating and implementing air pollution control strategies, including periodic updates to the Air Quality Management Plan (AQMP), and guidance to local government about how to incorporate these strategies into their land use plans and decisions about development.

SCAG is responsible for generating the socio-economic profiles and growth forecasts on which land use, transportation, and air quality management and implementation plans are based. The growth forecasts provide the socioeconomic data used to estimate vehicle trips and vehicle miles traveled (VMT). Emission estimates then can be forecast by SCAQMD based on these projected estimates. Reductions in emissions due to changes in the socio-economic profile of the region are an important way of taking account of changes in land use patterns. For example, changes in jobs/housing balance induced by changes in urban form and transit-oriented development induce changes in VMT by more closely linking housing to jobs. Thus, socio-economic growth forecasts are a key component to guide the Basin toward attainment of the NAAQS.

The current AQMP establishes a comprehensive regional air pollution control program leading to the attainment of state and federal air quality standards in the Basin. In addition to setting minimum acceptable exposure standards for specified pollutants, the AQMP incorporates SCAG's growth management strategies that can be used to reduce vehicle trips and VMT, and hence air pollution. These include, for example, co-location

of employment and housing, and mixed-use land patterns that allow the integration of residential and non-residential uses.[4]

Air quality impacts of the Project and consistency of the Project with the AQMP are analyzed in **Section IV.C, Air Quality**, of the Draft EIR.

(c) Los Angeles County Metropolitan Transportation Authority Congestion Management Plan

The Congestion Management Plan (CMP) for Los Angeles County is intended to address vehicular congestion relief by linking land use, transportation, and air quality decisions. The CMP also seeks to develop a partnership among transportation decision-makers to devise appropriate transportation solutions that include all modes of travel, and to propose transportation projects, which are eligible to compete for state gas tax funds.[5] Within Los Angeles, the Los Angeles County Metropolitan Transportation Authority (Metro) is the designated congestion management agency responsible for coordinating the CMP.

The Project's potential impacts with respect to the CMP are analyzed in **Section IV.L, Transportation/Traffic**, of the Draft EIR.

(3) Local Plans

(a) City of Los Angeles General Plan

The City of Los Angeles (City) General Plan (General Plan), adopted December 1996 and re-adopted August 2001, provides general guidance on land use issues for the entire City. The General Plan consists of a Framework Element, a Land Use Element, and 10 citywide elements.

(i) Framework Element

The Framework Element of the General Plan serves as guide for the City's overall long-range growth and development policies and serves as a guide to update the community plans and the citywide elements. The citywide elements address functional topics that cross community boundaries, such as transportation, and address these topics in more detail than is appropriate in the Framework Element, which is the "umbrella document" that provides the direction and vision necessary to bring cohesion to the City's overall

[4] *2016 Air Quality Management Plan, Executive Summary; South Coast Air Quality Management District; https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/executive-summary.pdf?sfvrsn=4*

[5] *2010 Congestion Management Program, Executive Summary; Los Angeles County Metropolitan Transportation Authority; http://media.metro.net/docs/cmp_final_2010.pdf*

general plan. The Framework Element provides a conceptual relationship between land use and transportation and provides guidance for future updates to the various elements of the General Plan but does not supersede the more detailed community and specific plans. The Land Use chapter of the Framework Element contains Long Range Land Use Diagrams that depict the generalized distribution of centers, districts, and mixed-use boulevards throughout the City, but the community plans determine the specific land use designations. The Land Use Element of the General Plan is contained within 35 community plans. The Project Site is located in the Central City North Community Plan (Community Plan) Area, discussed below.

(ii) Housing Element

The Housing Element of the City's General Plan identifies as its overall goal the creation of a city of livable and sustainable neighborhoods with a range of housing types and costs in mutual proximity to jobs, infrastructure and services.[6]

On December 3, 2013, the City Council adopted the update to the Housing Element of the General Plan for the period of 2013-2021.[7] The Housing Element identifies the number of housing units each community must plan for and accommodate during the 8-year period, which is called the Regional Housing Needs Assessment (RHNA) allocation. The Housing Element does not alter the development potential of any site in the City, nor modify land use of the Zoning Code. It also does not undermine, in any way, neighborhood planning efforts such as Community Plans, Specific Plans, or Historic Preservation Overlay Zones. While the State requires the City to evaluate and plan for the existing capacity to accommodate future projected growth, the Housing Element does not have any material effect on development patterns or specify areas for increased height or density.[8]

Under Housing Element law, the City must show that it has adequate land zoned to accommodate the entirety of its 2013-2021 RHNA allocation of 82,002 housing units. The Housing Element has identified 453 sites (179.6 acres) in the Community Plan Area as having the housing capacity for 11,490 net units.[9]

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[6] *City of Los Angeles Department of City Planning, Housing Element, City of Los Angeles General Plan, adopted December 18, 2001, available online: https://planning.lacity.org/HousingInitiatives/HousingElement/TOCHousingElement.htm. (Hereinafter, Housing Element).*

[7] *City of Los Angeles, Housing Element, 2013-2021: https://sites.google.com/site/lahousingelement/*

[8] *Ibid.*

[9] *City of Los Angeles, Housing Element, 2013-2021, adopted December 3, 2013, Table 3.1, page 3-4.*

An objective of the Housing Element is to promote an equitable distribution of affordable housing opportunities throughout the City by providing incentives to include affordable housing in residential development, particularly in mixed-use developments.

(iii) Health and Wellness Element

The Health and Wellness Element (also known as Plan for a Healthy Los Angeles) lays the foundation to create healthier communities for all Angelenos. As an element of the General Plan, it provides high-level policy vision, along with measurable objectives and implementation programs, to elevate health as a priority for the City's future growth and development. Through a new focus on public health from the perspective of the built environment and City services, the City seeks to achieve better health and social equity through its programs, policies, plans, budgeting, and community engagement.

With a focus on public health and safety, the Health and Wellness Element provides a roadmap for addressing the most basic and essential quality-of-life issues: safe neighborhoods, a clean environment, access to health services, affordable housing, healthy and sustainably produced food, and the opportunity to thrive.

The Health and Wellness Element accomplishes two policy objectives: it elevates existing health-oriented policies in the General Plan and, where policy gaps exist, creates new policies to reinforce the City's goal of creating healthy, vibrant communities. The Health and Wellness Element acknowledges the relationship between public health and issues such as transportation, housing, environmental justice, and open space, among others, by reviewing the relevant policies in the General Plan and identifying where further policy direction is needed to achieve the goal of creating a healthy and sustainable City.[10]

The Health and Wellness Element is underpinned by seven goals and identifies new policies and possible programs that serve as the implementation blueprint for creating healthier neighborhoods. Each goal includes supporting objectives to track improvements to community health.

1. Los Angeles, a Leader in Health and Equity
2. A City Built for Health
3. Bountiful Parks and Open Spaces

[10] *Implementation of the Health and Wellness Element is addressed through programs, ordinances, and Community Plans, among other planning policy documents, which allow for the flexibility needed to address the specific needs of the City's diverse communities. References to neighborhoods usually reflect the Community Plan Area boundaries used by the Department of City Planning, but the City recognizes the fluidity and diversity of the City's neighborhoods.*

4. Food that Nourishes the Body, Soul, and Environment
5. An Environment Where Life Thrives
6. Lifelong Opportunities for Learning and Prosperity
7. Safe and Just Neighborhoods

(iv) Central City North Community Plan

The Community Plan is one of 35 Community Plans established for different areas of the City that are intended to implement the policies of the General Plan Framework. Together, the plans make up the Land Use Element of the General Plan. The Community Plan is intended to promote an arrangement of land uses, streets and services, which will encourage and contribute to the economic, social, and physical health, safety, and welfare of the people who live and work in the community. The Community Plan is also intended to guide development in order to create a healthful and pleasing environment. The community plans coordinate development among the various communities of Los Angeles and adjacent municipalities in a fashion both beneficial and desirable to the residents of the community.

The Community Plan Area contains 2,005 acres (2.57 square miles), which is approximately less than one percent of the land in the City. The Community Plan Area is adjacent to downtown Los Angeles and bounded by the Los Angeles River to the east, the City of Vernon to the south, Alameda Street, Cesar Chavez Avenue, Sunset Boulevard, and Marview Avenue to the west, and Stadium Way, Lilac Terrace, and North Broadway to the north. Within the City, the plan area is surrounded by the communities of Silverlake-Echo Park, Central City, Boyle Heights, and Northeast Los Angeles.

The Community Plan Area consists of a combination of grid and curvilinear streets and includes both the industrial district east of Alameda Street from the Santa Ana Freeway south to the City of Vernon and the largely commercial and residential Chinatown district north of the Hollywood Freeway. Nearly all of the housing is low-rise and mid-rise multi-family at a net density of 39 units per acre. The low-rise commercial district that comprises Chinatown consists of a mix of low-rise buildings with pedestrian oriented storefronts along segments of Hill Street and Broadway.[11]

Industrial development north of the US 101 freeway surrounds the Chinatown commercial district. The entire area south of the US 101 freeway between Alameda Street and the Los Angeles River (and railroad lines) is a major industrial district,

[11] *City of Los Angeles, Central City North Community Plan, December 2000, page I-1.*

consisting of a variety of different industrial activities. The Alameda Corridor has traditionally been a center of commercial and transit activity in this planning area, with rail lines extending from Union Station to the harbor area. Cottage and light industry have adjoined the corridor, with limited residential areas to accommodate the work force. In recent years, the area has seen an increase in the conversion of industrial buildings to artists-in-residence workshops and studios.[12]

The Community Plan Area is comprised of seven subareas, each with its own identity, described including the following:

- Figueroa Terrace
- Alpine Hill
- Chinatown
- North Industrial
- Government Support
- Artists-in-Residence (Arts District)
- South Industrial

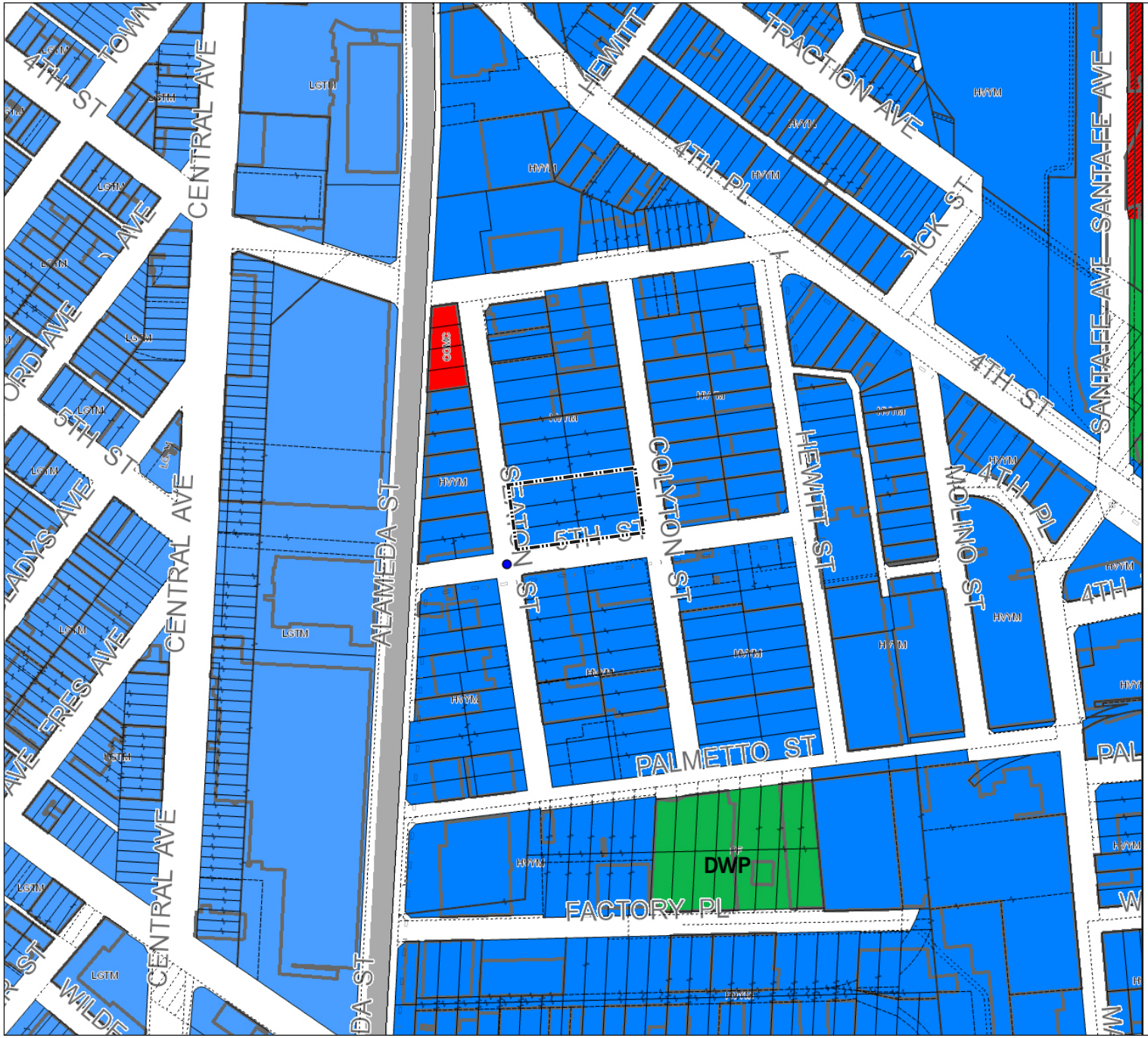
The Community Plan encourages the continued and expanded development of a thriving artists-in-residence community in the plan and proposed redevelopment areas.

The existing land use designation for the Project Site in the Community Plan is Heavy Industrial (see Figure IV.H-1).

(b) City of Los Angeles General Provisions and Zoning Code

All development activity on the Project Site is subject to the City of Los Angeles Municipal Code (LAMC), particularly Chapter 1, General Provisions and Zoning, also known as the City of Los Angeles Planning and Zoning Code (Zoning Code). The Zoning Code includes development standards for the various districts in the City. As shown in Figure IV.H-2, the Project Site is currently zoned M3-1-RIO (Heavy Industrial Zone, Height District 1, Los Angeles River Improvement Overlay District).

[12] *Ibid.*



Legend

GENERAL PLAN LAND USE

COMMERCIAL

- Community Commercial
- Regional Center Commercial

INDUSTRIAL

- Light Manufacturing
- Heavy Manufacturing

OPEN SPACE / PUBLIC FACILITIES

- Public Facilities

- Project Site

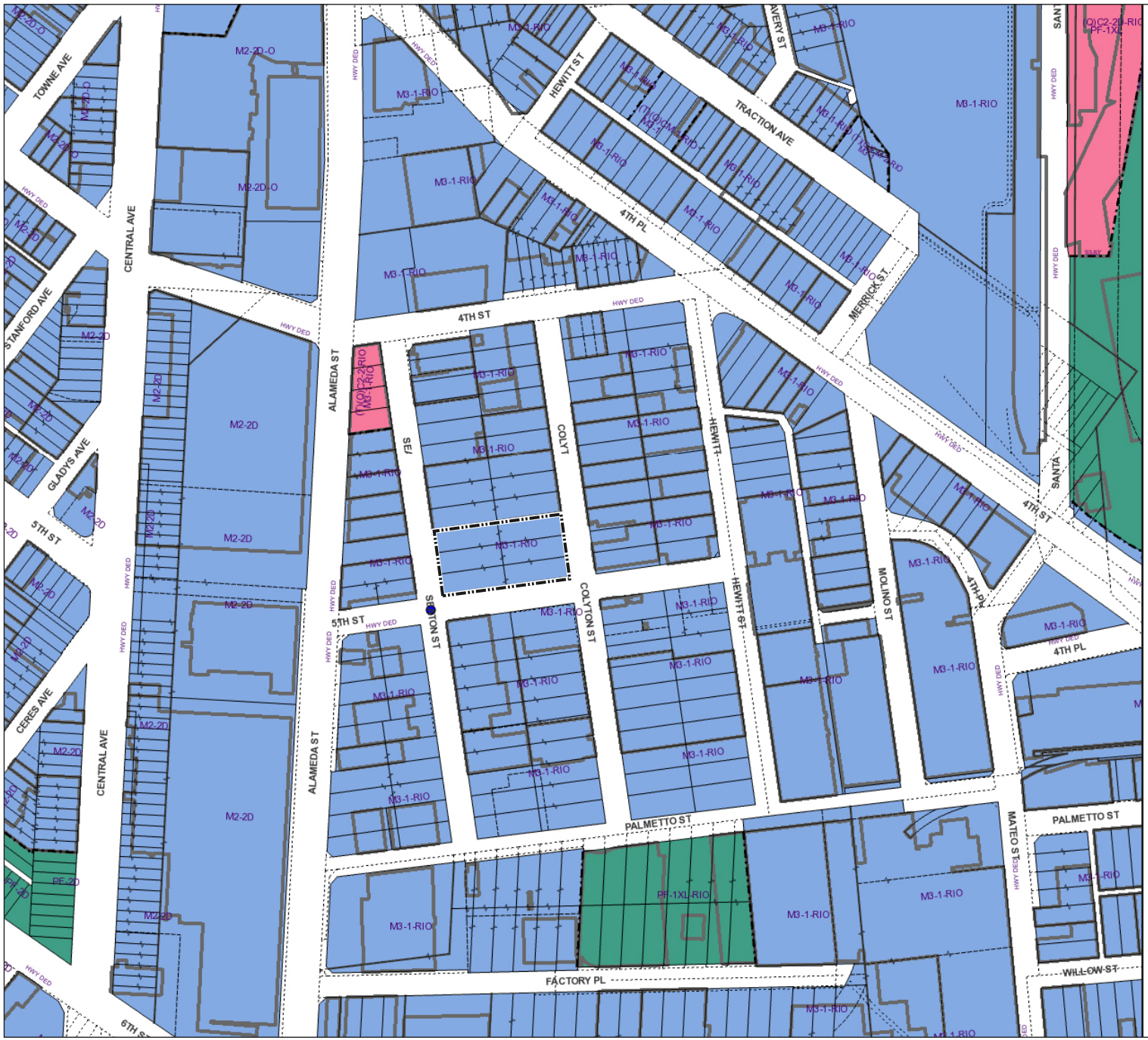
NORTH

0 200 400

Scale (Feet)

Figure IV.H-1
Existing Land Use Designation

Source: Los Angeles City Planning Department: http://zimas.lacity.org/, accessed April 2, 2018.



Legend

GENERALIZED ZONING

- CR, C1, C1.5, C2, C4, C5, CW, ADP, LASED, CEC, USC, PVSP, PPSP
- CM, MR, WC, CCS, UV, UI, UC, M1, M2, LAX, M3, SL
- PF
- Project Site

NORTH

0 200 400

Scale (Feet)

Source: Los Angeles City Planning Department: http://zimas.lacity.org/, accessed April 2, 2018.

Figure IV.H-2
Existing Zoning

Permitted Uses. Uses that are allowed in the M3 zone include all of the uses allowed in the M1, M2, and MR2 zones and, as such, generally include those uses allowed in the C1, C1.5, and C2 zones (see LAMC Section 12.20-A,1). Permitted uses include, among others: restaurants, business and professional offices, medical clinics and laboratories, grocery stores, retail and service stores, pharmacies, drugstores, manufacturing and industrial activities, research and development, storage, and parking. Buildings containing dwelling units or guest rooms are prohibited in the M3 zone (see LAMC Section 12.19-A,1.5(a).

Setback Requirements. Buildings in the M3 zone do not have setback requirements.

Lot Requirements. Buildings in the M3 zone do not have lot area requirements.

Height and Density Limitations. The M3-1 zone corresponds to Height District 1. Pursuant to LAMC Section 12.21.1-A,1, Height District 1 allows a maximum floor area ratio (FAR) of 1.5:1 and does not limit the height of structures in M designated zones.[13]

Open Space. Pursuant to LAMC Section 12.21-G, new construction of six or more dwelling units on a lot is required to provide at a minimum of 100 square feet of usable open space for each dwelling unit having less than three habitable rooms, 125 square feet for each dwelling unit having three habitable rooms, and 175 square feet for each dwelling unit having more than three habitable rooms. Usable open space is defined as area that is designed and intended to be used for active or passive recreation. Usable open space may consist of private and/or common area open space. However, common open space areas must be a minimum of 400 square feet and must constitute at least 50 percent of the total open space provided. Open space does not generally include parking areas, driveways, or required front and side yards. A minimum of 25 percent of the common open space area shall be planted with ground cover, shrubs, or trees and at least one 24-inch box tree is required for every four dwelling units.

Los Angeles River Improvement Overlay District. The Project Site falls within the Los Angeles River Improvement Overlay District, which is a special use district that requires new projects within the district to meet development regulations addressing landscaping, screening and fencing, and lighting, and orientation in association with the Los Angeles River.

[13] *Floor Area is defined in LAMC Section 12.03 as that area in square feet confined within the exterior walls of a building, but not including the area of the following: exterior walls, stairways, shafts, rooms housing building-operating equipment or machinery, parking areas with associated driveways and ramps, space for the landing and storage of helicopters, and basement storage areas. Therefore, floor area does not include exterior walls, stairs, elevators, shafts, telephone/electric rooms on each typical floor, and parking areas.*

East Los Angeles State Enterprise Zone. The Project Site is located within the East Los Angeles State Enterprise Zone and is, therefore, afforded parking standards pursuant to LAMC Section 12.21-A,4(x)(3) utilizing a lower parking ratio for commercial office, business, retail, restaurant, bar and related uses, trade schools, or research and development buildings, thereby allowing the increase of buildable area of the parcel.

Transit Priority Area. Transit Priority Areas are defined (Public Resources Code 21099(a)(7)) as those areas located within 0.5 miles of an existing or planned major transit stop, which includes the intersection of two or more bus routes having a service frequency interval of 15 minutes or less during peak commute periods. On February 10, 2016, the City circulated Zoning Information File No. 2452 to clarify the locations of Transit Priority Areas within the City. As shown on that document (see **Appendix B** of the Draft EIR), the Project Site is within a Transit Priority Area. The Project Site is located on an infill site, is a mixed-use project, and is located in a Transit Priority Area because it is within 0.5 miles of the intersection of Metro Bus Routes 18 and 60 at 7th Street and Alameda Street as well as 0.5 miles from the Little Tokyo/Arts District Metro Gold Line station, which is defined as a Major Transit Stop.[14] Zoning Information File No. 2452 states that visual resources, aesthetic character, shade and shadow, light and glare, and scenic vistas or any other aesthetics impact, as defined in the City's CEQA Threshold Guide, shall not be considered an impact for infill projects within Transit Priority Areas pursuant to CEQA.

(c) Walkability Checklist: Guidance for Entitlement Review

The purpose of the Walkability Checklist: Guidance for Entitlement Review (Walkability Checklist) is to guide the City's Department of City Planning, as well as developers, architects, engineers, and all community members in creating enhanced pedestrian movements, access, comfort, and safety throughout the City. The Walkability Checklist provides a list of recommended strategies that projects should employ to improve the pedestrian environment in the public right-of-way and on private property. Each of the implementation strategies on the Walkability Checklist should be considered in a proposed project, although not all may be appropriate in every proposed project. While the Walkability Checklist is not a requirement of the Zoning Code, it provides a guide for consistency relating with the policies contained in the General Plan Framework Element. Incorporating these guidelines into a project's design encourages pedestrian activity, more adequate forms, and placemaking.

[14] *Each of these Metro bus routes provides service every 15 minutes (or less) during the peak commuter periods each weekday (Source: Metro LA Bus Route Maps, https://www.metro.net/riding/maps/; accessed December 21, 2016).*

(d) Do Real Planning

In 2005, the City Planning Commission (CPC) identified a need to better frame the planning policy dialogue and establish the context by which the CPC would conduct its decision-making. In response, the CPC created a series of planning principles to frame the way policies, programs, and projects would be considered. The "Do Real Planning" mantra became the Commission's document title. Instead of the Commission simply responding and reacting to the projects and programs brought before them, they were now in a position to proactively guide and more effectively influence the outcomes. The "Do Real Planning" document provided 14 guiding principles to set the tone for civic discussions about planning issues and quality of life for communities and neighborhoods.

These 14 guiding principles are as follows:

1. Demand a walkable city
2. Offer basic design standards
3. Require density around transit
4. Eliminate Department bottlenecks
5. Advance homes for every income
6. Locate jobs near housing
7. Produce green buildings
8. Landscape in abundance
9. Arrest visual blight
10. Neutralize mansionization
11. Nurture planning leadership
12. Identify smart parking requirements
13. Narrow road widenings
14. Give project input early

b) Existing Conditions

(1) Existing Land Uses

The approximately 1.05-acre Project Site is located at 1129 E. 5th Street (with additional addresses of 1101 E. 5th Street, 445-457 South Colyton Street, and 450-456 South Seaton Street) on the north side of 5th Street and occupies the entire block between Seaton and Colyton Streets. The Project Site is developed with a two-story building. The lower level is primarily used as light industrial and arts production space. The second story contains 10 live/work units. The approximately 91,200-square-foot structure was constructed in approximately 1915 with a concrete slab foundation, wood beam framework, and brick/concrete exterior walls. The building covers the entirety of the Project Site. Street parking (head-in) is provided on three sides (5th, Seaton and Colyton) of the existing structure, which directly abuts the adjoining off-site buildings to the north. Local streets in the vicinity include north-south streets, such as Alameda Street, Seaton Street, and Colyton Street; and east-west streets, such as 5th Street, 4th Street, and 6th Street.

The Project Site is located within the Artists-in-Residence District of the Community Plan (more commonly referred to as the "Arts District"), which is bounded by 1st Street to the north, the Los Angeles River to the east, 6th Street to the south, and Alameda Street to the west. This area located just outside the Little Tokyo boundaries, is primarily made up of old warehouses, many of which are now in the process of being converted to artists' studios and workshops, live/work spaces, residential developments, and neighborhood-serving retail and commercial uses.

(2) Existing Surrounding Land Uses

The surrounding land uses are characterized by a mix of industrial and former industrial, commercial, and loft residential uses. The immediate surroundings are zoned M3-1-RIO (Heavy Industrial). Properties located a short distance east of the Project Site adjacent to the Los Angeles River are zoned PF (Public Facilities) and OS (Open Space).

The Project Site is immediately surrounded by a mix of industrial, gas station (including a commercial truck fueling facility), residential, and commercial uses contained in low-rise and mid-rise buildings of widely varying age, and which are physically separated from the Project Site on the south, west, and east by streets. Structures on the adjacent properties to the north immediately abut the existing building on the Project Site. The residential uses closest to the Project Site are the four-story Barker Block Residences, located southwest at 510 Hewitt Street, and the Beacon Lofts, located to the north at 825 East 4th Street. To the southeast at the corner of 5th Street and Hewitt Street are a restaurant, a tow service parking lot, and the new half-acre Arts District green

space/park. The park sits immediately north of the La Kretz Innovation Campus, a 60,000-square foot facility, which serves as an incubator for local startups in the cleantech industry.

The Project Site sits on the southern portion of the block bounded by 4th Street to the north, Colyton Street to the east, 5th Street to the south, and Seaton Street to the west. Specifically, the adjoining parcels are developed as follows:

- North: Immediately to the north of the Project Site is a three-story warehouse hosting an event space and creative business offices and creative business offices, and two one-story warehouses hosting commercial uses.
- South: Located across 5th Street, from east to west, uses include a surface asphalt parking lot associated with a four-story warehouse/office building (fronting on Colyton Street), another gated surface paved parking lot, and a single-story stucco industrial office building at the corner of 5th Street and Seaton Street.
- East: Across Colyton Street are single-story industrial and/or warehouse buildings with associated gated surface parking and exterior shed facilities.
- West: Across Seaton Street is a single-story brick industrial and/or warehouse building with associated gated surface parking. Immediately to the south (across 5th Street) is a commercial truck fueling station operated by Valero.

3. Project Impacts

a) Methodology

The analysis examines the Project's consistency with both regional and local plans, adopted for the purpose of avoiding or mitigating an environmental effect. In addition, the analysis examines the Project's compatibility with surrounding uses.

The determination of consistency with applicable land use policies and ordinances is based upon a review of the previously identified planning and zoning documents that regulate land use or guide land use decisions pertaining to the Project Site. CEQA Guidelines Section 15125(d) requires that a draft EIR discuss any inconsistencies with applicable plans. A project is considered consistent with the provisions and general policies of an applicable City or regional land use plan if it is consistent with the overall intent of the plan and would not preclude the attainment of its primary goals. A project does not need to be in perfect conformity with each and every policy.[15] More

[15] *Sequoyah Hills Homeowners Association v. City of Oakland (1993) 23 Cal.App.4th 704, 719.*

specifically, according to the ruling in *Sequoyah Hills Homeowners Association v. City of Oakland*, state law does not require an exact match between a project and the applicable general plan. Rather, to be "consistent," the project must be "compatible with the objectives, policies, general land uses, and programs specified in the applicable plan," meaning that a project must be in "agreement or harmony" with the applicable land use plan to be consistent with that plan.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), a project could have a significant impact related to land use and planning if the project would do the following:

(a) Physically divide an established community; or

(b) 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; or

(c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

(2) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) identifies the following criteria to evaluate land use and planning:

(a) Consistency Analysis

- Whether the proposal is inconsistent with the adopted land use/density designation in the Community Plan, redevelopment plan or specific plan for the site.
- Whether the proposal is inconsistent with the General Plan or adopted environmental goals or policies contained in other applicable plans.

(b) Compatibility Analysis

- The extent of the area that would be impacted, the nature and degree of impacts, and the type of land uses within that area.

- The extent to which existing neighborhoods, communities, or land uses would be disrupted, divided or isolated, and the duration of the disruptions.
- The number, degree, and type of secondary impacts to surrounding land uses that could result from implementation of the proposed project.

In assessing impacts related to land use and planning in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

c) Project Design Features

No specific Project Design Features (PDFs) are proposed with regard to land use and planning.

d) Analysis of Project Impacts

As discussed in **Section II, Project Description**, of the Draft EIR, the Project would develop a 12-story, approximately 148-foot-tall building containing 129 live/work condominium units (200,021 square feet), a 113-room hotel (97,850 square feet), and 72,469 square feet of commercial space, to be used for art galleries (10,341 square feet), retail (26,979 square feet), restaurant (31,719 square feet), and Artist CoLab (3,430 square feet). A total of 513 automobile parking spaces would be provided in four of the five subterranean levels. All of the parking levels (B2-B5) would include an automated robotic parking system with five car lifts that allow cars to be stored more effectively. The Project's FAR would be 8.1 to 1. Eleven percent of the base density would be set aside as restricted affordable (Very Low) units. Excavation for the Project would reach a depth of approximately 50 feet below the existing grade, which would require approximately 60,000 cubic yards of excavation.

The Project would require approval of the following entitlements:

1. Pursuant to LAMC Section 11.5.6 and Charter Section 555, a General Plan Amendment (GPA) to change the Central City North Community Plan land use designation of the Project Site from Heavy Industrial to Regional Center Commercial;
2. Pursuant to LAMC Section 12.32-Q, a Vesting Zone Change and Height District Change to change the zoning of the Project site from M3-1-RIO to C2-2-RIO (permitting a maximum FAR of 8.1:1 and a maximum height of 148 feet to the top of the parapet);

3. Pursuant to LAMC Section 17.01 et seq., a Vesting Tentative Tract Map No. 74703 for a 12-lot subdivision for merger and re-subdivision with a request for haul route approval;

4. Pursuant to LAMC Section 16.05, Site Plan Review;

5. Pursuant to LAMC Section 12.22-A,25(g)(2), Density Bonus Compliance Review for the provision of 11 percent Very-Low income affordable housing units with two on-menu incentives (a 35 percent increase in Floor Area Ratio and a reduced side yard setback of 12 feet in lieu of 14 feet). No density bonus units are requested;

6. Pursuant to LAMC Section 12.24-W,1, Master Conditional Use Permit for on-site and off-site sales and consumption of alcohol;

7. Pursuant to LAMC Section 12.24-W,18, Conditional Use Permit for live entertainment and dancing; and

8. Any other entitlements and permits necessary to construct the Project.

Threshold (a) Would the project physically divide an established community?

As discussed in the **Initial Study** (see **Appendix A** of the Draft EIR), the Project would not physically divide an established community. The Project Site is 1.05 acres in size and is currently developed with a two-story building containing light industrial/arts production spaces and live/work uses. The existing building covers the majority of the Project Site. Redevelopment of the Project Site with the Project would not physically divide an established community. **Therefore, no impact with respect to community division would occur. No further analysis is required.**

Threshold (b) Would the project 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?

(1) Impact Analysis

(a) SCAG 2016-2040 RTP/SCS

The SCAG 2016-2040 RTP/SCS plans to concentrate future development and provide higher intensity development, including residential development, in proximity to transit hubs in order to reduce VMT and thereby reduce GHG emissions from personal vehicles. The growth and land use assumptions for the SCS are to be adopted at the

jurisdictional level. For the City, SCAG's growth forecast envisions the addition of about 763,900 people and about 364,800 households between 2012 and 2040. The State-approved RHNA assigns the City a housing production need of 95,023 units for the 2014-2021 planning period, or an annual average of about 11,900 new dwelling units per year.[16] As discussed in detail in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, the Project's housing and associated residential population growth is consistent with SCAG's forecast for the City.

Development of the Project is anticipated to reduce VMT by including a balanced mix of uses that enhances walkability and connectivity near the DASH Line A, Metro Local Route 18, and the Metro Gold Line. A discussion of the Project's consistency with the relevant policies in the 2016-2040 RTP/SCS is presented on Table IV.H-1. The Project would be substantially consistent with the applicable 2016-2040 RTP/SCS policies. **Therefore, Project impacts related to consistency with the 2016-2040 RTP/SCS would be less than significant.**

Table IV.H-1
SCAG 2016-2040 RTP/SCS Consistency Analysis

Goal	Consistency Discussion
Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent.** The Project would be a mixed-use live/work, hotel, art gallery, and commercial development in proximity to downtown Los Angeles (a source of employment and shopping) and transit services, including DASH Line A, Metro Local Route 18, and the Metro Gold Line. Additionally, the Project would encourage biking due to the inclusion of 52 short-term and 168 long-term bicycle parking spaces. Sidewalks would surround the Project on three sides. The Project would further enhance pedestrian activity by offering retail and restaurant opportunities at the ground level, as well as movable and fixed outdoor furniture and an outdoor dining area along the sidewalk, at the southeast corner (corner of 5th and Colyton Streets). In addition, the Project Site has a Walk Score of 94, underscoring that the Project Site exists as a pedestrian-

[16] *Refer to **Section IV.J, Population, Housing, and Employment**, of the Draft EIR.*

Table IV.H-1
SCAG 2016-2040 RTP/SCS Consistency Analysis

Goal	Consistency Discussion
	friendly environment, which would be strengthened by the Project. The ability of Project residents and guests to walk or bike to local destinations would reduce total vehicle usage and thereby improve air quality.
Actively encourage and create incentives for energy efficiency, where possible.	**Consistent.** The Project would comply with 2016 Title 24 standards, the California Green Building Standards Code (CALGreen Code), and the Los Angeles Green Building Code (LAGBC), which are designed to reduce the Project's energy use. The Project would also be consistent with the City's Building Code. See **Section II, Project Description**, of the Draft EIR, for a list of energy-saving features incorporated into the Project's design.
Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consistent.** See discussion above for the first 2016-2040 RTP/SCS goal regarding encouraging the use of non-motorized transportation.
Source: Southern California Association of Governments, Regional Transportation Plan/Sustainable Communities Strategy, April 2016.	

(b) General Plan Framework Element

The Project's consistency with the relevant General Plan Framework Element land use policies is discussed on Table IV.H-2. As shown therein, the Project would be substantially consistent with applicable policies. **Therefore, Project impacts related to consistency with the Framework Element would be less than significant.**

Table IV.H-2
Project Consistency with Applicable Policies of the Framework Element

Objective	Project Consistency
Framework Element: Land Use Chapter	
3.1.5 Allow amendments to the community plans and coastal plans to further refine General Plan Framework Element land use boundaries and categories to reflect local conditions, personal characteristics, existing land	**Consistent.** The Project includes a request for a General Plan Amendment to change the land use designation from Heavy Industrial to Regional Center Commercial to permit a mixed-use live/work, hotel, art gallery, and

Table IV.H-2
Project Consistency with Applicable Policies of the Framework Element

Objective	Project Consistency
uses, and public input. These changes shall be allowed provided (a) that the basic differentiation and relationships among land use districts are maintained, (b) there is no reduction in the overall housing capacity, and (c) additional environmental review is conducted in accordance with the California Environmental Quality Act should the impacts of the changes exceed the levels of significance defined and modify the conclusions of the Framework Element's Environmental Impact Report.	retail/restaurant development. The Project would be consistent with the goals of the Community Plan, which "encourages the continued and expanded development of a thriving artists-in-residence community in the plan and proposed redevelopment areas." The Project would not reduce the City's housing capacity but would increase it by a net of 119 units. Finally, the Project is undergoing review pursuant to the requirements of CEQA.
3.2.2 Establish, through the Framework Long-Range Land Use Diagram, community plans, and other implementing tools, patterns and types of development that improve the integration of housing with commercial uses and the integration of public services and various densities of residential development within neighborhoods at appropriate locations.	**Consistent.** The Project would be located within the Artists-in-Residence District portion of the Community Plan Area. This area features several live/work developments that integrate housing with commercial uses. The Project itself would co-locate residential, hotel, arts-oriented, and commercial uses on the same Project Site.
3.2.3 Provide for the development of land use patterns that emphasize pedestrian/bicycle access and use in appropriate locations.	**Consistent.** The Project would be a pedestrian-friendly development with pedestrian access to the Project Site from 5th Street, Seaton Street, and Colyton Street via storefronts, entranceways, and landscaped open spaces. Sidewalks would surround the Project on three sides. The Project is near the DASH Line A; Metro Local Route 18, and the Metro Gold Line. In addition, the Project would encourage biking due to the inclusion of 52 short-term and 168 long-term bicycle parking spaces. Further, the Project Site has a Walk Score of 94, underscoring that the Project Site exists as a pedestrian-friendly environment, which would be strengthened by the Project.

Table IV.H-2
Project Consistency with Applicable Policies of the Framework Element

Objective	Project Consistency
3.2.4 Provide for the siting and design of the City's stable residential neighborhoods and enhance the character of commercial and industrial districts.	**Consistent.** The Project Site is located within the Artists-in-Residence District portion of the Community Plan Area and includes development of live/work units over lower level commercial uses. The Project would enhance the character of the surrounding neighborhood by developing a new mixed-use building at the Project Site that would include live/work units, a hotel, art galleries, restaurants, and Artist CoLab space, complementary to the Arts District neighborhood character.
3.4.1 Conserve existing stable residential neighborhoods and lower-intensity commercial districts and encourage the majority of new commercial and mixed-use (integrated commercial and residential) development to be located (a) in a network of neighborhood districts, community, regional, and downtown centers, (b) in proximity to rail and bus transit stations and corridors, and (c) along the City's major boulevards, referred to as districts, centers, and mixed-use boulevards, in accordance with the Framework Long-Range Land Use Diagram.	**Consistent.** The Project would locate a mixed-use development within the established Artists-in-Residence District portion of the Community Plan Area, proximate to Downtown Los Angeles and to both existing and planned rail and bus transit stations and corridors.
Source: City of Los Angeles General Plan.	

(c) General Plan Health and Wellness Element

The Project would support the applicable goals and objectives of the Health and Wellness Element by implementing a mixed-use development and incorporating a variety of open space areas within the Project Site that promote walkability and biking to contribute to the creation of a healthy community. The Project would include active and passive recreational spaces, including a rooftop area with a pool, community rooms and recreational facilities, landscaped gardens, common open space with gathering and seating areas, and a third-floor deck with additional outdoor and indoor amenities. The Project would provide a total of approximately 22,500 square feet of open space. The

Project would also provide approximately 42 new trees to be planted on the ground and third levels. The Project would promote pedestrian activity and promote walkability in the vicinity of the Project Site by locating commercial retail and restaurant uses on the ground floor of the proposed building along 5th Street. In addition, the Project would enhance pedestrian connections between the Project Site and adjacent properties through the provision of sidewalks along 5th Street and Colyton Street (where there are currently none) and the provision of a wider sidewalk along Seaton Street, which would facilitate easier access to the nearby Metro Gold Line Little Tokyo/Arts District Station. The Project would also create multi-modal transit options for Project users by providing ample bicycle parking.

The Project would also incorporate elements that would promote individual and community safety. Specifically, as provided in **Section IV.K.2, Public Services - Police Protection**, of the Draft EIR, the Project would include access control for the residential units and the parking areas; proper lighting of building entries and walkways to provide for pedestrian orientation; and sufficient perimeter lighting to maximize visibility and reduce areas of concealment. Thus, the Project would be substantially consistent with the applicable goals (i.e., A City Built for Health, Bountiful Parks and Open Spaces, and Safe and Just Neighborhoods) set forth in the Health and Wellness Element. **Therefore, Project impacts related to consistency with the Health and Wellness Element would be less than significant.**

(d) General Plan Housing Element

For a discussion of the 2013-2021 Housing Element and an analysis of the Project's consistency with its projected housing needs and growth forecasts, see **Section IV.J, Population, Housing, and Employment,** of the Draft EIR. The Project's consistency with the applicable Housing Element policies is discussed in Table IV.H-3. As shown therein, the Project would be substantially consistent with applicable policies. **Therefore, Project impacts related to consistency with the Housing Element would be less than significant.**

Table IV.H-3
Project Consistency with Applicable Policies of the Housing Element

Policy	Project Consistency
1.1.3 Facilitate new construction and preservation of a range of different housing types that address the particular needs of the city's households.	**Consistent.** The Project would develop live/work units, providing housing and work spaces to meet the needs of the Arts District, which is home to many artists and other self-employed creative sector workers.
1.3.5 Provide sufficient land use and density to accommodate an adequate	**Consistent.** The Project would develop additional housing within an area of the

Table IV.H-3
Project Consistency with Applicable Policies of the Housing Element

Policy	Project Consistency
supply of housing units by type and cost within the City to meet the projections of housing needs, according to the policies and objectives of the City's Framework Element of the General Plan.	City in which housing units are in high demand, resulting in a net increase of 119 units, including 15 Very Low Income units. The Project would contribute to the forecasted need for housing and would be consistent with the applicable policies of the Framework Element (see Table IV.H-3).
2.2.1 Provide incentives to encourage the integration of housing with other compatible land uses.	**Consistent.** The Project is a mixed-use development that would co-locate live/work, hotel, arts-oriented, and commercial land uses to integrate housing with other compatible land uses.
2.3.2 Promote and facilitate reduction of water consumption in new and existing housing.	**Consistent.** The Project would be designed and constructed consistent with the requirements of the LAGBC, which includes the installation of a variety of water-saving fixtures and devices (see **Section IV.M.2, Utilities and Service Systems – Water Supply and Infrastructure**, of the Draft EIR), to promote and facilitate the reduction of water consumption in new housing.
2.3.3 Promote and facilitate reduction of energy consumption in new and existing housing.	**Consistent.** The Project would be designed and constructed consistent with the requirements of the LAGBC, which includes the installation of a variety of energy-saving features and devices (see **Section IV.M.4, Utilities and Service Systems – Energy Conservation**, of the Draft EIR).
2.3.4 Promote and facilitate reduction of waste in construction and building operations.	**Consistent.** The Project would be constructed and operated consistent with all applicable requirements concerning the recycling of construction waste and the reduction of solid waste (see **Section IV.M.3, Utilities and Service Systems – Solid Waste**, of the Draft EIR).
2.4.1 Promote preservation of neighborhood character in balance with facilitating new development.	**Consistent.** The Project would be consistent with the existing and proposed land uses in the Arts District by including live/work, hotel, and commercial/retail space, as well as arts-oriented spaces for

Table IV.H-3
Project Consistency with Applicable Policies of the Housing Element

Policy	Project Consistency
	the use of artists to preserve the Artists-in-Residence character of the neighborhood.
2.4.2 Develop and implement design standards that promote quality residential development.	**Consistent.** The Project would be consistent with applicable City design guidelines regarding quality residential development (see Table IV.H-8).
2.4.3 Develop and implement sustainable design standards in public and private open space and street rights-of-way. Increase access to open space, parks and green spaces.	**Consistent.** The Project would include public and private open space areas that would be designed consistently with the sustainability requirements contained within the LAGBC, which requires the incorporation of sustainable building standards at a level equivalent to LEED certification. Examples of this sustainable open space design include water-saving pool filter, pool/spa recirculating filtration equipment, pool/spa leak detection system, proper hydro-zoned irrigation system, and use of energy-saving exterior lighting technologies.
2.5.1 Target housing resources, policies and incentives to include affordable housing in residential development, particularly in mixed use development, Transit Oriented Districts and designated Centers.	**Consistent.** The Project would include 15 Very Low Income affordable units within a mixed-use development.
2.5.2 Foster the development of new affordable housing units citywide and within each Community Plan area.	**Consistent.** The Project would include 15 Very Low Income affordable units within the Central City North Community Plan area.
Source: City of Los Angeles, Housing Element of the General Plan, adopted December 3, 2013.	

(e) Central City North Community Plan

(i) Consistency with Community Plan Land Use Designation

As discussed previously, the Community Plan designates the Project Site for Heavy Industrial land uses (see Figure IV.H-1). The Project would include a mix of live/work, hotel, art gallery/Artist CoLab, and retail/restaurant land uses that would be inconsistent

with the existing Heavy Industrial land use designation for the Project Site. Therefore, as part of the Project, the Applicant is seeking a General Plan Amendment to change the land use designation of the Project Site from Heavy Industrial to Regional Center Commercial.

(ii) Consistency with Community Plan Policies

Consistency of the Project with the applicable policies of the Community Plan is discussed in Table IV.H-4. As shown, the Project would be substantially consistent with the general intent of the Community Plan. **Therefore, Project impacts related to consistency with the policies of the Community Plan would be less than significant.**

Table IV.H-4
Project Consistency with Applicable Policies
of the Central City North Community Plan

Policy	Project Consistency
Residential	
1-1.1 Designate specific lands to provide for adequate multi-family residential development.	**Consistent.** The Project would change the Project Site's land use designation to Regional Center Commercial to allow for the development of multi-family residential uses in a commercial zone. The Project includes development of 129 multi-family live/work units. Additionally, 11 percent of the Project's base residential density would be set aside as restricted affordable (Very Low Income) units.
1-1.2 Protect the quality of the residential environment through attention to the appearance of communities, including attention to building and site design.	**Consistent.** Although the Project area is currently not heavily developed with residential uses, the Project would contribute to the appearance of the mixed-use/industrial character of the area. In terms of urban form and neighborhood design, the Project's architectural elements would encourage pedestrian traffic adjacent to and onto the Project Site. It is consistent with the intent of the design objectives and policies of the Community Plan. The proposed mixed-use Project, a building that would integrate distinctive design features, is designed to improve the quality of the public realm and enhance the livability of the neighborhood.

Table IV.H-4
Project Consistency with Applicable Policies
of the Central City North Community Plan

Policy	Project Consistency
	The Art Plaza, with the interactive/kinetic paving and the public art piece, would be accompanied by commercial retail, which would increase the use of public spaces, add to the character of a neighborhood, and create a sense of place, all of which encourage pedestrian activity. The Project is also located close to the new Arts District Park located at the corner of 5th and Hewitt Streets.
1-2.1 Encourage multiple residential development in commercial zones.	**Partially Consistent.** The Project includes development of a mix of live/work, hotel, and commercial land uses on land zoned for industrial land uses. The Project would change the Project Site's land use designation to Regional Center Commercial to allow for the development of multiple residential uses in a commercial zone.
1-3.1 Seek a high degree of architectural compatibility and landscaping for new infill development to protect the character and scale of existing residential neighborhoods.	**Partially Consistent.** The Project Site is not located within an existing predominately residential neighborhood. However, as discussed in detail in **Section IV.B, Aesthetics**, of the Draft EIR, the proposed architectural design and landscaping would enhance the visual character of the surrounding Arts District. The Project would be visually compatible with the eclectic character of the area. However, because the Project would be taller than most of the structures in the immediate vicinity of the Project Site, its scale would not be compatible with the low-rise character of the surrounding area. The Project would provide pedestrian-friendly landscaping and traditional storefront elements consistent with the character of surrounding and nearby buildings.
1-3.2 Consider factors such as neighborhood character and identity, compatibility of land uses, impact on	**Consistent.** As discussed in **Section IV.B, Aesthetics**, of the Draft EIR, the Project would not result in any significant

Table IV.H-4
Project Consistency with Applicable Policies
of the Central City North Community Plan

Policy	Project Consistency
livability, impacts on services and public facilities, and impacts on traffic levels when changes in residential densities are proposed.	impacts related to visual character. As discussed later in this section, the Project would be compatible with surrounding land uses. As discussed in **Sections IV.K and IV.M (Public Services and Utilities and Service Systems)** of the Draft EIR, the Project would not result in significant impacts related to these issues. As discussed in **Section IV.L, Transportation/Traffic**, of the Draft EIR, the Project would result in significant impacts at six area intersections. With implementation of Mitigation Measures TR-MM-1 through TR-MM-3, impacts at four of these intersections would be reduced to a less-than-significant level.
1-4.1 Promote greater individual choice in type, quality, price, and location of housing.	**Consistent.** The Project would include 129 live/work units (including 1-bedroom and 2-bedroom units, and 15 Very Low Income units), located near downtown Los Angeles, a source of employment and shopping.
1-4.2 Ensure that new housing opportunities minimize displacement of the existing residents.	**Consistent.** 10 live/work units are located on the Project Site that would be removed as part of the Project. Based on a persons-per-household rate of 2.43, approximately 25 residents would be displaced due to the Project. However, existing and projected available dwelling units in the Project area, including the 129 live/work units provided by the Project (15 of which would be set aside as Very Low Income units), could absorb the need for the loss of 10 units at the Project Site. As discussed below under "Cumulative Impacts," cumulative development in the Project area would include approximately 31,334 dwelling units. For these reasons, the Project would ensure that new housing opportunities minimize displacement of existing residents.
Commercial	

Table IV.H-4
Project Consistency with Applicable Policies
of the Central City North Community Plan

Policy	Project Consistency
2-1.1 New commercial uses shall be located in existing established commercial areas or existing shopping centers.	**Consistent.** The Project would replace existing commercial uses and introduce new neighborhood serving retail and commercial land uses on a site that is located near downtown Los Angeles with established commercial areas and shopping centers.
2-1.2 Protect commercially planned/zoned areas from encroachment by residential only development.	**Consistent.** The Project includes development of a mix of commercial, hotel, and live/work land uses. No residential-only development is being proposed.
2-1.4 Require that projects be designed and developed to achieve a high level of quality, distinctive character, and compatibility with existing uses and development.	**Consistent.** As discussed in detail in **Section IV.B, Aesthetics**, of the Draft EIR, the proposed architectural design and landscaping would enhance and complement the character of the surrounding Arts District by providing a publicly accessible art plaza and pedestrian-friendly features, including, but not limited to, seating areas adjacent to the sidewalks and sidewalks protected by bollards along both sides of the porte cochere. The Project would be visually compatible with the eclectic character of land uses in the Project vicinity.
2-2.2 New development needs to add to and enhance the existing pedestrian street activity.	**Consistent.** There is little existing pedestrian activity at the Project Site, primarily due to the lack of sidewalks and the presence of street parking (head-in) along the 5th Street frontage of the Project Site. The Project would introduce pedestrian access, connectivity, and activity along 5th Street, Seaton Street, and Colyton Street. Project shops and restaurants would front along these pedestrian streets. At the street level, the Project is designed to be pedestrian-friendly, maintaining a strong street wall, with distinct entrances, commercial glass storefront windows, and an art plaza on the southwest corner (corner of 5th and Seaton Streets), that creates a flexible open space

Table IV.H-4
Project Consistency with Applicable Policies
of the Central City North Community Plan

Policy	Project Consistency
	for pedestrians. Sidewalks would surround the Project on three sides. The Project would further enhance pedestrian activity by offering retail and restaurant opportunities at the ground level, as well as movable and fixed outdoor furniture and an outdoor dining area along the sidewalk, at the southeast corner (corner of 5th and Colyton Streets). In addition, the Project Site has a Walk Score of 94, underscoring that the Project Site exists within a pedestrian-friendly environment, which would be strengthened by the Project. The design of the Project is intended to enhance pedestrian activity as the retail and café window design would create a visual connection between the interior and exterior of the building. Additionally, the Project Site is located within a block of the Arts District Park and numerous restaurants and cafes with outdoor amenities. Other mixed-use developments are also located within a three-block radius. The pedestrian accessibility of the Project would create connections to these other nearby pedestrian-oriented land uses.
2-2.3 Require that the first floor street frontage of structures, including mixed use projects and parking structures located in pedestrian oriented districts, incorporate commercial uses.	**Consistent.** The Project includes ground-floor commercial land uses. Parking proposed by the Project would be provided at subterranean levels.
2-3.1 New development needs to add to and enhance the existing pedestrian activity.	**Consistent.** See above discussion for Policy 2-2.2 regarding pedestrian activity.
2-3.2 New development in pedestrian oriented areas shall provide parking at the rear of the property.	**Consistent.** Parking for the Project would be provided at subterranean levels.
2-3.3 Identify pedestrian oriented areas as preferred locations for mixed use projects.	**Consistent.** There is little existing pedestrian activity at the Project Site, primarily due to the lack of sidewalks and the presence of street parking (head-in)

Table IV.H-4
Project Consistency with Applicable Policies
of the Central City North Community Plan

Policy	Project Consistency
	along the 5th Street frontage of the Project Site; as such, the Project Site is not located in a pedestrian oriented area. However, the Project Site has a Walk Score of 94 and is located within a pedestrian-friendly environment. The Project is a mixed-use development located near downtown Los Angeles and provides an opportunity to both increase and take advantage of existing pedestrian activity in the Project area.
2-3.4 Require that the first floor street frontage of structures, including mixed use projects and parking structures located in pedestrian oriented districts, incorporate commercial uses.	**Consistent.** See above discussion for Policy 2.2-3 regarding locating projects in pedestrian oriented areas.
2-4.1 Require that any proposed development be designed to enhance and be compatible with adjacent development.	**Consistent.** See above discussion for Policy 2-1.4 regarding designing projects to be compatible with existing and adjacent developments.
2-4.2 Preserve community character, scale, and architectural diversity.	**Partially Consistent.** The Project has been designed and would be constructed in accordance with the City's Urban Design Guidelines and Standards. However, as discussed in **Section IV.B, Aesthetics**, of the Draft EIR, the Project would be increased in scale compared to existing development in the community. The Project would add to the diversity of architectural styles within the Arts District and would incorporate elements of the existing community aesthetic into a modern structure.
2-4.3 Improve safety and aesthetics of parking areas in commercial areas.	**Consistent.** Project parking would be provided at subterranean levels. Therefore, it would be secured and screened from adjacent properties.
2-4.4 Landscaped corridors should be created and enhanced through the planting of street trees along segments with no building setbacks and through median plantings.	**Consistent.** As discussed in **Section IV.B, Aesthetics**, of the Draft EIR, the Project would include landscaping along each street frontage.

Table IV.H-4
Project Consistency with Applicable Policies
of the Central City North Community Plan

Policy	Project Consistency
Industrial	
3-1.1 Designate lands for the continuation of existing industry and development of new industrial parks, research and development uses, light manufacturing, and similar uses which provide employment opportunities.	**Inconsistent.** The Project includes a General Plan Amendment to change the land use designation of the Project Site from Heavy Industrial to Regional Center Commercial. Although the Project would include uses that provide employment opportunities, including 129 live/work units, it would change the industrial designation of the Project Site, which would no longer allow for the development of new industrial parks, research and development uses, and light manufacturing.
3-2.1 Support the existing artists-in-residence in Central City North as a cultural resource for the community.	**Consistent.** The Project includes development of live/work units and a hotel over lower-floor retail commercial uses, as well as art gallery and Artist CoLab space that could be utilized for exhibitions and production. This would contribute to supporting the existing artists-in-residence as a cultural resource in the community.
Public and Institutional Land Use (Police Protection)	
8-1.1 Consult with the Police Department as part of the review of new development projects and proposed land use changes to determine law enforcement needs and demands.	**Consistent.** The Los Angeles Police Department (LAPD) was contacted as part of the preparation of this Draft EIR. The LAPD provided a response to a preliminary review of the Project (see **Appendix H-2** of the Draft EIR). See Project Design Feature POL-PDF-1 through POL-PDF-5 in **Section IV.K.2, Public Services – Police Protection**, of the Draft EIR, for additional details regarding safety design features that would be incorporated into the Project.
8-2.1 Support and encourage community based crime prevention efforts (such as Neighborhood Watch and the Senior Lead Officer Program), through regular interaction and coordination with existing community based policing, foot and bicycle patrols, watch programs, assistance in the formation of new neighborhood watch groups, and regular	**Consistent.** Operation of the Project would include crime prevention features, such as secured building entrances and parking facilities. Nighttime security lighting and security systems would also be incorporated into the Project design, as needed. The Applicant may incorporate additional security features, such as participation in a neighborhood watch

Table IV.H-4
Project Consistency with Applicable Policies
of the Central City North Community Plan

Policy	Project Consistency
communication with neighborhood and civic organizations.	program, based on LAPD review and comment on Project plans. See also Project Design Features POL-PDF-1 through POL-PDF-5 in **Section IV.K.2, Public Services – Police Protection**, of the Draft EIR, for additional details regarding safety design features that would be incorporated into the Project.
8-2.2 Ensure that landscaping around buildings be placed so as not to impede visibility.	**Consistent.** The Project would incorporate landscaping that does not impede visibility in accordance with City requirements.
8-2.3 Ensure adequate lighting around residential, commercial, and industrial buildings in order to improve security.	**Consistent.** Adequate lighting would be provided to provide safe lighting for security (see Project Design Feature POL-PDF-5 in **Section IV.K.2, Public Services – Police Protection**, of the Draft EIR,).
8-2.4 Insure that recreational facilities in multiple family residential complexes are designed to provide adequate visibility security.	**Consistent.** The Project's proposed recreational facilities, including the pool, spa, fitness rooms, and roof garden/clubhouse, would be designed to provide adequate visibility security and located away from non-secured places consistent with City requirements.
Public and Institutional Land Use (Fire Protection)	
9-1.1 Coordinate with the Fire Department the review of significant development projects and General Plan Amendments affecting land use to determine the impact on service demands.	**Consistent.** The Los Angeles Fire Department (LAFD) performed a preliminary review of the Project (see **Appendix H-1** of the Draft EIR). See also **Section IV.K.1, Public Services – Fire Protection**, of the Draft EIR for additional details regarding the Project's impacts with respect to fire protection and LAFD facilities.
Transportation	
12-1.1 Encourage non-residential development to provide employee incentives for utilizing alternatives to the automobile (i.e., carpools, vanpools, buses, flex time, bicycles, and walking, etc.).	**Consistent.** As discussed in **Section IV.L, Traffic/Transportation**, of the Draft EIR, the Project would implement Mitigation Measures TR-MM-1 and TR-MM-2, which involve Transportation Demand Management (TDM) measures and commit the Project to contributing financially to transportation system improvements,

Table IV.H-4
Project Consistency with Applicable Policies
of the Central City North Community Plan

Policy	Project Consistency
	respectively.
12-1.2 Encourage the use of multiple-occupancy vehicle programs for shopping and other activities to reduce midday traffic.	**Consistent.** See above discussion for Policy 12-1.1. The Project's TDM program would be focused on both employees and residents/guests of the Project and could include such measures as unbundled parking, rideshare programs, discounted transit passes, and a bikeshare program.
12-1.3 Require that proposals for major new non-residential development projects include submission of a TDM plan to the City.	**Consistent.** See above discussion for Policy 12-1.1 regarding implementation of a TDM plan.
12-1.4 TDM measures in Central City North should be consistent with adopted City policy.	**Consistent.** See above discussion for Policy 12-1.1 regarding implementation of a TDM plan.
13.1.4 Encourage the provision of changing rooms, showers, and bicycle storage at new and existing and non-residential developments and public places.	**Consistent.** The Project includes 52 short-term and 168 long-term bicycle parking spaces. As part of the Project's TDM program (under Mitigation Measure TR-MM-1), changing rooms, lockers, and showers would also be included for the use of guests, tenants, and residents.
14-1.1 Consolidate parking, where appropriate, to eliminate the number of ingress and egress points onto the arterial.	**Consistent.** Parking associated with the Project would be consolidated within a subterranean parking garage. Ingress and egress would be provided from 5th Street and Colyton Street.
14-1.2 New parking lots and garages shall be developed in accordance with design standards.	**Consistent.** Parking associated with the Project would be developed consistent with applicable City design standards.
16-1.1 Maintain a satisfactory LOS for streets and highways that should not exceed LOS "D" for Major Highways, Secondary Highways, and Collector Streets. If existing levels of service are LOS "E" or LOS "F" on a portion of a highway or collector street, then the level of service for future growth should be maintained at LOS "E."	**Inconsistent.** As is discussed in **Section IV.L, Transportation/Traffic**, of the Draft EIR, following implementation of all feasible mitigation (Mitigation Measures TR-MM-1 and TR-MM-2), traffic generated by the Project would contribute to a significant cumulative impact with respect to street intersection levels of service in the vicinity of the Project Site. Specifically, the Project, along with cumulative development, would result in a significant and unavoidable impact at one intersection

Table IV.H-4
Project Consistency with Applicable Policies
of the Central City North Community Plan

Policy	Project Consistency
	(Alameda Street /6th Street) during the AM peak hour.
Historic and Cultural Resources	
18-1.1 Support the existing artists community in Central City North as a cultural resource for the community.	**Consistent.** See above discussion for Policy 3-2.1 regarding providing support for the artists community as a cultural resource for the community.
Source: City of Los Angeles City Central North Community Plan, adopted December 2000.	

(iii) Consistency with Community Plan Design Policies

As shown on Table IV.H-5, the Project would implement a number of Community Plan design policies, including applicable commercial, multiple residential, and community design and landscaping policies. Thus, the Project would be substantially consistent with the applicable design policies of the Community Plan. **Therefore, Project impacts related to consistency with the design policies of the Community Plan would be less than significant.**

Table IV.H-5:
Project Consistency with Applicable Design Policies of the Central City North Community Plan

Policy	Project Consistency
Commercial (Site Planning)	
a. Locating surface parking to the rear of structures;	**Consistent.** All parking would be located within the Project building and shielded from external view.
b. Minimizing the number of widths of driveways providing sole access to the rear of commercial lots;	**Consistent.** The Project would have two driveways, a full-access driveway from Colyton Street on the east side of the Project Site, and a full-access driveway from 5th Street on the south side of the Project Site. The loading entrance for truck deliveries would be located on Seaton Street on the west side of the Project Site. The rear of the Project Site immediately abuts existing arts, industrial, and warehousing businesses. However, all ingress/egress points associated with the Project would be designed and constructed in accordance with the requirements of the

Table IV.H-5:
Project Consistency with Applicable Design Policies of the Central City North Community Plan

Policy	Project Consistency
	City's Department of Building and Safety, the City's Department of Public Works, and LADOT.
c. Maximizing retail and commercial service uses along street level frontages of commercial developments;	**Consistent.** Commercial (retail and restaurant uses) would be located on all three ground level street frontages.
d. Providing front pedestrian entrances for businesses fronting on main commercial streets;	**Consistent.** Pedestrian access into the Project would be provided from all three street frontages.
e. Providing through arcades from the front of buildings to rear parking for projects within wide frontages;	**Consistent.** The Project would not include any rear parking. All Project parking would be located on subterranean levels.
f. Providing landscaping strips between driveways and walkways which access the rear of properties;	**Consistent.** Landscaping would be provided along sidewalks and walkways and adjacent to driveway entrances.
g. Providing speed bumps for driveways paralleling walkways for more than 50 feet;	**Consistent.** No such driveways/walkways are proposed as part of the Project, and, thus, speed bumps are not needed.
h. Requiring site plans which include ancillary structures, service areas, pedestrian walkways, vehicular paths, loading areas, drop off and landscaped areas;	**Consistent.** The Project would include pedestrian walkways, vehicular paths, loading areas, a designated drop off zone/porte cochere, and landscaped areas.
i. Providing where feasible, the under grounding of new utility service.	**Consistent.** All utilities associated with the Project would be placed underground.
Commercial (Height and Building Design)	
a. Requiring the use of articulations, recesses, surface perforations, and porticoes to break up long, flat building facades	**Consistent.** The Project would include varying façade relief, articulation, and windows (see Figures II-17 through II-22 in **Section II, Project Description**, of the Draft EIR) and would not include long, flat facades.
b. Providing accenting, complimentary building materials to building facades	**Consistent.** Building materials that would be used for the Project would include materials used for other buildings in the Project area, including red brick, metal, and glass. For additional details, see the Project elevations contained in Figures II-17 through II-20 in **Section II, Project Description**, of the Draft EIR.
c. Maximizing the applications of architectural features or articulations to	**Consistent.** The Project would incorporate traditional storefront elements by including

Table IV.H-5:
Project Consistency with Applicable Design Policies of the Central City North Community Plan

Policy	Project Consistency
building facades	a solid base for the storefront windows, made of high quality durable red bricks. Metallic elements, such as metal panels, metal veneers and metal awnings and canopies, would add to the building's character. The architecturally integrated awnings and canopies would enhance the pedestrian activity and provide shelter from sun and rain for pedestrians, along the public right-of-way, where the building meets the street. To keep the building visually interesting and define the spaces when looking from the street, the Project would have several residential windows that visually delineate human-scale spaces. The residential part of the building would also be covered by printed panels with contemporary urban, artwork (mural) on the southern, western, and northern façades. Cantilevered private balconies would be sporadically placed to ensure that the building is broken up into comfortable-sized units. The hotel part of the building would have a continuous window wall façade with a varied color palette. For additional details, see the Project elevations contained in Figures II-17 through II-20, in **Section II, Project Description**, of the Draft EIR.
d. Designating architecturally untreated facades for signage	**Consistent.** All Project signage would be consistent with applicable LAMC exterior signage standards. The Project design also would allow opportunities for signage to be integrated with the architecture of the building and contribute to an articulated storefront character. The Project would feature coherent signage that wouldbe consistent in shape, size, color, height, and lettering.
e. Screening of mechanical and electrical equipment from public view	**Consistent.** All mechanical and electrical equipment that is located on the rooftops would be screened from public view

Table IV.H-5:
Project Consistency with Applicable Design Policies of the Central City North Community Plan

Policy	Project Consistency
	(formally included as Project Design Feature AES-PDF-1 in **Section IV.B, Aesthetics**, of the Draft EIR).
f. Requiring the enclosure of trash areas for all projects	**Consistent.** All trash areas would be enclosed.
g. Requiring freestanding walls to use articulation, recesses, surface perforations, porticoes to break up long freestanding walls.	**Consistent.** Vertical breaks and pedestrian-scaled storefront bays would prevent the monolithic "box-like" feeling and maintain a storefront rhythm. To keep the building visually interesting and define the spaces when looking from the street, the Project would have several residential windows that visually delineate human-scale spaces. The residential part of the building would also be covered by printed panels with contemporary urban, artwork (mural) on the south, west and north façades. Cantilevered private balconies would be sporadically placed to ensure that the building is broken up into comfortable-sized units. For additional details, see the Project elevations contained in Figures II-17 through II-20, in **Section II, Project Description**, of the Draft EIR.
Commercial (Parking Structures)	
a. Designing parking structure exteriors to match the style, materials and color of the main building(s).	**Consistent.** Parking would be located in an enclosed structure in subterranean levels and would not be visible from surrounding roadways.
b. Maximizing commercial uses, if appropriate, on the ground floor	**Consistent.** The Project includes development of live/work units and a hotel over lower-floor commercial uses.
Commercial (Light and Glare)	
a. Installing on-site lighting along all pedestrian walkways and vehicular access ways.	**Consistent.** Lighting in accordance with the LAMC would be provided to provide safe lighting for pedestrian paths and vehicular access ways (see Project Design Feature POL-PDF-5 in **Section IV.K.2, Public Services – Police Protection**, of the Draft EIR).
b. Shielding and directing of on-site	**Consistent.** On-site lighting would be

Table IV.H-5:
Project Consistency with Applicable Design Policies of the Central City North Community Plan

Policy	Project Consistency
lighting onto driveways and walkways, directed away from adjacent residential uses.	directed onto driveways and walkways and directed away from residential uses as required by the LAMC lighting requirements (see Project Design Feature AES-PDF-3 in **Section IV.B, Aesthetics**, of the Draft EIR).
Commercial (Mixed Use)	
Maximize commercial uses on the ground floor by requiring 10% of commercial development to serve needs of the residential portion of the building.	**Consistent:** Ground floor commercial land uses that would be included as part of the Project include two 3,460-square-foot restaurants, a 2,300-square-foot café, and 1,500 square feet of retail, all of which would be made available to serve the needs of Project residents.
Multiple Residential (Site Planning)	
a. Requiring usable open space for outdoor activities, especially for children.	**Consistent.** The Project would provide residential open space in excess of code requirements. Based on the number of units and the mix of unit types, 16,275 square feet of open space is required, and a total of 22,500 square feet of open space would be provided. Additionally, a 1,500 square foot covered an Art Plaza would be provided at the corner of Seaton and 5th Streets. The Project would also provide amenities, such as courtyards, pool and spas, roof garden, a gym, numerous seating areas, and landscaping, which would be usable for people of all ages.
Multiple Residential (Design)	
a. Requiring the use of articulations, recesses, surface perforations and/or porticos to break up long, flat building facades.	**Consistent.** See above discussion for Commercial (Height and Building Design) a. regarding the Project's design.
b. Utilizing complementary building materials on building facades.	**Consistent.** See above discussion for Commercial (Height and Building Design) b. regarding building materials.
c. Incorporating varying design to provide definition for each floor.	**Consistent.** The Project's design features provide variations between the lower street levels and the upper floors (see the Project elevations and renderings contained in Figures II-17 through II-20, in **Section II,**

Table IV.H-5:
Project Consistency with Applicable Design Policies of the Central City North Community Plan

Policy	Project Consistency
	Project Description, of the Draft EIR.
d. Screening of all roof top equipment and building appurtenances from view.	**Consistent.** See above discussion for Commercial (Height and Building Design) e. regarding building screening.
Multiple Residential (Parking Structures)	
a. Designing parking structure exteriors to match the style, materials and color of the main building(s).	**Consistent.** The Project's parking would be provided at subterranean levels and would not have any exteriors that would be visible from public view.
b. Maximizing commercial uses on the ground floor	**Consistent:** Ground floor commercial land uses that would be included as part of the Project include two 3,460-square-foot restaurants, a 2,300-square-foot café, and 1,500 square feet of retail.
Community Design and Landscaping Guidelines	
4. New lighting systems should be designed to minimize glare and "light trespass."	**Consistent.** The proposed lighting plan would be designed to ensure a sense of security on-site while minimizing light spillover onto off-site properties as required by the LAMC lighting requirements. On-site lighting would be directed onto driveways and walkways and directed away from residential uses (see Project Design Features AES-PDF-3 and AES-PDF-5 regarding lighting and AES-PDF-4 regarding minimizing glare in **Section IV.B, Aesthetics**, of the Draft EIR.).
Source: City of Los Angeles, Central City North Community Plan, December 2000.	

(f) City of Los Angeles General Provisions and Zoning Code

(i) Permitted Uses

As discussed previously, the Project Site is located in the M3 (Heavy Industrial) zone. Uses that are allowed in an M3 zone include uses allowed in the M1, M2, and MR2 zones and generally include those uses allowed in the C1, C1.5, and C2 zones (see LAMC Section 12.20-A,1). Permitted uses include, among others: restaurants, business and professional offices, medical clinics and laboratories, grocery stores, retail and service stores, pharmacies, drugstores, manufacturing and industrial activities, research

and development, storage, and parking. However, buildings containing dwelling units or guest rooms are prohibited in the M3 zone.

The Project would include a mix of live/work, hotel, art gallery, Artist CoLab, and retail/restaurant land uses that would be inconsistent with the existing M3 zoning for the Project Site. Therefore, as part of the Project, the Applicant is seeking a Zone Change from M3-1-RIO to C2-2-RIO, which would allow for the Project's proposed mix of uses. Pursuant to Section 12.14 of the LAMC, the following commercial uses are expressly permitted in the C2 zone: art or antique shop; bird store or taxidermist; carpenter, plumbing, or sheet metal shop; catering shop; feed and fuel store; interior decorating or upholstering shop; sign painting shop; tire shop; and restaurant, tea room, or café. In addition, the C2 zone permits uses permissible in the CR, C1, and C1.5 zones, which generally includes banks, offices, hotels, retail stores, live/work units, and nursing care facilities. Residential uses, such as apartment houses, duplexes, and single-family dwellings, are also permitted.

With approval of this request, the Project would conform to the new C2-2-RIO zoning for the Project Site.

(ii) Setback and Lot Requirements

There are no setback or lot requirements for development under the M3 zoning. As described above, the Project requests a zone change to the C2 zone. Minimum area per dwelling unit and setback requirements in the C2 zone are the same as the R4 zone for residential uses (a minimum area of 400 square feet per dwelling unit and 200 square feet per guest room); other uses within the C2 zone do not have minimum lot or setback requirements. The C2 zone has no front yard requirement, and side and rear yards are not required for buildings used for commercial purposes. If a residential use is contained in a mixed-use building, LAMC Section 12.22-A,18(c)(3) permits the residential floors of the structure to not have yard setbacks as long as the residential portion of the structure abuts a street, private street, or alley, and the first floor of the building is used for commercial uses or residential access. The R4 zone requires a five-foot side yard plus one foot for each story above the second story (not to exceed 16 feet), and a 15-foot rear yard plus one foot for each story above the third story (not to exceed 20 feet).

The Project is proposing a 12-lot subdivision for merger and re-subdivision. With approval of the requested entitlements, the Project's lot configuration would be consistent with the applicable lot requirements of the C2 zone. The Applicant is requesting an on-menu incentive to reduce the side yard setback to 12 feet in lieu of 14 feet that is otherwise required by the LAMC Section 12.12-C,2. The Project's setback from the Colyton Street, 5th Street, and Seaton Street property lines would be three feet

at the ground level. Starting at the 3rd floor, the rear yard setback of the residential floors would be 12 feet. The on-menu incentive for the reduced side yard setback would allow the Project to reduce the required 14 feet side yard setback to 12 feet, a decrease of approximately 14 percent of the required side yard setback, less than the maximum setback reduction of 20 percent, or 11.2 feet (LAMC Section 12.22-A,25(f)(1)). With approval of the requested entitlements, the Project would be consistent with the setback and lot requirements of the proposed C2 zone.

(iii) Height and Density Limitations

The Project would be developed at a height of approximately 148 feet above the ground surface (with rooftop mechanical elements extending to a height of approximately 154 feet above ground level) with an FAR of 8.1:1.

Under the existing M3-1-RIO zoning, buildings and structures on the Project Site would be limited to an FAR of 1.5:1. There is no maximum height limit; height is only limited by FAR. As discussed above, the Project Applicant is requesting a Zone Change to C2-2-RIO, pursuant to LAMC Section 12.32-Q. The C2 zone does not contain any height restrictions. However, the "2" Height District designation and a Density Bonus incentive would allow the proposed 8.1:1 FAR and no height limit.

With approval of these requests, the Project's maximum height and FAR would be consistent with the zoning for the Project Site.

(iv) Los Angeles River Improvement Overlay District

The Project Site falls within the Los Angeles River Improvement Overlay (RIO) District, which is a special use district that requires new projects within the district to meet development regulations addressing landscaping, screening and fencing, and lighting in association with the Los Angeles River. As shown in Figures II-23 through II-25 in **Section II, Project Description**, of the Draft EIR, the preliminary landscape plan includes specific design elements as part of the Project that would meet the RIO District regulations that are applicable to the Project Site (which is located within the "outer core" of the RIO District), including the use of native trees, plants and shrubs, species defined as "WatershedWise", and species listed in the Los Angeles County River Master Plan Landscaping Guidelines and Plant Palettes. Prior to issuance of a building permit, the Project Applicant would be required to consult with the Department of City Planning to obtain an Administrative Clearance for compliance with the applicable regulations of the RIO District. Therefore, the Project would be consistent with the RIO District.

(v) Parking Requirements

The LAMC contains a series of provisions potentially affecting the Project's required parking supply.

- LAMC Section 12.21-A,4, which establishes the basic ratios for required vehicle parking spaces for various land uses.
- LAMC Section 12.21-A,16, which implements the City's Ordinance No. 182,386 by establishing minimum requirements for bicycle parking spaces. It also permits reductions in the required number of vehicle spaces at a ratio of one vehicle space reduced for every four bicycle spaces provided, up to a maximum of 15 percent of the required vehicle spaces for residential uses and 30 percent of the required vehicle spaces for non-residential uses within 1,500 feet of a portal to a fixed-rail transit station. (The Project Site is not located within 1,500 feet of a portal to an existing fixed-rail transit station.)

Table IV.H-6 presents the amount of code-required and Project-provided parking. The Project is required to provide 321 spaces (after applicable code-allowed reductions) and includes 513 spaces. The Project proposes 11 percent of the base density to be set aside for restricted affordable units. Pursuant to LAMC Section 12.22-A,25(d), development projects that qualify for a Density Bonus and comply with Section 12.22-A,25 to provide at least 5 percent Very Low Income restricted units, may comply with whichever of the options (LAMC Section 12.21-A,4 or LAMC Section 12.22-A,25(d)(1)), requires the least amount of parking. Additionally, the Project Site is located within the East Los Angeles State Enterprise Zone and is afforded parking standards pursuant to LAMC Section 12.21-A,4(x)(3) utilizing a lower parking ratio for commercial office, business, retail, restaurant, bar and related uses, trade schools, or research and development buildings.

Off-street automobile parking for the Project would be provided below grade and screened from view and would include 54 valet spaces (on Level B2) and 459 automated parking spaces (on Levels B3 through B5). The entrance and exit to the subterranean parking levels for residents, customers, employees, and guests are provided through one ingress/egress driveway on Colyton Street, with an adjacent porte-cochere area for temporary drop-offs and pick-ups accessible via a driveway from 5th Street.

With approval of the requested entitlements, the Project would be designed and constructed to conform to the Code-required vehicular and bicycle parking spaces.

Table IV.H-6:
Project Required and Proposed Parking

Use	Amount	Rate	Total
Required Parking			
Live/Work Unit (less than 3 habitable rooms) [LAMC Section 12.22-A,4(p)(1)]	50 units	1.0 space/unit	50
Live/Work Unit (3 or more habitable rooms) [LAMC Section 12.22-A,4(p)(1)]	79 units	1.25 spaces/unit	99
Hotel (1-20 rooms) [LAMC Section 12.21-A,4(p)(1)]	20 rooms	0.5 space/room	10
Hotel (21-40 rooms) [LAMC Section 12.21-A,4(p)(1)]	20 rooms	0.25 space/unit	5
Hotel (41-113 rooms) [LAMC Section 12.21-A,4(p)(1)]	73 rooms	0.17 space/unit	12
Restaurant [LAMC Section 12.21-A,4(x)(3)]	31,719 sf	1 space/500 sf	63
Retail [LAMC Section 12.21-A,4(x)(3)]	26,979 sf	1 space/500 sf	54
Art Gallery [LAMC Section 12.21-A,4(x)(3)]	10,341 sf	1 space/500 sf	21
Artists' CoLab [LAMC Section 12.21-A,4(x)(3)]	3,430 sf	1 space/500 sf	7
Total Required			**321**
Provided Parking			
Valet Parking (Level B2)			54
Automated Parking (Levels B3, B4, B5)			459
Total Provided			**513**
Source: Togawa Smith Martin Architects, Inc.			

(vi) Impact Conclusion

As discussed above, the zone change request and other discretionary actions to implement the Project would be consistent with applicable provisions of the LAMC. The Project would be consistent with the setback and lot requirements of the proposed C2-2-RIO zone. Similarly, the Project would be consistent with the height and density limitations of the proposed C2-2-RIO zone. The Project would also provide vehicular parking spaces in excess of the Code-required number after approval of the requested entitlements. **Therefore, Project impacts related to consistency with the Zoning Code would be less than significant.**

(g) Walkability Checklist

The Walkability Checklist includes recommendations in the form of guidelines to implement the General Plan's policies regarding the creation of inviting pedestrian-oriented neighborhoods, encouraging community interaction and decreasing

unnecessary automobile use. Table IV.H-7 contains an analysis of the Project's consistency with the applicable guidelines of the Walkability Checklist. As demonstrated, the Project would be substantially consistent with the City's Checklist. **Therefore, Project impacts related to consistency with the Walkability Checklist would be less than significant.**

Table IV.H-7
Project Consistency with Applicable Walkability Checklist Guidelines

Guideline	Project Consistency
Sidewalks	
1. Create a continuous and predominantly straight sidewalk and open space.	**Consistent.** Colyton and 5th Streets adjacent to the Project Site currently have no sidewalks. Seaton Street has a sidewalk on both sides of the street immediately adjacent to the Project Site. However, the sidewalk stops at the northwestern corner of the Project Site. The Project would require the granting of a 3-foot wide dedication along the portions of Colyton Street and 5th Street that currently have a 60-foot right-of-way (30-foot half right-of-way) for the construction of 13-foot sidewalks along the Project's street frontages. A 3-foot dedication along the Project's street frontage on Seaton Street is also required for the widening of the existing sidewalk in conformance with the Mobility Element 2035. Sidewalks adjacent to the Project would be straight.
2. Create a buffer between pedestrians and moving vehicles by the use of landscape and street furniture (benches, newspaper racks, pedestrian information kiosks, bicycle racks, bus shelters, and pedestrian lighting).	**Consistent.** The Project would provide street trees (in sidewalk planters) and sidewalk benches that would create a physical barrier between street traffic and the sidewalk to enhance pedestrian safety and comfort.
4. Utilize street furnishings to create a consistent rhythm (i.e., consistent height of light poles or consistent shade pattern of trees).	**Consistent.** Light poles and landscaping would be designed to provide a consistent appearance along the Project's street frontages and would be installed consistent with applicable LAMC requirements. The trees would offer a continuous canopy of shade.
5. Incorporate closely planted shade-producing street trees. They may be interspersed with existing or proposed	**Consistent.** New trees proposed as part of the Project would result in the incorporation of closely planted shade-

Table IV.H-7
Project Consistency with Applicable Walkability Checklist Guidelines

Guideline	Project Consistency
palms.	producing street trees.
Building Orientation	
1. Design grade level entrances from the public right-of-way for pedestrians.	**Consistent.** The Project would include grade level public entrances from all three street frontages.
2. Create primary entrances for pedestrians that are easily accessible from transit stops, with as direct a path as possible to the transit stop.	**Consistent.** There are no transit stops in the immediate vicinity of the Project Site. However, the Project Site is located within a 0.5-miles walking distance to the Metro Gold Line Little Tokyo/Arts District Station and 0.25-miles to the Metro Rapid 720 bus stop at Alameda Street and 6th Street and DASH Line A at 4th Place and Hewitt Street. The Project would provide street-level pedestrian access from all three street frontages to create pedestrian connections to these existing public transit stops.
3. Make primary entrances to buildings visible from the street and sidewalk.	**Consistent.** Primary Project entrances would be marked and visible from each street and adjacent sidewalks.
4. Maintain at least one entrance from the public way at retail establishments with doors unlocked during regular business hours.	**Consistent.** Multiple entrances from a public way (the sidewalks adjacent to the three street frontages) would have doors unlocked during regular business hours.
8. Activate mid-block passageways or paseos so that they are visually interesting and safe spaces.	**Consistent.** The Project would include a porte cochere mid-block along 5th Street between Seaton Street and Colyton Street that would serve as open space for public access connecting the entry plaza, atrium, and entry fountain. The Project would include a water fountain, pedestrian-level lighting, artwork, benches, landscaping, and special paving to create safe and visually interesting spaces. This would create visual interest and enhance pedestrian safety.
9. Provide direct access to building entrances from sidewalks and streets.	**Consistent.** The Project would contain grade level entrances for pedestrians approaching from all three street frontages.

Table IV.H-7
Project Consistency with Applicable Walkability Checklist Guidelines

Guideline	Project Consistency
10. Locate buildings at the front property line or at the required setback to create a strong street wall. Where additional setback is necessary, that area can be used to create an "outdoor room" adjacent to the street, incorporating seating or water features for example.	**Consistent.** The Project's setback from the Colyton Street, 5th Street, and Seaton Street property lines would be three feet at the ground level, creating a strong street presence. Starting at the 3rd floor terrace, the rear yard setback of the residential floors would be 12 feet. The on-menu incentive for the reduced side yard setback would allow the Project to reduce the required 14 feet side yard setback to 12 feet, a decrease of approximately 14 percent of the required side yard setback, less than the maximum setback reduction of 20 percent, or 11.2 feet.
11. Use architectural features to provide continuity at the street where openings occur due to driveways or other breaks in the sidewalk and building wall.	**Consistent.** Architectural features would provide continuity at the street where openings occur. The Project would include a porte cochere mid-block along 5th Street that would serve as open space for public access connecting the entry plaza, atrium, and entry fountain.
Off-Street Parking and Driveways	
1. Maintain continuity of the sidewalk.	**Consistent.** The Project would install continuous sidewalks along the Project's street frontages (no sidewalks currently exist along Colyton and 5th Streets).
2. Locate parking behind buildings rather than directly exposed to the adjacent major street.	**Consistent.** Parking would be located in a subterranean garage and would not be visible from any surrounding street.
4. Accommodate vehicle access to and from the site with as few driveways as possible.	**Consistent.** Vehicle access to and from the Project Site would be achieved by two driveways (one each on Colyton Street and 5th Street) and a loading dock driveway on Seaton Street.
5. Limit the width of each driveway to the minimum required.	**Consistent.** The width of each driveway would be limited to the minimum required. The driveway from Colyton Street would be 27 feet in width, while the driveway from 5th Street would be 20 feet in width. The loading dock driveway on Seaton Street would be 30 feet in width.

Table IV.H-7
Project Consistency with Applicable Walkability Checklist Guidelines

Guideline	Project Consistency
8. Mitigate the impact of parking visible to the street with the use of planting and landscape walls tall enough to screen headlights.	**Consistent.** Parking would be located in a subterranean garage and would not be visible from adjacent streets.
9. Illuminate all parking areas and pedestrian walkways.	**Consistent.** Parking areas and pedestrian walkways would be illuminated.
12. Use architectural features to provide continuity at the street where openings occur due to driveways or other breaks in the sidewalk and building wall.	**Consistent.** See above discussion under Building Orientation No. 11 regarding the use of architectural features to provide street continuity.
On-Site Landscaping	
1. Provide canopy trees in planting areas in addition to the street trees.	**Consistent.** A total of 42 trees, including canopy trees and 9 trees more than required, would be planted as part of Project development.
2. Provide planting that complements pedestrian movement or views.	**Consistent.** Landscaping would be located throughout the Project Site, including areas on street frontages, along the internal walkways and driveways, courtyards, and porte cochere. The Project would provide appropriate landscaping that would support pedestrian activity and access among its components and the surrounding area.
3. Provide planting that complements the character of the built environment.	**Consistent.** See above discussion under On-Site Landscaping No. 2 regarding planting that complements the area.
Building Façade	
1. Incorporate different textures, colors, materials, and distinctive architectural features that add visual interest.	**Consistent.** The Project would incorporate traditional storefront elements by including a solid base for the storefront windows, made of high quality durable red bricks. Metallic elements, such as metal panels, metal veneers and metal awnings and canopies, would add to the building's character. The architecturally integrated awnings and canopies would enhance the pedestrian activity and provide shelter from sun and rain for pedestrians along the public right-of-way, where the

Table IV.H-7
Project Consistency with Applicable Walkability Checklist Guidelines

Guideline	Project Consistency
	building meets the street. Vertical breaks and pedestrian-scaled storefront bays would prevent the monolithic "box-like" feeling and maintain a storefront rhythm. To keep the building visually interesting and define the spaces when looking from the street, the Project would have several residential windows that visually delineate human-scale spaces. The residential part of the building would also be covered by printed panels with contemporary urban artwork (mural) on the south, west and north façades. This external skin would be designed to improve the building's appearance and to illustrate the importance of creative art expression for the neighborhood. Cantilevered private balconies would be sporadically placed to ensure that the building is broken into comfortable-sized units. The hotel part of the building would have a continuous window wall façade with a varied color palette. For additional details, see the Project elevations contained in Figures II-17 through II-20 in **Section II, Project Description,** of this Draft EIR.
2. Add scale and interest to the building facade by articulated massing.	**Consistent.** The massing of the Project building would be softened by varying façade relief, articulation, and windows. In addition, the landscaping along the Project's street frontages would soften the appearance from the surrounding uses.
3. Reinforce the existing facade rhythm along the street with architectural elements.	**Consistent.** The portion of the Arts District surrounding the Project Site is characterized as an eclectic assortment of differing building vintages and architectural motifs. The façade and massing of the proposed building would be designed to differentiate the proposed uses, add interest and dimension, and visually connect the Project building to

Table IV.H-7
Project Consistency with Applicable Walkability Checklist Guidelines

Guideline	Project Consistency
	other buildings in the area. The first two stories of the proposed building (the "base" of the building) would be of similar height and architecture to the buildings adjacent to and near the Project Site and would be constructed with red brick and metal materials, rectilinear lines, and pilasters and awnings on the façade. For additional details, see the Project elevations contained in Figures II-17 through II-20 in **Section II, Project Description**, of this Draft EIR.
4. Discourage blank walls. Architectural features, enhanced materials, fenestration, planting, lighting, and signage may contribute to a more pedestrian friendly streetscape.	**Consistent.** The Project building would include varying façade relief, articulation, and windows and would not include blank walls. In addition, the proposed landscaped street frontages would contribute to a strongly pedestrian-oriented streetscape.
5. Include overhead architectural features, such as awnings, canopies, trellises or cornice treatments that provide shade and reduce heat gain.	**Consistent.** The Project would provide architectural features, including awnings and canopies and/or landscaping to provide shade and reduce heat gain along the Project's street frontages.
6. Contribute to neighborhood safety by providing windows at the street that act as "eyes on the street".	**Consistent.** The Project would include many residential windows and ground-floor retail uses having numerous windows facing the street frontages, which would act as "eyes on the street."
7. Devote 75% of facades for ground floor retail uses to pedestrian entrances and pedestrian-level display windows.	**Consistent.** At least 75 percent of façades for ground floor retail uses would be devoted to pedestrian entrances and pedestrian-level display windows.
8. Utilize the building wall for security between the structure and the street, eliminating the need for fences at the street.	**Consistent.** The Project does not propose any security fences and would rely upon the building wall for security.
Building Signage and Lighting	
1. Include signage at a height and of a size that is visible to pedestrians, assists in identifying the structure and its use, and facilitates access to the building entrance.	**Consistent.** Project signage would be integrated within the architecture of the building and would contribute to an articulated storefront character. The Project would feature coherent signage

Table IV.H-7
Project Consistency with Applicable Walkability Checklist Guidelines

Guideline	Project Consistency
	that would be visible and consistent in shape, size, color, height, and lettering. The Project's signage would provide pedestrians with a sense of order to facilitate access to the building entrances, would identify the address and the business, and would also add to the Project's identity.
2. Provide adequate lighting levels to safely light the pedestrian path.	**Consistent.** Adequate lighting would be provided to provide safe lighting for pedestrian paths in compliance with the requirements in the LAMC.
3. Utilize adequate, uniform, and glare-free lighting to avoid uneven light distribution, harsh shadows, and light spillage.	**Consistent.** Adequate, uniform, and glare-free lighting would be used to avoid uneven light distribution, harsh shadows, and light spillage (see Project Design Feature AES-PDF-3).
4. Use fixtures that are "dark sky" compliant.	**Consistent.** All light fixtures would be "dark sky" compliant, or equivalent which seeks to reduce light pollution or illuminating unintended targets. These are fixtures that cast little to no light upward in public areas.
Source: City of Los Angeles, Department of City Planning, Walkability Checklist: Guidance for Entitlement Review, November 2008.	

(h) Citywide Design Guidelines

Consistency of the Project with the Citywide Design Guidelines is discussed on Table IV.H-8. As demonstrated, the Project would be substantially consistent with the overall intent of the Citywide Design Guidelines. **Therefore, Project impacts related to the consistency of the Project with the Citywide Design Guidelines would be less than significant.**

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
Site Planning	
1. Work with the natural topography of the site to avoid dramatic and unnecessary grade changes by utilizing landform grading.	**Consistent.** The Project Site is relatively flat. The Project would not change the topography of the Project Site.
3. Create a strong street wall by locating building frontages at the front property line where no setback requirement exists, or at the required setback. Where additional setback is necessary or a prevailing setback exists, activate the area with a courtyard or "outdoor room" adjacent to the street by incorporating residential amenities such as seating or water features, for example.	**Consistent.** The Project would be located at the front property lines on 5th, Seaton, and Colyton Streets to create a strong street presence. The Project's setback from the Colyton Street, 5th Street, and Seaton Street property lines would be three feet at the ground level, creating a strong street presence. Starting at the 3rd floor, the rear yard setback of the residential floors would be 12 feet, which would allow for a terrace to wrap around the entire third floor of the proposed building. The terrace would be landscaped with green screen trellises and raised planters without and with built-in seating and other outdoor furniture for use by the hotel guests and residents in their respective accessible areas.
5. Locate a majority of code-required open space at the ground level in a manner that is equally accessible to all residential units to promote safety and the use of outdoor areas. In mid- and high-rise buildings, podiums between buildings and rooftop areas can be used as common areas.	**Consistent.** The majority of the open space would be provided in a publicly-accessible atrium and an art plaza located on the ground level of the Project Site (see Figures II-4 and II-5). The rooftop would contain additional amenities, including a pool/spa and clubhouse, for the use of residents and hotel guests.
7. Provide direct paths of travel for pedestrian destinations within large developments. Especially near transit lines, create primary entrances for pedestrians that are safe, easily accessible, and a short distance from transit stops.	**Consistent.** The Project includes multiple ground-level pedestrian entrances along the City's rights-of-way, and provides easy access to transit routes in the area (see Figures II-4 and II-5).
8. In dense neighborhoods, incorporate passageways or paseos into mid-block developments, particularly on through	**Consistent.** The Project would include a porte cochere mid-block along 5th Street between Seaton Street and Colyton

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
blocks, to facilitate pedestrian access to commercial amenities nearby, such that pedestrians will not need to walk the perimeter of a block in order to access the middle of the next parallel street or alley.	Street that would serve as open space for public access connecting the entry plaza, atrium, and entry fountain. The porte cochere would facilitate pedestrian access to commercial amenities on the Project Site through the porte cochere along 5th Street and the pedestrian entrance on Colyton Street.
9. Activate mid-block passageways or paseos using water features, pedestrian-level lighting, artwork, benches, landscaping, or special paving so that they are safe and visually interesting spaces.	**Consistent.** The Project would include a porte cochere mid-block along 5th Street between Seaton Street and Colyton Street that would serve as open space for public access, connecting the entry plaza, atrium, and entry fountain to create a visually interesting space along 5th Street.
10. Install bicycle racks and lockers near building entrances, especially in residential or mixed-use projects located on Major or Secondary highways, or on Local and Collector streets near commercial services. Ensure bicycle racks are placed in a safe, well-lit location, convenient for residents and visitors.	**Consistent.** Secure short-term bicycle parking would be provided on the ground level near the parking garage entrance on Colyton Street and near the hotel valet area on 5th Street. Secure long-term bicycle parking would be provided on the Project's B1 parking level, accessible via an access point on Seaton Street.
Building Orientation	
1. Design small lot subdivisions, low-rise townhomes, and apartment buildings to ensure that all street-fronting units have a primary entrance facing the street. Alternatively, for Medium and High-Medium density buildings without ground floor entrances for individual units, create a prominent ground or first floor entry, such as a highly visible lobby or atrium.	**Consistent.** The Project includes multiple ground-level pedestrian entrances with access from the adjacent public streets. The residential and hotel lobbies, with distinctive signage, would be located directly off of the porte cochere, while secondary ground-floor entrances to the commercial uses would be located along all three street frontages.
2. Locate gathering spaces such as gyms, recreation rooms, and community space at the ground level and accessible to the street.	**Consistent.** The Project's amenity spaces would be located throughout the proposed building, depending on the purpose of each space. Although gyms and recreation rooms would not be located at the ground level (they would be located on the third level), the ground

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
	level would feature some community gathering spaces (such as outdoor seating at restaurants/cafes and the atrium and art plaza) that would be accessible from the street. Most of the other amenity spaces would be located on the proposed rooftop (see Figure II-11) for use by Project residents and hotel guests.
Entrances	
2 Entries should be designed according to simple and harmonious proportions in relationship to the overall size and scale of the building. Design entries in proportion to the number of units being accessed. Ensure that pedestrian entries provide shelter year-round.	**Consistent.** All entries would be designed proportional to the number and type of units/uses being accessed and would be proportional to the overall size and scale of the building. All entries would be sheltered from the elements.
3. Ensure that the main entrance and entry approach can accommodate persons of all mobility levels.	**Consistent.** The Project would be required to comply with all Americans with Disabilities Act (ADA) requirements.
4. Promote pedestrian activity by placing entrances at grade level or slightly above, and unobstructed from view from the public right-of-way. Entryways below street level should be avoided.	**Consistent.** The Project includes multiple ground-level pedestrian entrances along the public right-of-way. At the street level, the Project is designed to be pedestrian friendly, maintaining a strong street wall, with distinct entrances, commercial glass storefront, and an art plaza (1,500 square feet) on the southwest corner (corner of 5th and Seaton Streets), that creates a flexible open space for pedestrians. The Project would further encourage pedestrian activity by offering retail and restaurant opportunities at the ground level, as well as movable and fixed outdoor furniture and outdoor dining areas along the sidewalk, at the southeast corner (corner of 5th and Colyton Streets) and west side (along Seaton Street) of the building. In addition, the Project Site has a Walk Score of 94, underscoring that the Project Site exists within a pedestrian-

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
	friendly environment, which would be strengthened by the Project.
5. If stairs are used in common areas, such as an atrium or lobby, they should be highly visible and integrated with the predominant architectural design elements of the main building.	**Consistent.** All stairways would be highly visible and integrated with the overall design aesthetic of the building.
6. Maintain an active street presence for ground floor retail establishments in mixed-use projects by incorporating at least one usable street-facing entrance with doors unlocked during regular business hours.	**Consistent.** The Project includes multiple ground-level pedestrian entrances along the public right-of-way. The doors to these street-facing entrances would remain unlocked during regular business hours.
7. In mixed-use projects, ensure that ground floor uses maintain a high degree of transparency and maximize a visual connection to the street by providing clear and unobstructed windows, free of reflective glass coatings, exterior mounted gates, or security grills.	**Consistent.** All ground-floor uses would have clear windows and would not include reflective glass coatings or grills (see Project Design Feature AES-PDF-4).
Relationship to Adjacent Buildings	
1. Ensure that new buildings are compatible in scale, massing, style, and/or architectural materials with existing structures in the surrounding neighborhood. In older neighborhoods, new developments should likewise respect the character of existing buildings with regards to height, scale, style, and architectural materials.	**Partially Consistent.** As discussed in **Section IV.B, Aesthetics**, of this Draft EIR, the Project would increase the height and massing on the Project Site when compared to existing conditions. The Project would be taller than other existing structures in the immediate vicinity. The Project would reflect the prevailing architectural design within the Arts District by incorporating traditional storefront elements, including a solid base for the storefront windows made of high quality durable red bricks, and featuring an exterior art display.
5. Plant trees, shrubs, and vines to screen walls between property lines. Use decorative walls that include a change in color, material, and texture.	**Partially Consistent.** The proposed building would extend to the northern property line, which is the only façade that is immediately adjacent to private property. At the ground level, no landscaping is feasible in this area of the Project Site since the proposed building would abut the adjacent property.

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
	However, the Project would incorporate a green screen trellis and raised planter into the north-facing building façade at the 3rd level. Above the 3rd level, the north façade would feature large-scale artwork as illustrated in Figure II-19.
Building Facade	
1. Add architectural details to enhance scale and interest on the building facade by breaking it up into distinct planes that are offset from the main building façade. Porches and stoops can be used to orient housing towards the street and promote active and interesting neighborhood streetscapes.	**Consistent.** The Project would be designed in a modern architectural style, with articulated building façades and accent colors to provide visual interest. Although porches and stoops would not be included because no residential uses are proposed for the ground floor, the Project would include elements, such as metal panels, metal veneers and metal awnings and canopies, to add to the building's character. To keep the building visually interesting and define the spaces when looking from the street, the Project would have several residential windows that visually delineate human-scale spaces. The residential part of the building would also be covered by printed panels with contemporary urban, artwork (mural) on the southern, western and northern façades. Cantilevered private balconies would be sporadically placed to ensure that the building is broken up into comfortable-sized units. The hotel part of the building would have a continuous window wall façade with a varied color palette. For additional details, see the Project elevations contained in Figures II-17 through II-20 in **Section II, Project Description**, of this Draft EIR.
2. Design multi-family buildings to convey individual residential uses, even when applying a modern aesthetic. Modulated façades can prevent residential buildings from appearing commercial.	**Consistent.** The Project is a mixed-use building not a multi-family building. Consistent with the live/work nature of the residences being proposed, the Project would be designed to appear as both residential and commercial when

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
	viewed from the exterior. Changes in architectural design and building materials would be used to differentiate live/work uses from hotel and commercial uses within the Project.
3. Layer building architectural features to emphasize certain features of the building such as entries, corners, and organization of units.	**Consistent.** Entries and corners would be given emphasis in the building's architecture through the use of different building and façade materials.
4. Alternate different textures, colors, materials, and distinctive architectural treatments to add visual interest while avoiding dull and repetitive façades.	**Consistent.** The residential part of the building would be covered by printed panels with contemporary urban, artwork (mural) on the southern, western and northern façades. This external skin would be designed to improve the building's appearance and to illustrate the importance of creative art expression for the neighborhood. Cantilevered private balconies would be sporadically placed to ensure that the building is broken up into comfortable-sized units. The hotel part of the building would have a continuous window wall façade with a varied color palette. For additional details, see the Project elevations contained in Figures II-17 through II-20 in **Section II, Project Description**, of this Draft EIR.
5. Utilize windows and doors as character-defining features to reflect an architectural style or theme consistent with other façade elements. Windows should project or be inset from the exterior building wall and incorporate well designed trims and details.	**Consistent.** The Project would incorporate windows along the façades and would utilize them as a character-defining feature of the overall architectural design. Doors would also be given a consistent design that would complement and be compatible with the modern architectural style of the building.
6. Treat all façades of the building with an equal level of detail, articulation, and architectural rigor.	**Consistent.** The Project is designed in a modern architectural style, with articulated building façades and accent colors to provide visual interest. All building façades would receive these treatments, with some level of variation corresponding to the functionality of each

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
	facade.
7. Integrate varied roof lines through the use of sloping roofs, modulated building heights, gables, dormers, or innovative architectural solutions.	**Consistent.** The Project contains varying rooflines as illustrated in Figure II-17.
8. Reinforce existing facade rhythm along the street where it exists by using architectural elements such as trim, material changes, paved walkways, and other design treatments consistent with surrounding buildings.	**Consistent.** At the street level, the Project would maintain a strong street wall, with distinct entrances, commercial glass storefront, and an art plaza (1,500 square feet) on the southwest corner (corner of 5th and Seaton Streets), that creates a flexible open space for pedestrians. Vertical breaks and pedestrian-scaled storefront bays would prevent a monolithic "box-like" feeling and would maintain a storefront rhythm. The Project would incorporate traditional storefront elements by including a solid base for the storefront windows, made of high quality durable red bricks. These elements of the Project's design would be compatible with adjacent buildings to the north along both Seaton and Colyton Streets.
9. Include overhead architectural features such as eaves, awnings, canopies, trellises, or cornice treatments at entrances and windows that provide shade, provide passive cooling, and reduce daytime heat gain.	**Consistent.** The Project includes awnings, window treatments, and architectural features to reduce heat gain at the Project Site.
10. Orient windows on street facing units toward public streets, rather than inward, to contribute to neighborhood safety and provide design interest.	**Consistent.** Windows of the Project are oriented toward streets and entrances.
11. Orient interior unit spaces so that larger windows for more public rooms, such as living and dining areas, face onto the street.	**Consistent.** The Project's live/work spaces include large windows facing toward the streets.
12. Design balconies such that their size and location maximize their intended use for open space. Avoid "tacked on" balconies with limited purpose or function.	**Consistent.** In addition to the public outdoor terrace on the 3rd level of the Project, cantilevered functional private outdoor terraces would be sporadically placed around the 4th through 11th levels

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
	to ensure that the building is broken up into comfortable-sized units.
Building Materials	
1. Approach character-defining details in a manner that is true to a style of architecture or common theme.	**Consistent.** The Project is designed to have a consistent theme and architectural style, driven largely by the character-defining details, such as street frontages and entrances.
2. Apply trim, metal and woodwork, lighting, and other details in a harmonious manner, consistent with the proportions and scale of the building(s).	**Consistent.** Structural trim, metal/woodwork, lighting, and other details would be incorporated into the Project design to be harmonious and to avoid detracting from the overall aesthetic character of the building design and scale.
3. Select building materials, such as architectural details and finishes that convey a sense of permanence. Quality materials should be used to withstand weather and wear regardless of architectural style.	**Consistent.** Building materials proposed for the Project, including the durable red bricks and metallic elements, would be of a high quality and designed to withstand weather and wear. These materials, and the overall design, would convey a sense of permanence. Examples are illustrated in Figures II-17 through II-22.
4. Apply changes in material purposefully and in a manner corresponding to variations in building mass.	**Consistent.** Changes in building material would adhere to a plan that is intended to convey the overall Project design, including a differentiation between the uses within the Project (e.g., live/work units vs. hotel vs. retail).
6. Exterior bars on windows convey an environment of hostility and are therefore strongly discouraged.	**Consistent.** The Project would not include bars on windows.
Sidewalks	
1 For new multi-family residential projects where a sidewalk does not currently exist, establish a new sidewalk along the length of the public street frontage.	**Consistent.** The Project would require the granting of a 3-foot-wide dedication along the portions of Colyton Street and 5th Street that currently have a 60-foot right-of-way (30-foot half right-of-way) for the construction of 13-foot sidewalks along the Project's street frontages.
2. On Major and Secondary Highways, provide a comfortable sidewalk and parkway; at least 10 feet in width to	**Consistent.** All sidewalks included as part of the Project would be constructed in accordance to the City's standards for

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
accommodate pedestrian flow and activity, but wider if possible. Sidewalks and parkway widths on Local and Collector streets may be narrower, but generally not less than nine feet wide.	sidewalks and would be 13 feet wide.
3. Create continuous and predominantly straight sidewalks and open space. Reconstruct abandoned driveways as sidewalks.	**Consistent.** The sidewalks surrounding the property would be continuous and predominantly straight and would be improved along the Project Site frontages as part of the Project. No abandoned driveways exist at the Project Site.
4. Plant parkways separating the curb from the sidewalk with ground cover, low-growing vegetation or permeable materials that accommodate both pedestrian movement and the use of car doors. Brick work, pavers, gravel, and wood chips are examples of suitable permeable materials.	**Consistent.** Landscaping would be included as part of the Project in accordance with the City's landscaping requirements, specifically those established in connection with the RIO District (requiring the use of native trees, plants or shrubs, or species defined as "WatershedWise" or included in relevant landscaping guidelines), and would be planted to create a buffer and in conformance with the City's street tree requirements.
5. Create a buffer zone between pedestrians, moving vehicles, and other transit modes by the use of landscape and street furniture. Examples include street trees, benches, newspaper racks, pedestrian information kiosks, bicycle racks, bus shelters, and pedestrian lighting.	**Consistent.** See above discussion for Sidewalks No. 4 regarding creating a buffer zone between pedestrians and the street.
6. Plant street trees at the minimum spacing permitted by the Division of Urban Forestry, typically one tree for every 20 feet of street frontage, to create a consistent rhythm. Broad-leaf evergreen and deciduous trees should be used to maintain a continuous tree canopy. Shade producing street trees may be interspersed with an occasional non-shade tree. In high pedestrian use areas, install tree guards to protect tree	**Consistent.** The Project would include street trees planted in accordance with City standards. A total of 33 trees are required for the Project by the LAMC; the Project is proposing 42 trees.

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
trunks from damage.	
7. Provide lights on sidewalks to encourage and extend safe pedestrian activities into the evening.	**Consistent.** Adequate lighting would be provided (in accordance with LAMC requirements) to ensure safe lighting for pedestrian paths.
8. Utilize pedestrian lighting, seating areas, special paving, or landscaping. Ensure that new developments adjacent to transit stops invest in pedestrian amenities such as trash receptacles and sheltered benches or seating areas for pedestrian that do not intrude into the accessible route.	**Consistent.** The Project would include pedestrian lighting, seating, varied paving, and landscaping in its proposed sidewalk design. No transit stops are located immediately adjacent to the Project Site.
Crosswalks/Street Crossings for Large-Scale Developments	
1. Incorporate features such as white markings, signage, and lighting so that pedestrian crossings are visible to moving vehicles during the day and at night.	**Consistent.** The Project does not include development of pedestrian crossings but would include special paving and lighting along the sidewalks adjacent to the building to enhance the safety of pedestrians.
2. Improve visibility for pedestrians in crosswalks by installing curb extensions/bump outs and advance stop bars, and eliminating on-street parking spaces adjacent to the crossing.	**Consistent.** The Project would use appropriate pedestrian markings and infrastructure as required by the Departments of Building and Safety and LADOT on the Project Site. Some of the existing parking spaces would be removed adjacent to the Project.
On-Street Parking	
1. Locate curb cuts in a manner that does not reduce on-street parking and replace any unused curb cuts and driveways with sidewalks to maintain continuity for pedestrians.	**Partially Consistent.** The Project would remove approximately 40 existing on-street parking spaces adjacent to the Project Site in order to accommodate the driveways. Existing curb cuts along Seaton Street would be replaced by a landscaped sidewalk and a driveway for the loading dock on the northwestern portion of the Project Site. The Project would maintain sidewalk continuity for pedestrians.
2. Provide angled or parallel on-street parking to maximize the safety of bicyclists and other vehicular traffic.	**Consistent.** No on-street parking would be provided by the Project. All Project parking would be accommodated in a subterranean parking garage on-site.

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
	Accordingly, no impact to safety of bicyclists and other vehicular traffic would occur as they relate to on-street parking.
Off-Street Parking and Driveways	
1. Prioritize pedestrian access first and automobile access second. Orient parking and driveways toward the rear or side of buildings and away from the public right-of-way. On corner lots, parking should be oriented as far from the corner as possible.	**Consistent.** All Project parking would be provided in subterranean parking levels to minimize pedestrian/car interaction.
2. Maintain continuity of the sidewalk by minimizing the number of curb cuts for driveways and utilizing alleys for access and egress.	**Consistent.** All sidewalks would be continuous adjacent to the Project frontages.
3. Provide drop-off areas for large-scale residential projects to the side or rear of the building.	**Consistent.** The porte cochere would be provided on the ground floor of the Project, generally located toward the eastern side of the building and within the Project itself.
4. When a driveway in a front yard cannot be avoided, locate the driveway at the edge of the parcel rather than the center. Ensure that the street-facing driveway width is minimized to 20 feet or less.	**Partially Consistent.** The Project Site does not contain any front yard area, and no driveways would be placed within a front yard area. The proposed Project driveways would be constructed in accordance with LADOT requirements and are preliminarily estimated to be at least 20 feet in width at its narrowest point. The driveway opening on the 5th Street frontage of the Project would be located in the center of the parcel.
8. Illuminate all parking areas and pedestrian walkways to improve safety. Avoid unintended spillover impacts onto adjacent properties.	**Consistent.** Adequate lighting would be provided in accordance with LAMC requirements to ensure safe lighting for pedestrian paths and interior parking areas. Additionally, adequate, uniform, and glare-free lighting in accordance with LAMC Section 91.620 would be used to avoid uneven light distribution, harsh shadows, and light spillage. Since all Project parking would be provided in subterranean parking levels, no potential

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
	for spillover impacts from parking area lighting would result from the Project.
9. Where openings occur due to driveways or other breaks in the sidewalk or building wall, use architectural features such as decorative gates and pergolas in combination with landscaping to provide a continuous visual presence at the street level.	**Consistent.** As illustrated in Figure II-21, the openings in the building wall at street level would be incorporated into the overall architectural design of the Project. Landscaping and decorative building elements, such as continuous brick framing and metal awnings/pergolas would be utilized to maintain a continuous visual presence along the sidewalks.
On-Site Landscaping	
2. Design landscaping to be architecturally integrated with the building and suitable to the functions of the space while selecting plant materials that complement the architectural style and form of the building.	**Consistent.** The landscaping would be architecturally integrated into the building design and would include plant materials that complement the architectural style and form of the building. The proposed landscaping plans for the Project are shown in Figures II-23 through II-25. The intention of the landscape design is to create a pedestrian-friendly environment, which includes shade trees and landscaping along the street. The mixed-use residential building would provide landscaped areas at the third level and the roof terrace level. The landscaping for the Project would include both native and adaptive native plant materials selected to complement the building's style and design.
3. Design open areas to maintain a balance of landscaping and paved area.	**Consistent.** As shown in Figures II-23 through II-25, the open space areas within the Project would feature both landscaping and a variety of paving types.
4. Select drought tolerant, native landscaping to limit irrigation needs and conserve water. Mediterranean and other local climate-friendly plants may be used alongside native species.	**Consistent.** The Project would strategically use drought tolerant plants along with other types of landscaping.
5. Facilitate sustainable water use by using automated watering systems and	**Consistent.** The Project would comply with the City's Low Impact Development

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
drip irrigation to water landscaped areas.	(LID) requirements and would include drip systems, where appropriate consistent with applicable regulations.
6. Facilitate stormwater capture, retention, and infiltration, and prevent runoff by using permeable or porous paving materials in lieu of concrete or asphalt. Collect, store, and reuse stormwater for landscape irrigation.	**Consistent.** The Project would comply with the City's LID requirements, which includes the use of permeable paving as an option for reducing runoff volumes from the Project Site.
7. In addition to street trees, provide canopy trees in planting areas for shade and energy efficiency, especially on south and southwest facing façades.	**Consistent.** Landscaping would be located throughout the Project Site, including areas on external street frontages, along the internal walkways and driveways, courtyards, and porte cochere. Closely-planted trees would provide continuous shade along the sidewalks next to Seaton and 5th Streets.
Open Space and Recreation Activities	
1. Activate all open areas not used for buildings, driveways, parking, recreational facilities, or pedestrian amenities with landscaping. Landscaping may include any practicable combination of shrubs, trees, ground cover, minimal lawns, planter boxes, flowers, or fountains that reduce dust and other pollutants and promote outdoor activities, especially for children and seniors.	**Consistent.** Landscaping would be included throughout the Project's open space areas. These areas include the Art Plaza at the corner of Seaton and 5th Streets, the water feature at the main building entrance, along the outdoor dining areas, around the 3rd floor exterior deck, and on the rooftop amenity area.
2. For buildings with six units or more, cluster code-required common open space areas in a central location, rather than dispersing smaller less usable areas throughout the site.	**Consistent.** Most of the common open space would be located in centralized positions on the ground level, 3rd level terrace, and rooftop, as shown in Figures II-23 through II-25.
3. Provide balconies to augment, rather than substitute for, actively used common open spaces and recreational areas.	**Consistent.** The Project would include open space in accordance with LAMC open space requirements. Balconies would supplement centralized common open space areas on the ground, 3rd, and roof levels.
4. Provide common amenities such as community gardens and tot lots.	**Consistent.** The Project would include open space in accordance with LAMC open space requirements and would include such common amenities as a

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
	pool, a spa, roof garden, and an atrium and art plaza.
Building Signage	
1. Place signs so they do not dominate or obscure the architectural elements of the building design.	**Consistent.** The Project would not include dominating or obscuring signage. Examples of the proposed signage are illustrated in Figures II-17 and II-20.
2. Include signage at a height and of a size that is visible to pedestrians and facilitates access to the building entrance. In residential-only buildings, permanent signs affixed to the building solely for the purpose of communicating the name of a business or entity, or for advertising rentals are inappropriate in residential areas.	**Consistent.** The Project would provide signage at the pedestrian level that conforms to applicable LAMC requirements with respect to height, size, and visibility.
3. For mixed-use projects, incorporate an overall sign program for the building, including business identification signs, directional and informational signs, and residential signage to maintain a common graphic character and theme.	**Consistent.** The Project would include a consistent signage theme that is integrated with the architectural design of the building and conforms to applicable LAMC requirements. Examples of the proposed graphic theme for Project signage are illustrated in Figures II-17 and II-20.
Lighting and Security	
1. Use ornamental low-level lighting to highlight and provide security for pedestrian paths and entrances. Ensure that all parking areas and pedestrian walkways are illuminated.	**Consistent.** Adequate lighting would be provided in accordance with LAMC requirements.
2. Install lighting fixtures to accent and complement architectural details at night to establish a façade pattern and animate a building's architectural features.	**Consistent.** The Project would include exterior lighting designed to complement the architectural and artistic details of the building at night.
3. Utilize adequate, uniform, and glare-free lighting, such as dark-sky compliant fixtures, to avoid uneven light distribution, harsh shadows, and light spillage.	**Consistent.** All light fixtures would be "dark sky" compliant, or equivalent which seeks to reduce light pollution or illuminating unintended targets.
Utilities	
1. Place utilities such as gas, electric, and water meters in side yard setbacks	**Consistent.** All Project utilities would be placed underground. Rooftop mechanical

Table IV.H-8
Project Consistency with Applicable Citywide Design Guidelines

Guideline	Project Consistency
or in landscaped areas and out of the line-of-sight from crosswalks or sidewalks. Utilities such as power lines, transformers, and wireless facilities should be placed underground or on rooftops when appropriately screened by a parapet. Otherwise, any mechanical or electrical equipment should be buffered by planting materials in a manner that contributes to the quality of the existing landscaping on the property and the public streetscape.	equipment would be screened from public view (see Project Design Feature AES-PDF-1).
2. Screen rooftop equipment such as air conditioning units, antennas and communication equipment, mechanical equipment, and vents from the public right-of-way.	**Consistent.** All rooftop equipment would be screened from public view (see Project Design Feature AES-PDF-1).
3. Hide trash enclosures within parking garages so that they are not visible to passersby. Screen outdoor stand-alone trash enclosures using walls consistent with the architectural character of the main building and locate them so that they are out of the line-of-sight from crosswalks or sidewalks.	**Consistent.** All trash areas, which would be located adjacent to the loading area, would be enclosed and would not be visible from public view.
4. Locate noise and odor-generating functions in enclosed structures so as not to create a nuisance for building residents or adjacent neighbors.	**Consistent.** The Project would not include any major sources of odor. As discussed in **Section IV.I, Noise**, of this Draft EIR, compliance with existing LAMC provisions and implementation of Mitigation Measures NOI-MM-1 through NOI-MM-3 would ensure that Project noise levels would not exceed applicable thresholds and would also reduce the noise levels associated with construction of the Project to the maximum extent that is technically feasible.
Source: City of Los Angeles, Citywide Design Guidelines.	

(i) City of Los Angeles Do Real Planning Principles

The Project is compatible with the applicable good-planning practices set forth in the Do Real Planning publication. The City's Do Real Planning principles set forth objectives for building neighborhoods and communities that preserve a neighborhood's character and promote good planning initiatives. The Project's consistency with applicable Do Real Planning principles is analyzed in Table IV.H-9. As demonstrated, the Project would be substantially consistent with those principles as it would provide a live/work mixed-use development in walking and biking proximity to the Metro Gold Line Little Tokyo/Arts District Station and in proximity to existing bus lines and other commercial uses located in the Arts District. The Project would also provide both jobs and housing and promote livability benefits in the area. Further, the Project would incorporate sustainable building practices to reduce pollution and waste. The Project would also provide 220 bicycle parking spaces that would encourage alternative modes of transportation to and from the Project Site. **Therefore, Project impacts related to consistency with the Do Real Planning principles would be less than significant.**

Table IV.H-9
Do Real Planning Principles Consistency Analysis

Principles	Project Consistency/Comments
Demand a walkable City.	**Consistent.** The Project would be a mixed-use development within walking proximity to the Metro Gold Line Little Tokyo/Arts District Station at Alameda/1st Streets. The Project Site has a Walk Score of 94, underscoring that the Project Site exists as a pedestrian-friendly environment, which would be strengthened by the Project. The Project would be close to existing bus lines, would provide commercial uses, and would be located in close walking distance to other commercial uses located within the Arts District.
Require density around transit.	**Consistent.** The Project would be a mixed-use development within walking distance to the Metro Gold Line Little Tokyo/Arts District Station at Alameda/1st Streets and other Metro bus lines, as well as LADOT's DASH Route A. By developing 129 live/work residential units, the Project would help to create a node of density in a transit-proximate location.

Table IV.H-9
Do Real Planning Principles Consistency Analysis

Principles	Project Consistency/Comments
Locate jobs near housing.	**Consistent.** The Project proposes a mixed-use development that would provide both jobs and housing, including 129 live/work units, as well as the jobs that would be generated by the hotel and commercial uses.
Produce green buildings.	**Consistent.** The Project would incorporate sustainable building practices to reduce pollution and waste. As described above, the Project would comply with the CALGreen Code and the LAGBC.
Identify smart parking requirements.	**Consistent.** The Project would provide "smart parking" in compliance with City requirements. This would include automated parking to maximize the number of parking spaces while minimizing the amount of space dedicated to parking.
Source: Do Real Planning, published in 2007.	

(j) Compatibility Analysis

Appendix G of the State CEQA Guidelines does not include any significance thresholds relating to a project's compatibility with surrounding land uses, except not to physically divide an existing community. However, as enumerated under the "Thresholds of Significance" heading, the Los Angeles *CEQA Thresholds Guide* addresses land use compatibility. The physical compatibility of the Project with its surrounding environs is based on an analysis of proposed uses and improvements and their potential on- and off-site impacts on traffic, noise, air quality, and aesthetics. These impacts, together with proposed mitigation measures, where applicable, are discussed in their respective sections of this Draft EIR.

The Project Site is immediately surrounded by a mix of industrial and commercial uses contained in low- to mid-rise buildings of varying vintages, which are physically separated from the Project Site by streets on three sides and are directly adjacent to the Project Site on the north.

As discussed in **Section IV.B, Aesthetics**, of the Draft EIR, although the Project would alter the visual character of the Project area by removing the existing two-story building and redeveloping the Project Site with a 12-story mixed-use building, this alteration in

the visual character would not equate to a degradation. Impacts related to visual character would be less than significant.

As discussed above, the Project would be physically compatible with the surrounding land uses. **Therefore, Project impacts related to land use incompatibility would be less than significant.**

(2) Mitigation Measures

No significant impacts related to the Project's consistency with applicable land use plans, policies, and regulations have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to the Project's consistency with applicable land use plans, policies, and regulations would be less than significant.

Threshold (c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

As discussed in the Initial Study (see **Appendix A** of the Draft EIR), there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan that applies to the Project Site. **Therefore, the Project would have no impact with respect to Threshold (c). No further analysis is required.**

e) Cumulative Impacts

(1) Impact Analysis

Generally, a "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects.[17] An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered "cumulatively considerable" when the incremental impacts of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider that effect significant but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

[17] *CEQA Guidelines, §15355.*

An adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect.[18] The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence.

Cumulative land use impacts could occur if any of the identified cumulative development projects (listed in Table III-1 of this Draft EIR) would result in incompatible land uses, or result in land uses that are inconsistent with adopted land use plans when combined with the impacts of the Project. As previously stated in **Section III, Environmental Setting**, of the Draft EIR, there are 117 cumulative development projects. Of this group of projects, 32 are located in close enough proximity to the Project Site to potentially result in cumulative land use impacts (generally within the northern portion of the Arts District). In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many of the cumulative projects identified in Table III-1. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

Cumulatively, the Project and the cumulative projects proposed or under construction within the Arts District, would convert existing industrial and warehouse properties in the Project area to higher-density mixed-use developments. The Project would help to implement local and regional goals and policies for the Arts District and the Community Plan Area and would assist the City of Los Angeles in achieving short- and long-term planning goals and objectives. Likewise, future development associated with the cumulative projects within the Arts District would support the furtherance of the planning and development policy objectives for the Community Plan Area that have been evaluated within this section. This cumulative development is generally consistent with SCAG, SCAQMD, and City policies for promoting more intense land uses near transit stations and job centers, providing a variety of housing options, and increasing the number of retail and commercial uses within walking distance of housing and employment. Further, all cumulative projects in the City would be subject to the same local development standards and potential mitigation requirements as the Project.

[18] *Id., §15130(b)(1)(A)-(B).*

Accordingly, the Project would not combine with the cumulative projects to create a cumulatively significant land use impact, and impacts would be less than significant.

(2) Mitigation Measures

No significant cumulative impacts related to land use and planning have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to land use and planning would be less than significant.

IV. Environmental Impact Analysis

I. Noise

1. Introduction

This section examines the noise impacts of the Project and is based on the following analysis, which is included in **Appendix G** of the Draft EIR:

G. *Arts District Center Project, Noise Analysis, DKA Planning, December 2018.*

Both short-term impacts occurring during construction (e.g., site grading, haul truck trips) and long-term effects related to the ongoing operation of the Project are discussed in this section.

2. Environmental Setting

a) Introduction to Noise

(1) Characteristics of Sound

Sound can be described in terms of its loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel, abbreviated dB. Because the human ear is not equally sensitive to sound at all frequencies, the A-weighted scale (dBA) is used to reflect the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately 3 to 140 dBA. Table IV.I-1 provides examples of A-weighted noise levels from common sources.

Table IV.I-1
A-Weighted Decibel Scale

Typical A-Weighted Sound Levels	Sound Level (dBA, L_{eq})
Threshold of Pain	140
Jet Takeoff at 100 Meters	125
Jackhammer at 15 Meters	95
Heavy Diesel Truck at 15 Meters	85
Conversation at 1 Meter	60
Soft Whisper at 2 Meters	35
Source: United States Occupational Safety & Health Administration, Noise and Hearing Conservation Technical Manual, 1999.	

(2) Definitions

This noise analysis discusses sound levels in terms of Equivalent Noise Level (L_{eq}) and Community Noise Equivalent Level (CNEL). "Noise" itself is frequently defined as "unwanted sound."

- Equivalent Noise Level: L_{eq} represents the average noise level on an energy basis for a specific time period. Average noise level is based on the energy content (acoustic energy) of sound. For example, the L_{eq} for one hour is the energy average noise level during that hour. L_{eq} can be thought of as a continuous noise level of a certain period equivalent in energy content to a fluctuating noise level of that same period. L_{eq} is expressed in units of dBA.

- Community Noise Equivalent Level: CNEL is an adjusted noise measurement scale of average sound level during a 24-hour period. Due to increased noise sensitivities during evening and night hours, human reaction to sound between 7:00 P.M. and 10:00 P.M. is as if it were actually 5 dBA higher than had it occurred between 7:00 A.M. and 7:00 P.M. From 10:00 P.M. to 7:00 A.M., humans perceive sound as if it were 10 dBA higher. To account for these sensitivities, CNEL figures are obtained by adding an additional 5 dBA to evening noise levels between 7:00 P.M. and 10:00 P.M. and 10 dBA to nighttime noise levels between 10:00 P.M. and 7:00 A.M. Because of this, 24-hour CNEL figures are always higher than their corresponding actual 24-hour averages.

(3) Audible Noise Changes

Small perceptible changes in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be noticeable and would likely cause a community reaction. A 10-dBA increase is heard as a doubling in loudness and would cause a community response.

Noise levels decrease as the distance from noise sources to receivers increases. For each doubling of distance, noise from stationary sources, commonly referred to as "point sources," can decrease by approximately 6 dBA over hard surfaces (i.e., reflective surfaces, such as parking lots), even greater over soft surfaces (i.e., absorptive surfaces, such as soft dirt and grass). For example, if a point source produces a noise level of 89 dBA at a reference distance of 50 feet and over an asphalt surface, its noise level would be approximately 83 dBA at a distance of 100 feet, 77 dBA at 200 feet, etc. Noises generated by mobile sources decrease by approximately 3 dBA over hard surfaces and 4.5 dBA over soft surfaces for each doubling of distance.

Noise is most audible when traveling by direct line of sight, an unobstructed visual path between noise source and receptor. Barriers that break line of sight between sources

and receivers, such as walls and buildings, can greatly reduce source noise levels allowing noise to reach receivers by diffraction only. As a result, sound barriers can reduce source noise levels by up to 20 dBA.[1] However, the effectiveness of barriers can be greatly reduced when they are not high or long enough to completely break line of sight from sources to receivers.

It should be noted that because decibels are logarithmic units they cannot be simply added or subtracted. For example, two cars producing 60 dBA of noise each would not produce a combined 120 dBA.

(4) Effects of Noise

The degree to which noise can impact an environment ranges from levels that interfere with speech and sleep to levels that can cause adverse health effects. Most human response to noise is subjective. Factors that influence individual responses include the intensity, frequency, and pattern of noise; the amount of background noise present; and the nature of work or human activity exposed to intruding noise.

According to the National Institute of Health (NIH), extended or repeated exposure to sounds at or above 85 dB can cause hearing loss. Sounds of 75 dBA or less, even after continuous exposure, are unlikely to cause hearing loss.[2] The World Health Organization (WHO) reports that adults should not be exposed to sudden "impulse" noise events of 140 dB or greater. For children, this limit is 120 dB.[3]

Exposure to elevated nighttime noise levels can disrupt sleep, leading to increased levels of fatigue and decreased work or school performance. For the preservation of healthy sleeping environments, the WHO recommends that continuous interior noise levels not exceed 30 dBA L_{eq}, and that individual noise events of 45 dBA or higher be limited.[4] Assuming a conservative exterior to interior sound reduction of 15 dBA, continuous exterior noise levels should therefore not exceed 45 dBA L_{eq}. Individual exterior events of 60 dBA or higher should also be limited.

Some epidemiological studies have shown a weak association between long-term exposure to noise levels of 65-70 dBA L_{eq} and cardiovascular effects including ischaemic heart disease and hypertension. However, at this time, the relationship is largely inconclusive.

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1 *California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.*

2 *National Institute on Deafness and Other Communication Disorders, www.nidcd.nih.gov/health/noise-induced-hearing-loss.*

3 *World Health Organization, Guidelines for Community Noise, 1999.*

4 *Ibid.*

People with normal hearing sensitivity can recognize small perceptible changes in sound levels of approximately 3 dBA. Changes of at least 5 dBA can be readily noticeable and may cause community reactions. Sound level increases of 10 dBA or greater are perceived as a doubling in loudness and can provoke a community response.[5] However, few people are highly annoyed at noise levels below 55 dBA L_{eq}.[6]

b) Introduction to Vibration

(1) Characteristics of Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, and acceleration. Unlike noise, vibration is not a common environmental problem, as it is unusual for vibration from vehicle sources to be perceptible. Common sources of vibration include trains, construction activities, and certain industrial operations.

(2) Definitions

This noise analysis discusses vibration in terms of Peak Particle Velocity (PPV) and Root Mean Square Amplitude (RMS Amplitude).

- Peak Particle Velocity: PPV is commonly used to describe and quantify vibration impacts to buildings and other structures. PPV levels represent the maximum instantaneous peak of a vibration signal and are usually measured in inches per second.[7]

- RMS Amplitude: RMS Amplitude is most frequently used to describe and quantify the effect of vibration on humans, specifically how groundborne vibration can annoy humans or disrupt certain sensitive land uses and activities. RMS Amplitude is defined as the average of the squared amplitude of a vibration signal. Decibel notation, expressed in VdB, is commonly used to measure RMS Amplitude. The decibel scale compresses the range of numbers required to quantify the vibration.[8]

(3) Effects of Vibration

High levels of vibration may cause physical personal injury or damage to buildings. However, ground-borne vibration levels rarely affect human health. Instead, most

5 *Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2006.*

6 *World Health Organization, Guidelines for Community Noise, 1999.*

7 *Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2006.*

8 *Ibid.*

people consider ground-borne vibration to be an annoyance that can disrupt concentration or disturb sleep. Ground-borne vibration can also interfere with certain types of highly sensitive equipment and machines, especially imaging devices used in medical laboratories.

(4) Perceptible Vibration Changes

Unlike noise, ground-borne vibration is not an environmental issue that most people experience every day. Background vibration levels in residential areas are usually well below the threshold of perception for humans, approximately 0.01 inches per second.[9] Perceptible indoor vibrations are most often caused by sources within buildings themselves, such as slamming doors or heavy footsteps. Common outdoor sources of ground-borne vibration include construction equipment, trains, and traffic on rough or unpaved roads. Traffic vibration from smooth and well-maintained roads is typically not perceptible.

c) Regulatory Framework

(1) Federal

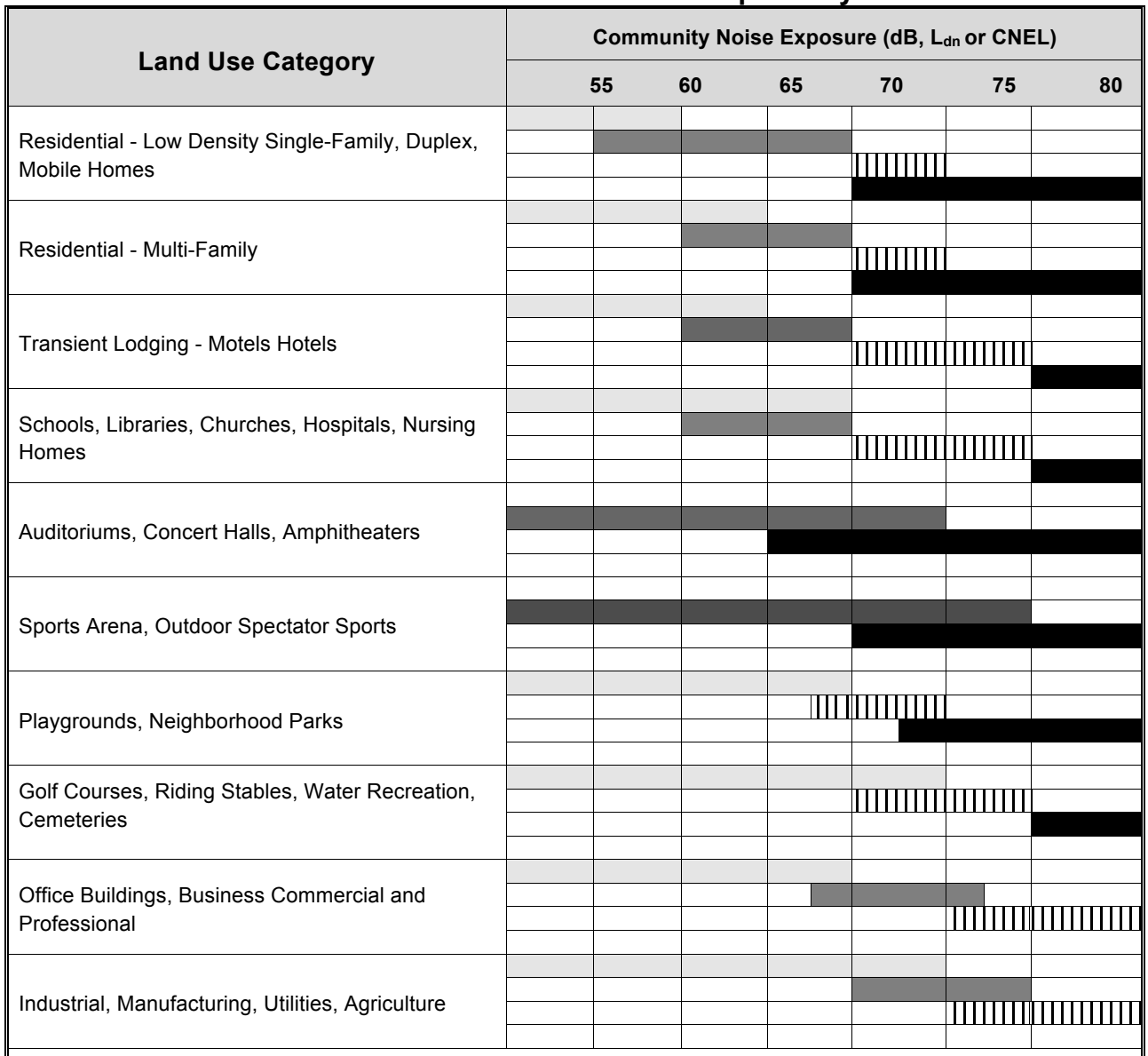
Currently, no federal noise standards regulate environmental noise associated with short-term construction activities or the long-term operations of development projects. As such, temporary and long-term noise impacts produced by the Project would be largely regulated by and evaluated with respect to state and City of Los Angeles standards designed to protect public well-being and health.

(2) State

The State's 2017 General Plan Guidelines establish county and city standards for acceptable exterior noise levels based on land use. These standards are incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities. The level of acceptable noise depends on the activity associated with a particular land use. Table IV.I-2 illustrates state compatibility considerations between various land uses and exterior noise levels.

[9] *Ibid.*

Table IV.I-2
State of California Noise/Land Use Compatibility Matrix



Source: California Office of Planning and Research, General Plan Guidelines - Noise Element Guidelines (Appendix D), Figure 2, 2017.

(3) City of Los Angeles

(a) General Plan Noise Element

The City of Los Angeles General Plan includes a Noise Element that includes policies and standards to guide for the control of noise to protect residents, workers, and visitors. Its primary goal is to regulate long-term noise impacts that preserve acceptable noise environments for all types of land uses.

According to the Noise Element, a noise exposure of up to 60 dB CNEL is considered most desirable for the exterior of noise-sensitive land uses, such as homes, schools, churches, libraries, etc. It is also recognized that such a level may not always be possible in areas of substantial traffic noise intrusion. Exposures up to 70 dB CNEL for noise-sensitive uses are considered conditionally acceptable if all measures to reduce such exposure have been taken. Noise levels above 70 dB CNEL are normally unacceptable for sensitive receptors except in unusual circumstances.

The Noise Element contains no quantitative or other thresholds of significance for evaluating a proposed project's noise impacts. Instead, it adopts the State's guidance on noise and land use compatibility, shown in Table IV.I-2 above, "to help guide determination of appropriate land use and mitigation measures vis-à-vis existing or anticipated ambient noise levels."

(b) Los Angeles Municipal Code

The City of Los Angeles Municipal Code (LAMC) contains a number of regulations that address noise created both by temporary construction activities and by long-term land use operations. LAMC Section 41.40(a) prohibits construction activities from occurring between the hours of 9:00 P.M. and 7:00 A.M., Monday through Friday. LAMC Section 41.40 (c), below, further prohibits such activities from occurring before 8:00 A.M. or after 6:00 P.M. on any Saturday, or on any Sunday or national holiday.

> *LAMC SECTION 41.40. NOISE DUE TO CONSTRUCTION, EXCAVATION WORK—WHEN PROHIBITED*
>
> *(a) No person shall, between the hours of 9:00 P.M. and 7:00 A.M. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power drive drill, riveting machine, excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and willfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this Code.*

(c) No person, other than an individual homeowner engaged in the repair or construction of his single-family dwelling shall perform any construction or repair work of any kind upon, or any earth grading for, any building or structure located on land developed with residential buildings under the provisions of Chapter I of this Code, or perform such work within 500 feet of land so occupied, before 8:00 A.M. or after 6:00 P.M. on any Saturday or national holiday nor at any time on any Sunday. In addition, the operation, repair, or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited on Saturdays and on Sundays during the hours herein specific…

Section 112.05 of the LAMC establishes noise limits for powered equipment and hand tools operated within 500 feet of residential zones. However, the Project Site is not located within 500 feet of residential-zoned land. A distinction between LAMC Section 112.05 below and LAMC Section 41.40 above should be noted; whereas LAMC Section 112.05 specifically refers to residential-zoned land when outlining its restrictions, LAMC Section 41.40 refers more broadly to places of residence, which may include those built within non-residential zones.

LAMC SECTION 112.05. MAXIMUM NOISE LEVEL OF POWERED EQUIPMENT OR POWERED HAND TOOLS

Between the hours of 7:00 A.M. and 10:00 P.M., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet therefrom:

(a) 75 dBA for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;

(b) 75 dBA for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools;

(c) 65 dBA for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors.

Said noise limitations shall not apply where compliance therewith is technically infeasible. The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall mean that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other noise reduction device or techniques during the operation of the equipment.

Section 112.01 of the LAMC prohibits any amplified noises, especially those from outdoor sources (e.g., outdoor speakers, stereo systems, etc.) from exceeding the ambient noise levels of adjacent properties by more than 5 dBA. LAMC Section 112.01(b) does not apply, as the Project Site is not located in a residential zone or within 500 feet of any residential zone.

LAMC SECTION 112.01. RADIOS, TELEVISION SETS, AND SIMILAR DEVICES

(a) It shall be unlawful for any person within any zone of the City to use or operate any radio, musical instrument, phonograph, television receiver, or other machine or device for the producing, reproducing or amplification of the human voice, music, or any other sound, in such a manner, as to disturb the peace, quiet, and comfort of neighbor occupants or any reasonable person residing or working in the area.

(b) Any noise level caused by such use or operation which is audible to the human ear at a distance in excess of 150 feet from the property line of the noise source, within any residential zone of the City or within 500 feet thereof, shall be a violation of the provisions of this section.

(c) Any noise level caused by such use or operation which exceeds the ambient noise level on the premises of any other occupied property, or if a condominium, apartment house, duplex, or attached business, within any adjoining unit, by more than five (5) decibels shall be a violation of the provisions of this section.

LAMC Section 112.02(a), below, prevents HVAC systems and other mechanical equipment from elevating ambient noise levels at neighboring properties by more than 5 dBA.

LAMC SECTION112.02. AIR CONDITIONING, REFRIGERATION, HEATING, PLUMBING, FILTERING EQUIPMENT

(a) It shall be unlawful for any person, within any zone of the city, to operate any air conditioning, refrigeration or heating equipment for any residence or other structure or to operate any pumping, filtering or heating equipment for any pool or reservoir in such manner as to create any noise which would cause the noise level on the premises of any other occupied property … to exceed the ambient noise level by more than five decibels.

(4) Vibration

The City has not adopted any standard, guideline or threshold relating to ground vibration.

Though not regulatory in nature, the Federal Transit Administration's (FTA) 2006 Transit Noise and Vibration Manual has established vibration impact criteria for various land uses based on their potential for activity disruption. These criteria, listed in Table IV.I-3, are used in the Draft EIR to assess potential impacts due to groundborne vibration. It should be noted that these criteria are intended to apply to long-term or permanent operational groundborne vibration from transit projects, not from temporary events such as construction activities. Though the same criteria are utilized to evaluate the impacts of construction activities, exceeding them on a temporary, short-term basis would not necessarily be considered significant.

Table IV.I-3
FTA Land Use Disruption Vibration Impact Criteria

Land Use	Impact Criteria (VdB)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Buildings where vibration would interfere with interior operations	65	65	65
Residences and buildings where people normally sleep	72	75	80
Institutional land uses with primarily daytime uses	75	78	83
Concert halls, TV studios, and recording studios	65	65	65
Auditoriums and theaters	72	80	80

[1] *The FTA defines "Frequent Events" as more than 70 vibration events of the same source per day.*
[2] *"Occasional Events" are defined as between 30 and 70 vibration events of the same source per day.*
[3] *"Infrequent Events" are defined as fewer than 30 vibration events of the same kind per day.*

Source: Federal Transit Administration, 2006

Typically, potential building and structural damages are the foremost concern when evaluating the impacts of construction-related vibrations. Table IV.I-4 summarizes the FTA's vibration guidelines for building and structural damage.

Table IV.I-4
FTA Vibration Damage Potential Criteria

Structure and Condition	Vibration Damage Criteria (in/sec PPV)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12
Source: Federal Transit Administration, 2006.	

d) Existing Conditions

(1) Sensitive Receptors

The Project Site is located in a transitional neighborhood with numerous commercial, industrial, and manufacturing land uses, but also a number of residential live/work loft spaces as well. According to the L.A. CEQA Thresholds Guide, land uses sensitive to noise include residences, transient lodgings, schools, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheaters, playgrounds, and parks. The following receptors were chosen specifically for detailed construction noise impact analysis given their potential sensitivity to noise and proximity to the Project Site:

- Beacon Lofts – 825 E. 4th Street

  This multi-family residential building is located approximately 500 feet north of the Project Site.

- Barker Block Lofts – 530 Hewitt Street

  This multi-family residential building, consisting of live/work lofts, is located approximately 400 feet southeast of the Project Site.

- Arts District Park

  This park is located at the southwest corner of Hewitt Street and 5th Street, approximately 210 feet southeast of the Project Site.

- 1201 E. 5th Street Residence

  This residence is located at the northeast corner of 5th Street and Colyton Street, approximately 60 feet east of the Project Site.

(2) Existing Ambient Noise

Short-term noise readings were taken at locations surrounding the Project Site to determine these receptors' ambient noise conditions.[10] For all noise monitoring locations, ambient noise was primarily attributable to vehicle traffic along nearby roadways, as well as noise from pedestrians and commercial activity in the area. Table IV.I-5 summarizes the results of this monitoring. For the analysis of Project noise

[10] *Noise measurements were taken using a Quest Technologies SoundPro DL Sound Level Meter. The SoundPro meter complies with the American National Standards Institute (ANSI) and International Electrotechnical Commission (IEC) for general environmental measurement instrumentation. The meter was equipped with an omni-directional microphone, calibrated before the day's measurements, and set at approximately five feet above the ground.*

impacts, the ambient noise level measured for the Barker Block Lofts has also been applied to Arts District Park. This noise level was recorded at the intersection of Hewitt Street and 5th Street, adjacent to the Barker Block Lofts, which are located approximately 50 feet east of the Arts District Park immediately across Hewitt Street. Given their proximity to each other and this intersection, both receptors experience a similar noise profile that is reasonably represented by the 60.7 dBA L_{eq} ambient noise level measurement. At the time of the noise measurement field study, the northwest Arts District Park location closest to the Project Site was experiencing temporary noise levels that were potentially elevated when compared to usual ambient conditions. A noise measurement taken at this time would have, therefore, exaggerated the baseline noise conditions for the receptor and, thus, under-represented the sensitivity of its existing noise environment. The ambient noise level measured at the intersection of Hewitt Street and 5th Street was located outside the influence of the intruding noise sources and, therefore, more accurately represents the baseline conditions of the location surrounding Hewitt Street and 5th Street.

Table IV.I-5
Existing Ambient Noise Levels in the Project Site Vicinity

Noise Monitoring Location	Existing Ambient Noise Level (dBA L_{eq})
1. Beacon Lofts – 825 E. 4th Street	68.6
2. Barker Block Lofts – 530 Hewitt Street	60.7
3. Arts District Park	60.7
4. 1201 E. 5th Street Residence	59.8
Source: DKA Planning, 2018.	

(3) Existing Vibration

Groundborne vibration is generally not perceptible in the area of the Project Site. Though trucks and buses are common on local roadways, vibration from these sources is approximately 63 VdB at 50 feet. This is just below the minimum approximate threshold of perception in humans, 65 VdB. There are no continuous point sources of perceptible groundborne vibration. As a result, it can be assumed that baseline vibration levels generally do not exceed 65 VdB in the area of the Project Site.[11]

[11] *Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.*

3. Project Impacts

a) Methodology

The noise analysis considers operational and construction noise and vibration sources. Operational noise levels were calculated used the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) Version 2.5. The calculations are for a straight roadway over flat ground, with a receiver set at a height of five feet (1.5 meters) above the ground. Stationary source noise levels were calculated based on available technical data. Vibration levels were estimated based on information provided by the FTA.[12] Construction noise impacts were modeled in accordance with FTA and Caltrans recommendations. Noise modeling results supporting the discussion presented in this section are included in **Appendix G** to the Draft EIR.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), a project could have a significant impact related to noise if the project would result in the following:

(a) Exposure of persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or

(b) Exposure of persons to or generate excessive groundborne vibration or groundborne noise levels; or

(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or

(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; or

(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 expose people residing or working in the project area to excessive noise levels; or

[12] *Ibid.*

(f) 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.

(2) 2006 L.A. CEQA Thresholds Guide

The City's 2006 L.A. CEQA Thresholds Guide (Thresholds Guide) provides guidance for the determination of significance for construction and operational noise impacts. It should be noted that the Thresholds Guide is "intended to be available as a voluntary tool" that serves as "a guidance document that draws together practical information" to "streamline and enhance the City's permit and development processes."[13] The Thresholds Guide further notes that "[i]t recognizes that the impacts resulting from a particular action depend on the project setting, design, and operational components and that the determination of significance and the appropriate criteria for evaluation are the responsibility of the lead agency."[14]

According to the Thresholds Guide, a project would, under normal circumstances, have a significant impact from construction noise if:

- Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use;
- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use; or
- Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, before 8:00 A.M. or after 6:00 P.M. on Saturday, or at any time on Sunday.

According to the Thresholds Guide, a Project would, under normal circumstances, have a significant impact from operational noise sources if:

- The Project would cause the ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL to or within the "normally unacceptable" or "clearly unacceptable" category; or
- Any 5 dBA or greater noise increase.

[13] *L.A. CEQA Thresholds Guide, page vii.*

[14] *L.A. CEQA Thresholds Guide, page viii.*

The "normally unacceptable" and "clearly unacceptable" categories referenced in the standard refer to those outlined by the State's noise and land-use compatibility chart, shown in Table IV.I-2.

In assessing impacts related to noise in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

The City has not adopted standards or other applicable regulations that would govern the Project's vibration impacts. Thus, the FTA's criteria set forth in the 2006 Transit Noise and Vibration Manual are used to assess potential vibration impacts. Additionally, the Thresholds Guide contains no guidance for the analysis and determination of groundborne vibration impacts. Given the lack of regulatory standards and City guidance, this analysis adopts FTA significant criteria for groundborne vibration impacts. The Project would be considered to have a significant impact should its construction and/or operational groundborne vibration levels exceed the building damage criteria shown in Table IV.I-4 or the land use impact criteria shown in Table IV.I-3.

c) Project Design Features

No specific Project Design Features (PDFs) are proposed with regard to noise.

d) Analysis of Project Impacts

Threshold (a) ***Would the project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

(1) Impact Analysis

(a) Construction

The estimated construction schedule for the Project is shown in Table IV.I-6 and is expected to last approximately 30 months. Project operation would begin in 2021. The amount of excavation materials exported from the Project Site is estimated at approximately 60,000 cubic yards.[15] The Project would contain five subterranean levels under the proposed building (approximately 50 feet below grade) in addition to any other excavation typically required for foundation and utility work.

[15] *Estimates provided by the Applicant, May 2017.*

Table IV.I-6
Estimated Construction Schedule

Phase	Duration
Demolition/Site Preparation	1 month
Grading/Excavation	2 months
Building Construction	25 months
Architectural Coatings[1]	2 months
Paving/Landscaping[1]	1 month

Note: Construction schedule, including start, end, and duration dates are estimates only.

[1] Would occur simultaneously during the building construction period.

During all construction phases, noise-generating activities could occur at the Project Site between the hours of 7:00 A.M. and 9:00 P.M., Monday through Friday, in accordance with Section 41.40(a) of the LAMC. On Saturdays, construction would be permitted to occur between 8:00 A.M. and 6:00 P.M. Construction activities would not occur between 9:00 P.M. and 7:00 A.M., Monday through Friday, before 8:00 A.M. or after 6:00 P.M. on Saturday, or at all on Sunday. On-site construction activities could include the use of heavy equipment, such as excavators, loaders, and similar tractor or dozer-type vehicles. Smaller equipment, such as forklifts, skid steer loaders, trenchers, generators, and various powered hand tools, would also be used. Off-site secondary noises could be generated by sources, such as construction worker vehicles, vendor deliveries, and haul trucks. Table IV.I-7 lists the hourly noise levels of construction vehicles and equipment that could be utilized for the Project.

Section 112.05 of the LAMC establishes a maximum noise level of 75 dBA at 50 feet for powered construction equipment operating in or within 500 feet from residential zones. As shown in Table IV.I-5, the Project's construction noise levels from certain powered equipment could exceed 75 dBA at a distance of 50 feet. Although the 1201 E. 5th Street Residence and the live/work units associated with the nearby Beacon Lofts (825 E. 4th Street) and Barker Block Lofts (530 Hewitt Street) are located within 500 feet of the Project Site, these areas are zoned M3-1-RIO. As such, the Project Site is not located in or within 500 feet of any residential-zoned land. The nearest residential zones to the Project Site are R5-4D-O-CDO-zoned parcels located along 3rd Street, over 1,600 feet northwest of the Project Site. [Q]R5-2D-zoned parcels located along San Pedro Street near Winston Street are over 2,000 feet west of the Project Site. As a result, the noise limits set forth by LAMC Section 112.05 would not apply to the Project. Construction activity would still comply with the construction restrictions set forth by Section 41.40 of the LAMC. Project construction would be consistent with all local general plan and noise ordinance regulations related to noise.

Table IV.I-7
Construction Equipment Noise Levels (Unmitigated)

Noise Source	Noise Level (dBA, 1-hr L_{eq})[1]					
	50 feet	100 feet	150 feet	200 feet	250 feet	300 feet
Auger Drill Rig	77.4	71.3	67.8	65.3	63.4	61.8
Backhoe	73.6	67.6	64.0	61.5	59.6	58.0
Concrete Mixer Truck	74.8	68.8	65.3	62.8	60.8	59.3
Concrete Pump Truck	74.4	68.4	64.9	62.4	60.4	58.8
Crane	72.6	66.6	63.0	60.6	58.6	57.0
Dozer	77.7	71.7	68.1	65.6	63.7	62.1
Dump Truck	72.5	66.5	62.9	60.4	58.5	56.9
Excavator	76.7	70.7	67.2	64.7	62.8	61.2
Front End Loader	75.1	69.1	65.6	63.1	61.2	59.6
Gradall[2]	79.4	73.4	69.9	67.4	65.4	63.9
Paver	74.2	68.2	64.7	62.2	60.2	58.6
Roller	73.0	67.0	63.5	61.0	59.0	57.4
Welder	70.0	64.0	60.5	58.0	56.0	54.5

[1] *Noise levels derived from the Federal Highway Administration's Roadway Construction Noise Model, version 1.1 (FHWA RCNM 1.1).*

[2] *A gradall is a telescoping forklift.*

The Thresholds Guide provides that a project could result in a significant impact if construction activities lasting more than one day would exceed existing ambient exterior noise levels at a noise sensitive use by 10 dBA, or if activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA or more at such a use.

For the Project, construction noise levels were modeled using the noise reference levels of excavators and front-end loaders, as these vehicles would be utilized extensively to demolish, excavate, and grade for the Project, especially its multi-level subterranean parking garage. Excavators can produce average peak noise levels of 76.7 dBA at a reference distance of 50 feet; front-end loaders can produce average peak noise levels of 75.1 dBA at a distance of 50 feet.[16] Compounding their noise impacts is the fact that these vehicles commonly operate in tandem. Excavators remove soils or debris, and front-end loaders transport this matter to on-site stockpiles or haul trucks for off-site export. As a result, excavators and front-end loaders have the greatest potential to cause sustained and significant noise impacts at nearby receptors. The projected

[16] *Reference noise levels obtained from the Federal Highway Administration's Roadway Construction Noise Model.*

exterior noise impacts from excavators and front-end loaders are shown in Table IV.I-8 and summarized below.

Table IV.I-8
Estimated Construction Noise Levels (Unmitigated)

Sensitive Receptor	Distance from Site (feet)	Maximum Construction Noise Level (dBA, L_{eq})	Existing Ambient (dBA, L_{eq})	New Ambient (dBA, L_{eq})	Increase (dBA, L_{eq})
Beacon Lofts – 825 E. 4th Street	500	52.5	68.6	68.7	0.1
Barker Block Lofts – 530 Hewitt Street	400	60.9	60.7	63.8	3.1
Arts District Park	210	66.5	60.7	67.5	6.8
1201 E. 5th Street Residence	60	77.4	59.8	77.5	17.7
Source: DKA Planning, 2018.					

As shown in Table IV.I-8, Beacon Lofts is projected to experience a negligible increase in exterior noise levels as a result of the Project's construction activities. The exterior noise level increase experienced by Barker Block Lofts would be considered barely perceptible. However, Arts District Park is projected to experience a noise increase of 6.8 dBA L_{eq} as a result of the Project's on-site construction, in excess of the 5-dBA noise increase threshold recommended by the Thresholds Guide for construction activities lasting more than ten days in a three-month period. The 1201 E. 5th Street Residence is projected to experience a noise increase of 17.7 dBA L_{eq}, also in excess of the Thresholds Guide's 5-dBA noise increase threshold. **Therefore, without mitigation, on-site construction-related noise impacts would be considered significant.**

With regard to off-site construction noise impacts, the Project would require haul trucks to export demolished materials, excavated soils, and construction waste from the Project Site to a regional landfill. Flatbeds, concrete mixing trucks, and other delivery vehicles would also be required throughout the Project's construction. As these trucks access and exit the Project Site, they could expose roadside sensitive land uses to increased traffic noise levels. The Project's peak construction truck trip generation would occur during its grading phase, when up to 600 haul truck and 40 delivery truck trips per work day could be required. Assuming a standard 8-hour work day, this could result in an upper-limit average of 80 total inbound and outbound truck trips per hour. Haul trucks in particular would approach the Project from Alameda Street, via I-10.

From Alameda Street, haul trucks would access and exit the Project Site using any combination of 4th Street, Seaton Street, Colyton Street, and 5th Street. Haul Trucks departing the Project Site would access I-10 via Alameda Street. Of these haul route segments, only two contain roadside sensitive receptors that could be impacted by increased noise levels due to the Project's trucks: 4th Street, between Alameda Street and Colyton Street; and Colyton Street, between 4th Street and 5th Street. The projected off-site construction noise impact from the Project's haul trucks along these segments are shown in Table IV.I-9 below.

Table IV.I-9
Estimated Haul Truck Noise Levels (Unmitigated)

Haul Route Segment	Maximum Haul Truck Noise Level (dBA, L_{eq})	Roadside Sensitive Receptors	Existing Ambient (dBA, L_{eq})	New Ambient (dBA, L_{eq})
4th St. between Alameda St. and Colyton St.	64.3	Beacon Lofts – 825 E. 4th St.	68.6	70.0
Colyton St. between 4th St. and 5th St.	68.0	1201 E. 5th St. Residence	59.8	68.6
Source: DKA Planning, 2018.				

As shown, Beacon Lofts is projected to experience a 1.4-dBA increase in noise levels due to the Project's haul trucks, well below the 5-dBA noise increase threshold for construction activities. However, the 1201 E. 5th St. Residence is projected to experience an increase of 8.8 dBA, which would exceed the threshold. **Therefore, without mitigation, off-site construction-related noise impacts associated with haul trucks would be considered significant.**

Below, Table IV.1-10 shows the composite construction noise impact – the combined effect of the Project's on- and off-site construction noise sources – at each sensitive receptor. Arts District Park and the 1201 E. 5th Street Residence would both experience noise levels in excess of the 5-dBA noise increase threshold as a result of the Project's on- and off-site construction activities, though noise increases at Beacon Lofts and Barker Block Lofts would remain below this threshold. **Therefore, without mitigation, the overall composite construction noise impact would be significant.**

Table IV.I-10
Estimated Composite Construction Noise Levels (Unmitigated)

Sensitive Receptor	Existing Ambient (dBA, L_{eq})	Maximum Construction Noise Level (dBA, L_{eq})	Maximum Haul Truck Noise Level (dBA, L_{eq})	New Ambient (dBA, L_{eq})	Increase (dBA, L_{eq})
Beacon Lofts – 825 E. 4th Street	68.6	52.5	64.3	70.0	1.4
Barker Block Lofts – 530 Hewitt Street	60.7	60.9	N/A	63.8	3.1
Arts District Park	60.7	66.5	N/A	67.5	6.8
1201 E. 5th Street Residence	59.8	77.4	68.0	78.0	18.2
Source: DKA Planning, 2018.					

(b) Operation

During long-term Project operation, the proposed development would produce noise from both on- and off-site sources, as discussed below.

(i) On-Site Noise Sources

- **Mechanical Equipment**: Regulatory compliance with LAMC Section 112.02 would ultimately ensure that noise from sources, such as heating, air conditioning, and ventilation systems, would not increase ambient noise levels at neighboring occupied properties by more than 5 dBA. Given this regulation, distances to sensitive receptors, the relatively quiet operation of modern HVAC systems, and the Project's own height, these on-site noise sources would not be capable of causing the ambient noise levels of nearby uses to increase by 3 dBA in CNEL to or within the "Normally Unacceptable" or "Clearly Unacceptable" noise categories, or by 5 dBA or greater overall. Noise from pool pumping and filtering equipment would also be regulated by LAMC Section 112.02, although it is not anticipated that these noises would be capable of contributing to audible off-site increases in noise given the relatively quiet operation of this equipment and the Project's location in a transitional area with commercial and industrial activities.

- **Hotel Land Uses**: Most noise generated by the proposed hotel would be internal, and audibility generally would be confined to within the Project itself. Given attenuation associated with the distance and height of the hotel's outdoor amenities, normal and reasonable use of the hotel's outdoor open space would

not result in a noticeable increase in noise levels at the location of the nearby sensitive receptors. Voice noise levels in face-to-face conversations generally increase proportionally to background ambient noise levels but only up to approximately 67 dBA at a reference distance of one meter. As a result, noise from speech and conversation would rapidly attenuate to below-nuisance levels and would have a negligible effect on surrounding ambient noise levels. At the 1201 E. 5th Street Residence, 60 feet east of the Project, noise levels attributable to speech and conversation sources would be below 50 dBA and have a nominal effect on the receptor's ambient noise levels. It should also be noted that this receptor is already located approximately 60 feet from an outdoor curbside dining area associated with the nearby Urth Caffe and presumably experiences existing conversation and speech noises from this area. Other sensitive receptors are located hundreds of feet from the Project and would not experience any audible speech and conversation noises. Additionally, all hotel operations would be subject to LAMC Section 112.01 related to amplified noise levels. (Noise impacts related to the hotel's porte-cochere and valet pick-up/drop-off area are discussed below under "Auto-Related Activities.") The pool area would also be elevated at the 12th floor roof level, well above surrounding properties and thereby, reducing potential noise impacts.

- **Residential Land Uses**: Noise from recurrent activities (e.g., conversation, consumer electronics, dog barking) and non-recurrent activities (e.g., social gatherings) would elevate ambient noise levels to different degrees. The City's noise ordinance would provide a means to address nuisances related to intrusive residential noises. As stated, noise levels from speech and conversation are typically no greater than 67 dBA at a reference distance of one meter. As a result, noise from speech and conversation, including noise from residential balconies, would rapidly attenuate to below-nuisance levels and have a negligible effect on surrounding ambient noise levels.

- **Restaurant Land Uses**: Most restaurant areas would be internal, and audibility generally would be confined to within interior restaurant spaces. However, the Project would contain outdoor dining and bar areas. A 3,200-square-foot 3rd floor terrace would include a dining and seating deck, and the 12th floor roof level would include a rooftop restaurant with 1,780 square feet of outdoor dining area, as well as a 1,060-square-foot bar area. As discussed earlier, voice noise levels in face-to-face conversations generally increase proportionally to background ambient noise levels but only up to approximately 67 dBA at a reference distance of one meter. Noise levels from outdoor dining areas would fluctuate throughout the day in relation to hours of peak or reduced patronage. Generally speaking, hours of peak use would largely coincide with afternoon and evening hours when

ambient noise levels are elevated, not during quieter late evening or early morning times when intrusive noises can have a more pronounced effect. Given the height of these outdoor areas, the sound attenuation that occurs across distance and the ambient noise levels in the Project vicinity, it is unlikely that noise from sources, such as patron conversations or light ambient music, would have a perceptible effect of at least 3 dBA on surrounding ambient noise levels. Noise levels decrease as the distance from the noise source to the receiver increases. For each doubling of distance, noise generated by a stationary noise source, or "point source," would decrease by approximately 6 dBA. Residential receptors such as Barker Block Lofts and Beacon Lofts are each located 400 feet or greater from the Project; speech and conversation noises from the outdoor dining areas would not be audible at this distance. Though the 1201 E. 5th Street Residence is located 60 feet east of the Project, as discussed earlier, the effect of speech and conversation noise from the Project would have a marginal effect on the receptor's ambient noise levels, especially given that this receptor is already located next to Urth Cafe with a large outdoor dining area. Overall, the noise impact of the Project's dining areas would not be significant, as ambient noise levels in the neighborhood are already influenced by other outdoor dining areas serving nearby cafes and restaurants, vehicle traffic, and other urban activities in the neighborhood. Noise from nearby warehouses and manufacturing uses loading/unloading goods and materials from delivery vehicles is also commonplace. The Project's outdoor dining areas would not alter the noise profile of this active street and pedestrian environment to a significant degree.

- **Auto-Related Activities**: The Project would provide a total of 513 parking spaces and 54 valet parking spaces in five below-grade levels. Non-valet parking would be served by an automated robotic parking system. As parking areas would be internalized and underground, auto-related noises at off-site locations would be inaudible, or at the very least considerably attenuated. It should also be noted that the Project Site's existing uses are served by ground-level curbside head-in parking. The removal of this outdoor parking and replacement with subterranean parking would result in a net decrease in audible auto-related noises.

  The hotel's porte cochere and valet pick-up/drop-off area would not generate a substantial amount of noise from vehicles, especially considering the area's existing noise profile from transportation sources. The Project is located in an active commercial and industrial environment with significant vehicle noise: forklifts load and unload goods onto and from delivery vehicles outside warehouses, diesel tractor-trailers frequently pass through transporting goods from nearby industrial and manufacturing centers, and passenger vehicles circle

the neighborhood in search of curbside parking. The hotel's valet area would have a nominal effect on this noise environment. Additionally, the removal of the Project Site's existing industrial and warehousing business could reduce noise levels associated with these uses' delivery and other street-level activities. Therefore, the Project's on-site auto-related activities would not be capable of substantially elevating ambient noise levels at off-site receptors, especially given the location's existing high levels of noise related to transportation sources. The Project's change in use and relocation of parking areas could even reduce transportation-related noise sources by some degree.

- **Trash/Recycling and Loading Activities**: Trash/recycling and loading areas would be included on the ground level near the northwestern corner of the proposed building. As shown on Figure II-9 in **Section II, Project Description**, of the Draft EIR, these areas would be enclosed within the building and as such, noise levels associated with occasional trash/recycling and loading activities would be substantially attenuated from off-site locations and would have a nominal effect on surrounding average ambient noise levels.

For the reasons discussed above, Project impacts related to on-site sources of operational noise would be less than significant.

(ii) Off-Site Noise Sources

The majority of the Project's operational noise impacts would be from off-site mobile sources associated with the increase in daily automobile trips generated by the Project as compared to the existing uses on the Project Site. On a typical weekday, the Project is forecast to generate an estimated 4,713 net new daily trips, including 273 net new AM peak-hour trips and 229 net new PM peak-hour trips.[17] The potential noise impact of these vehicle trips was modeled using the FHWA's Traffic Noise Model 2.5 (TNM 2.5). This noise prediction software uses traffic volumes, vehicle mix, average speeds, roadway geometry, and other inputs to calculate average noise levels along inputted roadway segments. For this analysis, an existing year (2017) without Project scenario was compared to an existing year with Project scenario. As shown in Tables IV.I-11 and IV.I-12, Project-related traffic would have a negligible impact on roadside ambient noise levels in the Project site vicinity. Twenty-four-hour CNEL impacts would similarly be minimal, far below the Thresholds Guide criteria for significant operational noise impacts, which begin at 3 dBA. **Therefore, the Project's off-site noise impacts would be less than significant.**

[17] *Ibid.*

Table IV.I-11
Existing + Project AM Peak-Hour Mobile Source Noise Levels

Roadway Segment[1]	Receptor Location	Estimated dBA, L_{eq} 1-hr			
		No Project (2017)	With Project (2017)	Project Change	Significant Impact?
4th St., E of Alameda St.[2]	North side of 4th St.	66.7	66.9	0.2	No
	South side of 4th St.	66.7	66.9	0.2	No
Seaton St., N of 5th St.	East side of Seaton St.	54.2	54.2	0.0	No
	West side of Seaton St.	54.0	54.0	0.0	No
Colyton St., N of 5th St.	East side of Colyton St.	54.5	54.5	0.0	No
	West side of Colyton St.	53.2	53.4	0.2	No

[1] *These roadway segments are based on the study intersections identified in the Project's traffic analysis and represent roadway segments with the highest levels of Project traffic. Projected noise levels are shown for each side of the roadway, as they can vary due factors such as building setback and daily traffic patterns.*

[2] *4th Street is a one-way street and as such, the north and south noise levels are the same.*

Source: DKA Planning, 2018.

Table IV.I-12
Existing + Project PM Peak-Hour Mobile Source Noise Levels

Roadway Segment[1]	Receptor Location	Estimated dBA, L_{eq} 1-hr			
		No Project (2017)	With Project (2017)	Project Change	Significant Impact?
4th St., E of Alameda St.[2]	North side of 4th St.	72.8	72.9	0.1	No
	South side of 4th St.	72.8	72.9	0.1	No
Seaton St., N of 5th St.	East side of Seaton St.	54.8	54.8	0.0	No
	West side of Seaton St.	54.7	54.7	0.0	No
Colyton St., N of 5th St.	East side of Colyton St.	56.5	56.6	0.1	No
	West side of Colyton St.	55.2	55.3	0.1	No

[1] *These roadway segments are based on the study intersections identified in the Project's traffic analysis and represent roadway segments with the highest levels of Project traffic. Projected noise levels are shown for each side of the roadway, as they can vary due factors such as building setback and daily traffic patterns.*
[2] *4th Street is a one-way street and as such, the north and south noise levels are the same.*

Source: DKA Planning, 2018.

(2) Mitigation Measures

Mitigation Measures NOI-MM-1 through NOI-MM-3 are recommended to reduce the Project's construction ambient noise impact at Arts District Park and the 1201 E. 5th Street Residence.

NOI-MM-1 All diesel-powered construction vehicles shall be equipped with exhaust mufflers or other suitable noise-reduction devices.

NOI-MM-2 Temporary sound barriers with a transmission loss value of at least 25 dBA shall be erected along the Project's eastern boundary. At plan check, building plans shall include documentation prepared by a noise consultant verifying compliance with this measure.

NOI-MM-3 No more than 7 haul trucks per hour shall access or exit the Project via Colyton Street. The Project Applicant (or grading or haul contractor) shall maintain logs documenting the hourly and daily number of haul trucks accessing or exiting the site via Colyton Street that shall be provided to the Construction Monitor. The logs shall contain license plate numbers or vehicle identification numbers (VIN) to identify trucks visiting the site. The logs shall be validated every two weeks by the Construction Monitor and maintained on-site and made available to the SCAQMD or the City for inspection upon request.

(3) Level of Significance After Mitigation

As shown in Table IV.I-13, implementation of Mitigation Measures NOI-MM-1 through NOI-MM-3 would reduce the Project's construction-related noise impacts at Arts District Park and the 1201 E. 5th Street Residence to below 5 dBA. Equipping diesel-powered construction vehicles with noise-reducing exhaust mufflers would reduce noise emissions by 3 dBA. Temporary sound barriers with a transmission loss value of at least 25 dBA would be capable of reducing construction noise levels at the 1201 E. 5th Street Residence by 15 dBA and would also reduce construction noise levels at the Arts District Park by at least 10 dBA. Restricting haul truck trips along Colyton Street to no more than 7 per hour would reduce haul truck-related noise levels at the 1201 E. 5th Street Residence from 68.0 dBA L_{eq} to 60.4 dBA L_{eq}. These mitigation measures would also have the effect of reducing construction noise levels at all other receptors as well. **As a result, Project impacts related to construction noise would be reduced to a less than significant.**

Table IV.I-13
Estimated Composite Construction Noise Levels (Mitigated)

Sensitive Receptor	Existing Ambient (dBA, L_{eq})	Maximum Construction Noise Level (dBA, L_{eq})	Maximum Haul Truck Noise Level (dBA, L_{eq})	New Ambient (dBA, L_{eq})	Increase (dBA, L_{eq})
Beacon Lofts – 825 E. 4th Street	68.6	52.5	56.7	69.0	0.4
Barker Block Lofts – 530 Hewitt Street	60.7	60.9	N/A	63.8	3.1
Arts District Park	60.7	53.5	N/A	61.5	0.8
1201 E. 5th Street Residence	59.8	59.4	60.4	64.6	4.8
Source: DKA Planning, 2018.					

Threshold (b) Would the project expose persons to or generate excessive groundborne vibration or groundborne noise levels?

Groundborne noise level impacts are discussed under Threshold (a) above. The discussion below addresses groundborne vibration impacts of the Project.

(1) Impact Analysis

(a) Construction

As shown in Table IV.I-7, construction of the Project would require equipment, such as excavators, auger drill rigs, and haul trucks. Table IV.I-14 shows the approximate distances at which groundborne vibration generated by these vehicles could exceed FTA building damage vibration criteria. In the vicinity of the Project Site are numerous vibration-sensitive brick and other masonry warehouse buildings dating to, in many cases, the 1920s and earlier. For these old masonry buildings, vibrations of 0.3 in/sec PPV or greater could be potentially damaging. Auger drills and large earthmoving equipment could produce these vibration levels at a distance of approximately 11 feet. Loaded trucks could generate these vibration levels at a distance of approximately 10 feet. Small earthmoving equipment could generate these vibration levels at distances less than 2 feet.

Table IV.I-14
Construction Related Vibration Levels

Equipment	Distance to FTA Vibration Damage Criteria			
	I. Reinforced-concrete, steel or timber (no plaster) 0.5 in/sec PPV	II. Engineered concrete and masonry (no plaster) 0.3 in/sec PPV	III. Non-engineered timber and masonry 0.2 in/sec PPV	IV. Buildings extremely susceptible to vibration damage 0.12 in/sec PPV
Large Dozer	8 feet	11 feet	15 feet	20 feet
Small Dozer	< 2 feet	< 2 feet	< 2 feet	< 2 feet
Auger Drill	8 feet	11 feet	15 feet	20 feet
Loaded Truck	7 feet	10 feet	13 feet	18 feet
Source: Federal Transit Administration, 2006.				

Masonry warehouse buildings surrounding the Project Site across Seaton Street, Colyton Street, and 5th Street are located greater than 11 feet from the Project and would not experience potentially damaging levels of vibration from construction activities. However, the Project Site does directly abut neighboring buildings to the north. Construction activities utilizing auger drills or large earthmoving equipment and

occurring at or within 11 feet of the Project Site's northern property line could cause these buildings to experience groundborne vibration levels in excess of the FTA's 0.3 in/sec PPV damage threshold for engineered concrete and masonry structures. The structures that could be impacted include a three-story brick building at 440 Seaton Street and a single-story warehouse building located at 441 S. Colyton Street. Smaller earthmoving equipment operating within 2 feet of these structures could expose them to groundborne vibrations in excess of the 0.3 in/sec PPV threshold. Loaded trucks operating within 10 feet of these structures could also result in such an impact. **Therefore, without mitigation, the Project's vibration impact related to potential building damage would be significant.**

With regard to human annoyance, land uses in the immediate vicinity of the Project Site consist mainly of commercial and industrial uses that the FTA does not consider to be sensitive to groundborne vibration. However, the 1201 E. 5th Street Residence is located just 60 feet east of the Project Site. At this distance, the receptor could experience groundborne vibration levels of 75.6 VdB from auger drills and large steel-tracked earthmoving equipment. This would exceed the FTA's 72 VdB significance criteria for frequent vibration events impacting residential land uses. Additionally, loaded haul and delivery trucks driving past this receptor could expose it to peak groundborne vibration levels of 97.9 VdB, which would also exceed the FTA significance criteria for this land use. Smaller grading equipment operating at the Project Site would generate vibration levels of 46.6 VdB at the 1201 E. 5th Street Residence, which would be well below the FTA significance criteria.

Though Beacon Lofts is located 500 feet north of the Project, well beyond the distance where on-site construction-generated vibration could be perceptible, up to 40 inbound haul trucks per hour and delivery trucks could pass this receptor when accessing the Project Site, exposing it to peak groundborne vibration levels of 81.6 VdB. This would also exceed the FTA's 72 VdB significance criteria for frequent vibration events impacting residential land uses. On-site construction-generated vibrations would not be perceptible at Barker Block Lofts, which is located 400 feet east of the Project site. Haul trucks would not pass this receptor when accessing the Project Site. The Arts District Park would not be considered sensitive to groundborne vibrations as it is an outdoor facility that is surrounded by streets and commercial/industrial buildings that currently see or generate considerable truck traffic. Haul trucks would not pass any other vibration sensitive land uses when accessing the Project Site via Alameda Street and the I-10 freeway. **Therefore, without mitigation, the Project's human annoyance vibration impact would be significant.**

(b) Operation

During Project operation, there would be no significant stationary sources of groundborne vibration, such as heavy equipment or industrial operations. Automated hydraulic parking equipment located in the Project's garage would generate minimal vibrations that would not exceed nuisance or damage criteria within the Project itself, let alone at off-site uses. Virtually imperceptible levels of groundborne vibration would be generated by cars moving within the parking areas. Minimal levels of groundborne vibration in the Project Site's vicinity would be generated by its related vehicle travel on local roadways. However, as previously discussed, road vehicles rarely create vibration levels perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps. Project-related traffic would expose nearby land uses and other sensitive receptors to vibrations far below levels associated with human annoyance or land use disruption. **As a result, the Project's long-term vibration impacts would be less than significant**.

(2) Mitigation Measures

Mitigation Measures NOI-MM-4 and NOI-MM-5 are recommended to reduce the Project's potential building damage due to groundborne vibration impacts at 440 Seaton Street and 441 S. Colyton Street. NOI-MM-4 would also reduce the Project's potential human annoyance groundborne vibration impact at the 1201 E. 5th Street Residence. Mitigation Measure NOI-MM-3 (see above) would further mitigate the Project's groundborne vibration impact at Beacon Lofts and the 1201 E. 5th Street Residence by limiting haul truck trips on Colyton Street.

NOI-MM-4 Construction activities that produce vibration shall be sequenced so that vibration sources within 80 feet of the 1201 E. 5th Street Residence and within 11 feet of 440 Seaton Street and 441 S. Colyton Street do not operate simultaneously.

NOI-MM-5 Pre-construction surveys shall be performed to document the existing conditions at the boundary of Project Site adjacent to 440 S. Seaton Street and 441 S. Colyton Street properties. A structural monitoring program shall be implemented and recorded during construction to ensure that groundborne vibration levels at the boundary of the Project Site adjacent 440 S. Seaton Street and 441 S. Colyton Street properties do not exceed 0.3 PPV inches/second. The performance standards of the structure monitoring plan shall include the following:

- Documentation, consisting of video and/or photographic documentation of accessible and visible areas on the exterior of the building.

- A registered civil engineer, certified engineering geologist, or vibration control engineer shall review the appropriate vibration criteria for the identified vibration receptors, taking into consideration their age, construction, condition, and other factors related to vibration sensitivity in order to develop additional recommendations for the structure-monitoring program.

- Vibration sensors shall be installed on and/or around the identified vibration receptors to monitor for horizontal and vertical movement. These sensors shall remain in place for the duration of excavation, shoring, and grading phases.

- The vibration sensors shall be equipped with real-time warning system capabilities that can immediately alert construction supervisors when monitored vibration levels approach or exceed threshold limits.

- Should an exceedance of vibration thresholds occur, work in the vicinity of the affected area shall be halted and the respective vibration receptor shall be inspected for any damage. Results of the inspection shall be logged. In the even that damage occurs, the damage shall be repaired in consultation with a qualified preservation consultant. In the event of an exceedance, feasible steps to reduce vibratory levels shall be undertaken, such as halting/staggering concurrent activities and utilizing lower-vibratory techniques.

(3) Level of Significance After Mitigation

Mitigation Measures NOI-MM-4 and NOI-MM-5 would reduce the Project's on-site construction vibration sources and implement a comprehensive structure monitoring program for 440 Seaton Street and 441 S. Colyton Street. These measures would substantially reduce the potential for the Project's construction-related vibrations to damage the receptor. **With these measures in place, the Project's building damage construction vibration impact would be less than significant.**

Mitigation Measure NOI-MM-4 would also reduce the Project's on-site construction vibration sources affecting the 1201 E. 5th Street Residence by restricting the simultaneous operation of construction equipment that could generate substantial human annoyance groundborne vibration levels at this receptor. However, it would be infeasible to outright prohibit the individual operations of all construction equipment capable of generating such an impact at the 1201 E. 5th Street Residence. As a result, even with mitigation, the receptor could still be exposed to frequent vibration events exceeding the FTA's 72 VdB significance criteria for residential uses. **Therefore, even with this mitigation measure in place, the Project's human annoyance vibration impact associated with on-site construction sources would be significant and unavoidable.**

With regard to human annoyance due to vibration impacts from haul trucks and other construction vehicles, NOI-MM-3 would prohibit more than 7 haul trucks from accessing the Project via Colyton Street per hour. This would reduce the number of haul truck passbys and associated vibration events affecting Beacon Lofts and the 1201 E. 5th Street Residence from potentially 40 inbound trucks per hour (320 per work day) to no more than 7 inbound trucks per hour (42 per workday). Despite this mitigation, the impact of 42 haul truck passbys per day generating peak potential vibration events of 81.6 VdB at Beacon Lofts and 97.9 VdB at the 1201 E. 5th Street Residence would still exceed the FTA's 75 VdB residential land use significance criteria for between 30 and 70 vibration events per day. Though it is likely that both of these residences already experience frequent truck passbys each hour due to their locations in a largely industrial and commercial neighborhood with many nearby warehouses (Beacon Lofts, in particular, as it is located adjacent to a major arterial roadway), this impact would nevertheless be considered significant. **Therefore, even with this mitigation measure in place, the Project's human annoyance vibration impact associated with off-site construction vehicles would be significant and unavoidable.**

Threshold (c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

As discussed in response to Threshold (a), the Project's operation activities would not result in noticeable increases in noise. Thus, the Project would not result in a substantial permanent increase in ambient noise levels in the Project Site vicinity above levels existing without the Project. **Therefore, Project impacts related to substantial permanent increase in ambient noise levels would be less than significant.**

Threshold (d) ***Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

As discussed in response to Threshold (a), the Project's construction activities could result in noticeable increases in noise. However, with implementation of Mitigation Measure NOI-MM-1, construction noise levels would not exceed the City's significance threshold. Thus, the Project would not result in a substantial temporary increase in ambient noise levels in the Project Site vicinity above levels existing without the Project. **Therefore, Project impacts related to substantial temporary increase in ambient noise levels would be less than significant.**

Threshold (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 expose people residing or working in the project area to excessive noise levels?***

The Project Site is not located within an area covered by an airport land use plan and is not located within two miles of a public or public use airport. **Therefore, the Project would have no impact with respect to Threshold (e)**. No further analysis is required.

Threshold (f) ***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 Project Site is not located within the vicinity of a private airstrip. **Therefore, the Project would have no impact with respect to Threshold (f)**. No further analysis is required.

e) Cumulative Impacts

(1) Impact Analysis

Generally, a "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects (CEQA Guidelines, §15355). An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered "cumulatively considerable" when the incremental impacts of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not

consider that effect significant but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

An adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence. The analysis below is based on a list-based approach to determine the Project's contributing effect on potential cumulative impact upon existing community noise levels. A total of 117 cumulative projects were identified in the study area, as shown in Table III-1 in **Section III, Environmental Setting**, of the Draft EIR.

Generally, development of the Project in combination with the cumulative projects located within the Arts District north of 8th Street (Cumulative Development Project Nos. 1, 7, 8, 9, 10, 12, 13, 16, 18, 21, 22, 26, 30, 31, 32, 36, 37, 39, 40, 76, 77, 78, 81, 82, 84, 86, 89, 94, 95, 99, 101, and 112 in Table III-1) would marginally increase ambient noise levels in an already urbanized and relatively "noisy" area of the City. However, a few of these cumulative projects are located in close proximity to the Project Site and are discussed more specifically below.

(a) Construction Noise

As discussed earlier, construction activities would temporarily increase ambient noise levels at nearby receptors. Any other future developments that are built concurrently with the Project could further contribute to these temporary increases in ambient noise levels. Given the active state of development in the Project Site area, a number of developments have been identified within the immediate vicinity of the Project and its receptors.

Cumulative projects in the vicinity of the Beacon Lofts receptor include Cumulative Project No. 89 (401 S. Hewitt Street), Cumulative Project No. 84 (926 E. 4th Street), Cumulative Project No. 78 (940 E. 4th Street), Cumulative Project No. 39 (333 S. Alameda Street), Cumulative Project No. 30 (330 S. Alameda Street), Cumulative Project No. 13 (360 S. Alameda Street), and Cumulative Project No. 18 (400 S. Alameda Street). It is possible that construction noise levels from these projects could cumulatively increase temporary noise levels at Beacon Lofts to above the 5-dBA noise increase threshold. However, the Project itself would be capable of increasing exterior noise levels at Beacon Lofts by no more than 0.1 dBA L_{eq}, as it is located approximately 500 feet south of this receptor. As such, the Project's own contribution to any potential cumulative construction noise impacts at this receptor would be negligible and would

not be considered cumulatively considerable. Any strategies or mitigation to preserve an acceptable noise environment at Beacon Lofts would be contingent upon the appropriate management and mitigation of the noise generated by construction of the aforementioned cumulative projects as they are located closer to Beacon Lofts than the Project.

Cumulative projects in the vicinity of the Barker Block Lofts receptor include Project No. 84 (926 E. 4th Street), Project No. 78 (940 E. 4th Street), Project No. 89 (401 S. Hewitt Street), Project No. 99 (527 Colyton Street), and Project No. 101 (1100 E. 5th Street). However, these projects are located over 400 feet from Barker Block Lofts, and their lines-of-sight to this receptor are obstructed either fully or in part by nearby structures. As a result, due to attenuation associated with distance and intervening structures, any potential overlapping construction activities would not result in cumulative construction-related noise levels that would exceed applicable significance thresholds. With mitigation, the Project's individual construction noise impact at Barker Block Lofts would be only 1.8 dBA. Noise associated with cumulative construction activities would be reduced to the degree reasonably and technically feasible through proposed mitigation measures for each individual related project and compliance with locally adopted and enforced noise ordinances.

The aforementioned cumulative projects are also located proximate to the Arts District Park. With mitigation, the Project itself would be capable of increasing noise levels at this receptor by no more than 0.8 dBA L_{eq}. As such, the Project's individual contribution to any potential cumulative construction noise impacts at this receptor would be negligible and would not be considered cumulatively considerable. Furthermore, given the distances of related projects from the Arts District Park, it is unlikely that the potential overlapping of any construction activities would result in significant cumulative construction-related noise at the receptor.

Cumulative projects in the vicinity of the 1201 E. 5th Street Residence also include Cumulative Project No. 84 (926 E. 4th Street), Cumulative Project No. 78 (940 E. 4th Street), Cumulative Project No. 89 (401 S. Hewitt Street), Cumulative Project No. 99 (527 Colyton Street), and CumulativeProject No. 101 (1100 E. 5th Street). With mitigation, it was determined that the Project's on- and off-site construction activities could increase ambient noise levels at the 1201 E. 5th Street Residence by 4.8 dBA L_{eq}. Though this impact would not exceed the 5 dBA threshold of significance, practically any additional noise from concurrent construction activities would be capable of causing a cumulative noise impact in excess of 5 dBA. Project No.101 and Project No. 99, the nearest cumulative projects, are each located over 200 feet from the 1201 E. 5th Street Residence (approximately 220 feet and 420 feet, respectively). It is unlikely that the on-site construction activities of these projects would be capable of raising noise levels at

the receptor by more than an additional 1 dBA, especially if these projects have adopted or will adopt mitigation programs similar to the measures adopted by the Project. Nevertheless, given the small margin between the Project's own 4.8 dBA impact at this receptor and the 5 dBA threshold, it is likely that concurrent construction activities would have the potential to exceed this threshold, especially if the cumulative projects were to require haul truck access via 5th Street and Colyton Street. **As a result, the Project's potential to result in a significant cumulative construction noise impact would be significant.**

(b) Construction Vibration

For temporary building damage vibration impacts, Project impacts would be mitigated to a less-than-significant level via Mitigation Measures NOI-MM-4 and NOI-MM-5. As shown in Table IV.I-14, construction activities involving large grading vehicles and/or auger drills would have to occur within 11 feet of the nearest off-site structures in order to result in a potentially significant building damage vibration impact. None of the cumulative projects are located within 11 feet of the two off-site structures that would be impacted by Project construction (440 Seaton Street and 441 S. Colyton Street). Therefore, the Project would not contribute to a cumulative building damage vibration impact and this impact would be less than significant.

As for human annoyance, groundborne vibration resulting from the Project's on-site construction activities and off-site haul truck trips would have a significant and unavoidable impact at the nearest off-site residential receptor (1201 E. 5th Street). The nearest cumulative project to this location is approximately 220 feet away (Cumulative Project No. 101). Groundborne vibration generated by this cumulative project's on-site construction activities would not be perceptible at the residential receptor. However, any construction-related haul truck trips generated by this and the other cumulative projects that pass by the 1201 E. 5th Street Residence could create additional vibration events at this receptor that would exceed the FTA's criteria for residential land uses, which range between 72 and 80 VdB. Given that the Project's human annoyance vibration impact would be significant and unavoidable at the 1201 E. 5th Street Residence and, potentially, Beacon Lofts residential receptors, any additional impact associated with the cumulative projects would exacerbate this impact. **As a result, the Project's potential to result in a significant cumulative construction vibration impact would be significant.**

(c) Operational Noise

The majority of the Project's long-term noise impacts would come from traffic traveling to and from the Project Site. This traffic increase along with the addition of future traffic from the other new cumulative developments in the Project area and overall ambient

traffic growth would increase ambient noise levels surrounding local roadways. As shown in Tables IV.I-15 and IV.I-16, land uses along Seaton Street north of 5th Street could experience peak hour noise increases in excess of 3 dBA, and in one case, in excess of 5 dBA. However, this would not be considered a significant cumulative operational noise impact for the following reasons.

First, existing land uses along Seaton Street are zoned M3, "Heavy Industrial." As shown in the State's Noise and Land Use Compatibility Matrix in Table IV.I-2, which has been adopted in the City's General Plan Noise Element, noise levels up to 75 dBA CNEL would be considered "Normally Acceptable" for this type of land use. Some uses along this roadway segment have been converted to office space and live/work dwellings for artists. The Noise and Land Use Compatibility Matrix considers noise levels up to 70 dBA CNEL to be "Normally Acceptable" for office uses. For multi-family or denser residential uses, noise levels of up to 65 dBA CNEL are considered "Normally Acceptable," and noise levels of up to 70 dBA CNEL are considered "Conditionally Acceptable." Peak hour noise levels would not exceed any of these thresholds, and therefore neither would 24-hour CNEL noise levels.

Second, although southbound Seaton Street north of 5th Street could experience a noise increase in excess of 5 dBA during the A.M. peak hour, this would not correlate with an overall 5 dBA increase of 24-hour CNEL noise levels. Noise level increases during non-peak hours of travel, especially during early morning and late evening periods, would not exceed 5 dBA.

Finally, as shown in Tables IV.I-15 and IV.I-16, the Project would not contribute to any noise level increase along Seaton Street during either the A.M. or P.M. peak hour, individually or cumulatively. Future noise level increases along Seaton Street would entirely result from other developments' traffic and ambient traffic growth in the Project area. **Therefore, the Project's cumulative operational noise impact at this and other roadway segments would be considered less than significant.**

Table IV.I-15
Future + Project AM Peak-Hour Mobile Source Noise Levels

Roadway Segment		Estimated dBA, L_{eq} 1hr				
		Existing (2017)	No Project (2021)	With Project (2021)	Total Change	Significant Impact?
E/B 4th St., E of Alameda St.	N	66.7	69.1	69.2	2.5	No
	S	66.7	69.1	69.2	2.5	No
Seaton St., N of 5th St.	E	54.2	58.5	58.5	4.3	No
	W	54.0	59.7	59.7	5.7	No
Colyton St., N of 5th St.	E	54.5	54.6	54.7	0.2	No
	W	53.2	53.5	53.7	0.5	No
Source: DKA Planning, 2018.						

Table IV.I-16
Future + Project PM Peak-Hour Mobile Source Noise Levels

Roadway Segment	Receptor Location	Estimated dBA, L_{eq} 1hr				
		Existing (2017)	No Project (2021)	With Project (2021)	Total Change	Significant Impact?
E/B 4th St., E of Alameda St.	North side of 4th St.	72.8	73.7	73.7	0.9	No
	South side of 4th St.	72.8	73.7	73.7	0.9	No
Seaton St., N of 5th St.	East side of Seaton St.	54.2	58.5	58.5	4.3	No
	West side of Seaton St.	54.0	59.7	59.7	5.7	No
Colyton St., N of 5th St.	East side of Colyton St.	54.5	54.6	54.7	0.2	No
	West side of Colyton St.	53.2	53.5	53.7	0.5	No
Source: DKA Planning, 2018.						

(d) Operational Vibration

The Project would produce no significant stationary sources of groundborne vibration, such as heavy equipment or industrial operations. Virtually imperceptible levels of groundborne vibration would be generated by cars moving within the parking areas. Minimal levels of groundborne vibration in the Project Site's vicinity would be generated

by its related vehicle travel on local roadways. However, as previously discussed, road vehicles rarely create vibration levels perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps. Given these extremely low vibration levels and the distance to the nearest cumulative project (220 feet), cumulative vibration levels associated with the Project and the cumulative projects in the area would expose nearby land uses and other sensitive receptors to vibrations far below levels associated with human annoyance or land use disruption. **As a result, long-term cumulative vibration impacts would be less than significant**.

(2) Mitigation Measures

No additional mitigation measures are required.

(3) Level of Significance After Mitigation

Mitigation Measures NOI-MM-1 through NOI-MM-3 would reduce the Project's construction noise impact at the 1201 E. 5th Street Residence to a 4.8 dBA increase. Any additional mitigation to reduce the potential of a cumulative construction noise impact at this receptor would be technically infeasible, as all feasible methods have already been implemented by the aforementioned measures. Further mitigation of the potential cumulative construction noise impact would be contingent on the cumulative projects. **Therefore, even with implemention of Mitigation Measures NOI-MM-1 through NOI-MM-3, the Project's potential contribution to cumulative construction-related noise levels would be considered significant and unavoidable.**

Mitigation Measures NOI-MM-4 and NOI-MM-5 would reduce the Project's construction vibration impact as it relates to potential building damage at the 1201 E. 5th Street Residence and Beacon Lofts, but occasional vibration events at these receptors could still exceed the FTA's human annoyance criteria for residential land uses, particularly with the addition of vibration from trucks generated by the construction of the cumulative projects. Further mitigation of this impact at these receptors would be technically infeasible, as all feasible methods have already been addressed in the aforementioned measures. **Therefore, even with implementation of Mitigation Measures NOI-MM-4 and NOI-MM-5, the Project's potential contribution to cumulative construction-related vibration levels would be considered significant and unavoidable.**

IV. Environmental Impact Analysis

J. Population, Housing, and Employment

1. Introduction

This section evaluates the potential impacts of the Project on population, housing, and employment growth within the City of Los Angeles (City) based on information and data from Southern California Association of Governments' (SCAG) population, housing, and employment growth forecasts for the City. It also evaluates whether the Project would cause growth that exceeds projected or planned growth for the area through the development of infrastructure and whether the Project would displace housing or residents necessitating replacement housing elsewhere. In addition, the potential cumulative population, housing, and employment impacts of the Project in combination with all known cumulative projects are evaluated.

2. Environmental Setting

a) Regulatory Setting

(1) Regional

(a) Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements, including the Transportation Conformity Rule and other applicable federal, state, and air district laws and regulations. As the federally designated Metropolitan Planning Organization (MPO) for the six-county Southern California region, SCAG is required by law to ensure that transportation activities associated with existing and projected population growth "conform" to, and are supportive of, the goals of regional and state air quality plans.

(i) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS).[1,2] The 2016–2040 RTP/SCS reaffirms the land use policies that were incorporated into SCAG's 2012–2035 RTP/SCS. These foundational policies, which guided the development of the 2016-2040 RTP/SCS's land use strategies, include the following:

- Identify regional strategic areas for infill and investment;
- Structure the plan on a three-tiered system of centers development;[3]
- Develop "Complete Communities";
- Develop nodes on a corridor;
- Plan for additional housing and jobs near transit;
- Plan for changing demand in types of housing;
- Continue to protect stable, existing single-family areas;
- Ensure adequate access to open space and preservation of habitat; and
- Incorporate local input and feedback on future growth.

The 2016–2040 RTP/SCS recognizes that transportation investments and future land use patterns are inextricably linked, and continued recognition of this close relationship will help the region make choices that sustain existing resources and expand efficiency, mobility, and accessibility for people across the region. In particular, the 2016–2040 RTP/SCS draws a closer connection between where people live and work, and it offers a blueprint for how Southern California can grow more sustainably. The 2016–2040 RTP/SCS also includes strategies focused on compact infill development and economic growth by building the infrastructure the region needs to promote the smooth flow of goods and easier access to jobs, services, educational facilities, healthcare and more.

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1 *SCAG, Final 2016–2040 RTP/SCS.*

2 *CARB, Executive Order G-16-066, SCAG 2016 SCS ARB Acceptance of GHG Quantification Determination, June 2016.*

3 *Complete language: "Identify strategic centers based on a three-tiered system of existing, planned and potential relative to transportation infrastructure. This strategy more effectively integrates land use planning and transportation investment." A more detailed description of these strategies and policies can be found on pp. 90–92 of the SCAG 2008 Regional Transportation Plan, adopted in May 2008.*

The 2016–2040 RTP/SCS states that the SCAG region was home to about 18.3 million people in 2012 and included approximately 5.9 million homes and 7.4 million jobs.[4] By 2040, the integrated growth forecast projects these figures will increase by 3.8 million people, with nearly 1.5 million more homes and 2.4 million more jobs. High Quality Transit Areas (HQTAs) will account for 3 percent of regional total land but are projected to accommodate 46 percent and 55 percent of future household and employment growth respectively between 2012 and 2040.[5] The 2016–2040 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region's HQTAs. HQTAs are a cornerstone of land use planning best practice in the SCAG region, because they concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional lifecycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability. The Project Site is located within an HQTA.[6]

Additionally, the 2016-2040 RTP/SCS contains growth forecasts, which are largely built off local growth forecasts from local governments like the City. The growth forecasts utilized in the development of the 2016-2040 RTP/SCS accommodate up to 4,609,400 persons, 1,690,300 households, and 2,169,100 jobs in the City by 2040.

(ii) Regional Housing Needs Assessment

The 2014-2021 Regional Housing Needs Assessment (2014-2021 RHNA) is a key tool for SCAG and its member governments to plan for growth. The 2014-2021 RHNA quantifies the need for housing within each jurisdiction between 2014 and 2021. Communities then plan, consider, and decide how they will address this need through the process of completing the housing elements of their general plans. The RHNA does not necessarily encourage or promote growth but rather, allows communities to anticipate growth, so that they can grow in ways that enhance quality of life and improve access to jobs, transportation, and housing without adversely impacting the environment. The RHNA is produced periodically by SCAG, as mandated by State law, to coincide with the region's schedule for preparing housing elements. It consists of two measurements of housing need: (a) existing need, and (b) future need.

The existing need assessment is based on data from the most recent U.S. Census to measure ways in which the housing market is not meeting the needs of current

[4] *The SCAG 2016–2040 RTP/SCS is based on year 2012 demographic data with growth forecasts developed for 2020, 2035, and 2040.*

[5] *Defined by the 2016–2040 RTP/SCS as generally walkable transit villages or corridors located within 0.5 miles of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.*

[6] *SCAG, 2016-2040 RTP/SCS, Chapter 5, Exhibit 5.1.*

residents. These variables include the number of low-income households paying more than 30 percent of their income for housing, as well as severe overcrowding.

The future need for housing is determined primarily by the forecasted growth in households in a community, based on historical growth patterns, job creation, household formation rates, and other factors to estimate how many households will be added to each community over the projection period. The housing need for new households is then adjusted to account for an ideal level of vacancy needed to promote housing choice, maintain price competition and encourage acceptable levels of housing upkeep and repair. The RHNA also accounts for units expected to be lost due to demolition, natural disaster, or conversion to non-housing uses. The sum of these factors - household growth, vacancy need and replacement need - form the "construction need" assigned to each community. The City was assigned a RHNA of 95,023 units for the 2014-2021 planning period.[7] There is no process for allocating the citywide total to City subareas, such as a Community Plan Area. Finally, the RHNA considers how each jurisdiction might grow in ways that will decrease the concentration of low-income households in certain communities. The need for new housing is distributed among income groups so that each community moves closer to the regional average income distribution.

(2) Local

(a) City of Los Angeles General Plan

The City's General Plan addresses community development goals and policies relative to the distribution of land use, both public and private, including housing. The General Plan integrates citywide elements, Community Plans, and Specific Plans and gives policy direction for planning regulations and implementation programs.

(i) General Plan Framework Element

The General Plan Framework Element (Framework Element), adopted in December 1996 (re-adopted August 2001), is a strategy for long-term growth that sets a citywide context to guide the update of the Community Plans and citywide elements.[8] The Framework Element provides that precise determinations regarding future growth and development will be made through the Community Planning process. The Framework Element encourages future growth and development within target areas but does not

[7] *SCAG, 5th Cycle Regional Housing Needs Assessment Final Allocation Plan, August 29, 2012, page 2.*

[8] *City of Los Angeles Department of City Planning, The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan, adopted December 11, 1996 and re-adopted August 8, 2001, available online: http://www.cityofla.org/PLN.*

require that future development and growth be limited to target areas. The Framework Element's central housing goal is an equitable distribution of housing opportunities by type and cost accessible to all residents of the City.

The Framework Element focuses on providing strategies for accommodating growth by encouraging growth in a number of higher-intensity commercial and mixed-use districts, centers, boulevards and industrial districts particularly in proximity to transportation corridors and transit stations. It is intended to be flexible and provides a Long Range Land Use Diagram recommending the creation of new land use categories for targeted growth areas in various areas of the City that will contain international centers, regional centers, community centers, neighborhood districts, and mixed-use boulevards based on the planning principles, goals, objectives, and policies it discusses.

(ii) General Plan Housing Element

The Housing Element of the City's General Plan identifies as its overall goal the creation of a city of livable and sustainable neighborhoods with a range of housing types and costs in mutual proximity to jobs, infrastructure and services.[9]

On December 3, 2013, the City Council adopted the update to the Housing Element of the General Plan for the period of 2013-2021.[10] The Housing Element provides the number of housing units each community must plan and accommodate during the 8-year period and is called the RHNA allocation. The Housing Element does not alter the development potential of any site in the City or modify land use of the Zoning Code. It also does not undermine, in any way, neighborhood planning efforts, such as Community Plans, Specific Plans, or Historic Preservation Overlay Zones. While the State requires the City to evaluate and plan for the existing capacity to accommodate future projected growth, the Housing Element does not have any material effect on development patterns or specify areas for increased height or density.[11]

Under Housing Element law, the City must show that it has adequate land zoned to accommodate the entirety of its 2013-2021 RHNA allocation of 82,002 housing units. The Housing Element has identified 453 sites (179.6 acres) in the Central City North Community Plan Area as having the housing capacity for 11,490 net units.[12]

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[9] *City of Los Angeles Department of City Planning, Housing Element, City of Los Angeles General Plan, adopted December 18, 2001, available online: http://www.cityofla.org/PLN. (Hereinafter, Housing Element).*

[10] *City of Los Angeles, Housing Element, 2013-2021: https://sites.google.com/site/lahousingelement/.*

[11] *Ibid.*

[12] *City of Los Angeles, Housing Element, 2013-2021, adopted December 3, 2013, Table 3.1, page 3-4.*

An objective of the Housing Element is to promote an equitable distribution of affordable housing opportunities throughout the City by providing incentives to include affordable housing in residential development, particularly in mixed-use developments.

(iii) Central City North Community Plan

The Central City North Community Plan (Community Plan) is one of 35 community plans that make up the land use element of the City's General Plan. The Community Plan was adopted on December 15, 2000, with CPC File No. 95-0352-CPU and Council File No. 97-0282.

The Community Plan contains the following applicable goal, objectives, and policies:

Goal 1: A safe, secure, and high quality residential environment for all economic, age, and ethnic segments of the community.

- **Objective 1-1:**To provide for the preservation of existing housing and for the development of new housing to meet the diverse economic and physical needs of the existing residents and projected population of the Central City North Plan area to the year 2010.
    - **Policy 1-1.1:** Designate specific lands to provide for adequate multi-family residential development.
    - **Policy 1-1.3:** The City should promote neighborhood preservation, particularly in existing low density multi-family neighborhoods.
- **Objective 1-2:** To locate new housing in a manner which reduces vehicular trips and makes it accessible to services and facilities.
    - **Policy 1-2.1:** Encourage multiple residential development in commercial zones.
- **Objective 1-4:** To promote and ensure the provision of adequate housing for all persons regardless of income, age, or ethnic background.
    - **Policy 1-4.1:** Promote greater individual choice in type, quality, price, and location of housing.
    - **Policy 1-4.2:** Ensure that new housing opportunities minimize displacement of the existing residents.

b) Existing Conditions

(1) Existing and Forecasted Population, Housing, and Employment for the City

According to SCAG's growth forecast, the six-county southern California region is projected to add about 3.82 million people, about 1.5 million households, and about 2.4 million jobs between 2012 and 2040.[13] In the City alone, the forecast envisions the addition of about 763,900 people, about 364,800 households, and about 472,700 jobs between 2012 and 2040.[14] The State-approved RHNA assigns the City a housing production need of 95,023 units for the 2014-2021 planning period, or an annual average of about 11,900 new dwelling units per year.

Table IV.J-1 lists SCAG's forecasts for population, housing, and employment for the City, as well as the number and percent change.[15]

(2) Existing Uses

The Project Site is developed with an approximately 91,200-square-foot, two-story building containing approximately 45,600 square feet of light industrial/arts production space and 10 live/work units. Based on the citywide average of 2.43 persons per multi-family household, the 10 existing live/work units on the Project Site (approximately 45,600 square feet) are estimated to have a resident population of approximately 25 persons.[16] The existing businesses on the Project Site (approximately 45,600 square feet) currently support approximately 50 employees.[17]

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[13] *Southern California Association of Governments (SCAG), 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, adopted April 2016, page 51.*

[14] *Southern California Association of Governments (SCAG), 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, Appendix (Demographics & Growth Forecast), adopted April 2016, page 24.*

[15] *Employment information is provided for informational purposes only.*

[16] *The source for the 2.43 persons-per-household rate for the City is the American Community Survey, 5-year (2013-2016) Average Estimates.*

[17] *Current employment provided by Applicant in November 2016.*

Table IV.J-1
Population, Housing, and Employment Forecasts for the City

Year	Population	Households	Employment[1]
2012[2]	3,981,900	1,325,500	1,696,400
2017[3]	3,981,900	1,390,600	1,780,800
2021[3]	4,091,000	1,442,800	1,848,300
2040[2]	4,609,400	1,690,300	2,169,100
Change 2017 to 2021[4]			
Number Changed	+109,100	+52,100	+67,500
Percent Changed	+2.74%	+3.75%	+3.79%
Change 2017 to 2040			
Number Changed	+627,500	+299,700	+388,300
Percent Changed	+15.76	+21.55	+21.80

[1] *Employment information is provided for informational purposes only.*
[2] *2012 and 2040: Based on SCAG's adopted 2016-2040 RTP/SCS, Appendix, page 24.*
[3] *Population, housing and employment rate data for years 2017 (baseline year) and 2021 (anticipated buildout year of the Project) were calculated based on a linear interpolation of the 2012 to 2040 projections in SCAG's adopted 2016-2040 RTP/SCS.*
[4] *Represents a comparison of baseline year to Project buildout year.*

3. Project Impacts

a) Methodology

(1) Population

The potential population growth associated with the Project's related land uses and Project's live/work units was estimated. The Project's total residential population was then compared to an extrapolation of data from SCAG's 2016-2040 RTP/SCS population growth forecast for the City from 2017 to 2021 and from 2017 to 2040. Population growth forecasts for the Project's baseline year (2017) and buildout year (2021) were derived based on straight-line interpolations between the 2012 and 2040 data from the 2016-2040 RTP/SCS.

(2) Housing

The Project's direct housing/households impacts were determined based on the proposed number and characteristics of the live/work units included in the Project, all of which were estimated to be occupied conservatively (i.e., households). The Project's total household impacts were then compared to SCAG's 2016-2040 RTP/SCS growth projection for the City from 2017 to 2021 and from 2017 to 2040. Household forecasts for the Project's baseline year (2017) and buildout year (2021) were derived based on straight-line interpolations between the 2012 and 2040 data from the 2016-2040 RTP/SCS.

(3) Employment

The analysis in this section provides an assessment of the jobs that would be generated by the Project to gauge if there could be possible physical impacts from the increase in employment opportunities. Employment projections from SCAG's 2016-2040 RTP/SCS were used for the analysis in this section. In accordance with SCAG guidance, the Project's employment generation is assessed against the employment forecast for the City. To derive the employment forecasts for the Project's baseline year (2017) and buildout year (2021), straight-line interpolations were made between the 2012 and 2040 data from the 2016-2040 RTP/SCS.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), a project would have a significant impact related to population and housing if the project would result in the following:

(a) Inducement of substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or

(b) Displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or

(c) Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere.

(2) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) identifies the following criteria to evaluate population, housing, and employment:

- The degree to which the project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds projected/planned levels for the year of project occupancy/buildout, and that would result in an adverse physical change in the environment;
- Whether the project would introduce unplanned infrastructure that was not previously evaluated in the adopted Community Plan or General Plan;
- The extent to which growth would occur without implementation of the project;
- The total number of residential units to be demolished, converted to market rate, or removed through other means as a result of the project, in terms of net loss of market-rate and affordable units;
- The current and anticipated housing demand and supply of market rate and affordable housing in the project area; and
- Whether the Project is compatible with adopted local and regional employment growth policies, including jobs/housing balance, as set forth in the City's General Plan and SCAG's 2016-2040 RTP/SCS.

In assessing impacts related to population and housing in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

c) Project Design Features

No specific Project Design Features (PDFs) are proposed with regard to population, housing, and employment.

d) Analysis of Project Impacts

Threshold (a) ***Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

(1) Impact Analysis

(a) Indirect Growth

(i) Construction

The construction of the Project would result in increased employment opportunities in the construction field, which could potentially result in increased permanent population and demand for housing in the vicinity of the Project Site. However, the employment patterns of construction workers in southern California are such that it is not likely that they would relocate their households as a consequence of the construction employment associated with the Project. The construction industry differs from most other industry sectors in several ways:

- There is no regular place of work. Construction workers regularly commute to job sites that change many times over the course of a year. Their sometimes lengthy daily commutes are facilitated by the off-peak starting and ending times of the typical construction workday;
- Many construction workers are highly specialized (e.g., crane operators, steelworkers, masons, etc.) and move from job site to job site as dictated by the demand for their skills; and
- The work requirements of most construction projects are highly specialized. Workers remain at a job site only for the time frame in which their specific skills are needed to complete a particular phase of the construction process.

Therefore, Project-related construction workers would not be likely to relocate their place of residence as a consequence of working on the Project. Although construction of the Proposed Project would generate direct (in the form of short-term construction jobs at the Project Site), indirect (in the form of employment supported by Project construction-related expenditures), and induced (in the form of wages paid to construction workers) employment impacts, Project-related construction would not represent a permanent or substantial new employment generator that would significantly contribute to local or regional growth. There would be no significant housing or population impacts from construction of the Project. Accordingly, Project

construction would not induce substantial population growth indirectly in the Project area. **Therefore, no impact related to construction-related indirect population growth would occur.**

(ii) Operation

As shown in Table IV.J-2, the proposed hotel, retail, art gallery, Artist CoLab, and restaurant land uses within the Project would generate a net increase of approximately 239 employees after the existing uses on-site are removed. As shown in Table IV.J-3, compared to the anticipated employment growth in the City between the 2017 baseline year and the Project's anticipated buildout year of the 2021, the Project's employment would represent 0.35 percent of the forecasted employment growth in the City. As shown in Table IV.J-3, compared to the anticipated growth in the City between 2017 and 2040, the Project's employment would represent a 0.06 percent of the forecasted employment growth in the City. It is likely that the existing availability of employees in the Project area would fill the jobs generated by the Project and would not draw new people to the City to fill the jobs. Thus, operation of the Project's commercial and retail land uses would not cause an increase in population to induce population growth indirectly in the Project area. **Therefore, impacts related to operation-related indirect population growth would be less than significant.**

(iii) Infrastructure

The Project would not induce substantial growth that exceeds growth forecasted for the area, introduce unplanned infrastructure, or accelerate development in an undeveloped area that would result in an adverse physical change in the environment. The Project Site is currently developed with an industrial/residential building and is located within an urbanized area in the City. **Thus, the construction of a potential growth-inducing roadway or other infrastructure extensions would not be required. As development of the Project would not induce substantial indirect population growth and would be supported by the existing infrastructure, such as roadways, impacts would be less than significant.**

Table IV.J-2
Project Estimated Employee Generation

Land Use	Size	Employee Generation Rates[1]	Total Employees
Retail	26,979 sf	2.71 employees/1,000 sf	73
Restaurant	31,719 sf	2.71 employees/1,000 sf	86
Hotel	97,850 sf	1.13 employees/1,000 sf	111
Art Gallery	10,341 sf	1.35 employees/1,000 sf	14
Artist CoLab	3,430 sf	1.35 employees/1,000 sf	5
Live/Work Units	129 units	N/A	0
Total Project Employment			**289**
Less Existing Uses	45,600 sf and 10 units	N/A	50[2]
Net Increase in Employment at Project Site			**239**

sf = square feet

[1] *Employment rates based on Los Angeles Unified School District, Developer Fee Justification Study, March 2017. Note that the industrial park rate was applied to the art gallery and Artist CoLab uses, as it represents the closest approximation to the uses.*

[2] *Total employment for the Project was provided by the Project Applicant.*

Table IV.J-3
Project Comparison to SCAG Growth Forecasts
(2017 to 2021 and 2017 to 2040)

Net Project Population, Housing, and Employment Growth	Forecast Citywide Growth[1]	Project % of Forecast Citywide Growth
As compared to Growth Forecast from 2017 to 2021 (Interpolated)		
289 residents	+109,100	+0.26
119 units	+52,100	+0.23
239 employees	+67,500	+0.35
As compared to Growth Forecast from 2017 to 2040 (Interpolated)		
289 residents	+627,500	+0.05
119 units	+299,700	+0.04
239 employees	+388,300	+0.06

[1] *Refer to Table IV.J-1.*

(b) Direct Growth

(i) Population

Estimated Project population generation is shown in Table IV.J-4. Based on City household demographics (e.g., an average of 2.43 persons per non-single-family household), the construction of 129 new live/work units at the Project Site (for a net increase of 119 live/work units) would result in a net increase of up to approximately 289 new permanent residents at the Project Site. Table IV.J-3 (above) provides a comparison of the Project's estimated population, housing units, and employment to the growth projections provided by SCAG in its 2016-2040 RTP/SCS.

Table IV.J-4
Project Estimated Population Generation

Land Use	Quantity	Generation Rates[1]	Total
Live/Work	129	2.43 persons/unit	314
Less Existing Live/Work Units	*10*	*2.43 persons/unit*	*25*
Net Increase in Population at Project Site			**289**

[1] *American Community Survey, 5-year (2013-2016) Average Estimates.*

As shown in Table IV.J-3, compared to the anticipated population growth in the City between the 2017 baseline year and the Project's anticipated buildout year of the 2021, the Project's residential population would represent 0.26 percent of the forecasted population growth in the City. As shown in Table IV.J-3, compared to the anticipated population growth in the City between the 2017 baseline year and 2040, the Project's residential population would represent 0.05 percent of the forecasted population growth in the City.

The Project is an infill development in an already urbanized area, located near Downtown Los Angeles, which is among the region's largest areas for employers, and is also consistent with the 2016-2040 RTP/SCS and its focus on integrated land use planning. Specifically, the Project Site's location near local transit services places the site in an HQTA. The 2016-2040 RTP/SCS forecasts that these areas, while comprising only 3 percent of land area in the region, will make up 46 percent of future household growth and 55 percent of future job growth.

Also, the City's Framework Element focuses on providing strategies for accommodating growth by encouraging growth in a number of higher-intensity commercial and mixed-use districts, centers, boulevards and industrial districts particularly in proximity to transportation corridors and transit stations, while Community Plan policies call for developing new housing in a manner that reduces vehicle trips and makes services and facilities accessible to residents, by encouraging the development of multi-residential land uses in commercial zones. The Project includes development that is consistent with these City plans.

Also, as discussed in **Section IV.F, Greenhouse Gas Emissions**, and in **Section IV.L, Transportation/Traffic**, of the Draft EIR, the vertical integration of land uses on the Project Site would produce reductions in auto-mode share to and from the Project Site that would help the region accommodate growth and promote public transit ridership that minimizes environmental impacts, such as those associated with traffic and pollutant emissions increases, and reduces per capita emissions consistent with the 2016-2040 RTP/SCS. It should be noted that the Project's percentage of the forecasted citywide population growth conservatively assumes that all of the projected residents of the Project would be in-migrants to the City and would not be relocating to the Project from elsewhere within the City. **As such, for all of the reasons discussed above, the Project's residential population would be consistent with 2016-2040 RTP/SCS population projections for the City. Therefore, Project impacts related to population growth would be less than significant.**

(ii) Housing

As shown in Table IV.J-3, compared to the anticipated housing growth in the City between the 2017 baseline year and the Project's anticipated buildout year of the 2021, the Project's residential housing would represent 0.23 percent. The Project's housing units would represent approximately 0.04 percent of forecasted growth between 2017 and 2040. In addition to being consistent with population and household growth forecasts for the City, the Project would be consistent with applicable residential policies set forth in Community Plan (refer to Table IV.H-7 in **Section IV.H, Land Use and Planning**, of the Draft EIR). For example, the Project would contribute to opportunities for a range of housing choices within the Project Site area by providing a new, high-quality live/work development. In addition, the Project would make an important contribution to expanding the regional housing supply at an infill location near existing jobs, community resources, and transit infrastructure.

The Project responds to the unmet housing demand in the City. Specifically, the Project would help achieve a portion of the household growth forecast for the City, while also being consistent with regional policies to reduce urban sprawl, efficiently utilize existing infrastructure, reduce regional congestion, and improve air quality through the anticipated reduction of vehicle miles traveled (VMT) associated with the co-location of complementary land uses within the same development and within walking distance of a variety of commercial and retail establishments. Based SCAG's housing and employment projections for the City, the 2021 jobs/housing ratio for the City is 1.28 jobs per household. With the Project, the jobs/housing ratio is forecast to be the same since the Project represents only a small percentage of the 2021 housing and employment positions for the City.

Therefore, the Project would not cause housing growth to exceed projected/planned levels for the Project's buildout year, and impacts related to housing growth would be less than significant.

(c) Conclusion

Thus, while the Project would generate an employee and residential population at the Project Site through the development of new commercial land uses and housing, the Project would not substantially induce housing growth beyond forecasted levels. **Therefore, the Project would not induce substantial population growth in the Project Site area, either directly or indirectly. As such, Project impacts related to population, housing, and employment growth would be less than significant.**

(2) Mitigation Measures

No significant impacts related to population, housing, and employment have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to population, housing, and employment would be less than significant.

Threshold (b) ***Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?***

Threshold (c) ***Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?***

(1) Impact Analysis

Ten live/work units are located on the Project Site that would be removed as part of the Project. Based on a persons-per-household rate of 2.43, approximately 25 residents would be displaced due to the Project. However, existing and projected available dwelling units in the Project Site area and on the Project Site could absorb the need for the loss of 10 units at the Project Site and the need to house the approximately 25 residents that currently live on-site who would be displaced due to the Project. As discussed below under "Cumulative Impacts," cumulative development in the Project area includes approximately 31,334 dwelling units. For these reasons, the Project would not displace a substantial number of existing housing or people, necessitating the construction of replacement housing elsewhere. **Thus, the Project would not displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere. Therefore, impacts related to these issues would be less than significant, and no further analysis of these issues is required**.

(2) Mitigation Measures

No significant impacts related to displacement of housing and people have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to displacement of housing and people would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

A total of 117 cumulative projects were identified in the study area (refer to Table III-1 in **Section III, Environmental Setting**, of the Draft EIR). These projects include the development of approximately 31,205 dwelling units and approximately 21,901,339 square feet of various commercial land uses in the Downtown Los Angeles area. It is possible that the sites of some (or all) of these cumulative projects already include actively operating land uses that would be removed with implementation of the cumulative projects, and as such, the total net number of dwelling units and/or commercial land uses to be developed would be less than what is represented on Table III-1. However, for a conservative analysis, it is assumed that all 31,205 dwelling units and 21,901,339 square feet of various commercial land uses would be net new development. With the Project added to these totals, the number of cumulative housing units would be approximately 31,334, and the cumulative commercial development would be approximately 22,026,058 square feet. Moreover, it is unlikely that every one of the related projects would be completed by the Project's buildout year (2021).

In addition, the Central City North Community Plan Update, known as the DTLA 2040 Plan, is currently being prepared by the Department of City Planning. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is anticipated to be completed by 2021, well before the Community Plan Update's horizon year. As such, it can be assumed that the projected growth reflected by the list of related projects located within the Central City North Community Plan area, which itself is a conservative assumption as discussed above, would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

Assuming a 2.43-persons-per-household rate, cumulative development would generate approximately 76,142 residents. As shown in Table IV.J-5, cumulative commercial development would generate approximately 99,141 employees. Again, it is possible that some or all of these cumulative residents and employees could already live and work (respectively) in the City. However, for a conservative analysis, it is assumed that these cumulative residents and employees would be new to the City.

Table IV.J-5
Estimated Cumulative Employee Generation

Land Use	Size	Employee Generation Rates[1]	Total Employees
School	553 students	16 employees/student[2]	35
Retail	3,480,467 sf	2.71 employees/1,000 sf	9,432
Restaurant	545,710 sf	2.71 employees/1,000 sf	1,479
Hotel	3,798,600 sf[3]	1.13 employees/1,000 sf	6,195
Office	15,865,460 sf	4.79 employees/1,000 sf	7,996
Gym	112,148 sf	2.71 employees/1,000 sf	304
Cinema	18,600 sf	1.35 employees/1,000 sf	25
Commercial	1,305,587 sf	2.71 employees/1,000 sf	3,538
Storage	63,585	0.06 employees/1,000 sf	3
Event Space	122,079 sf	1.35 employees/1,000 sf	165
Grocery	109,912 sf	2.71 employees/1,000 sf	298
Sports Complex	43,000 sf	1.35 employees/1,000 sf	58
Museum	70,000 sf	1.35 employees/1,000 sf	95
Industrial Park	94,800 sf	1.35 employees/1,000 sf	1,280
		Cumulative Projects Total	***98,902***
		Project Net Total	***239***
		Cumulative Total	***99,141***

sf = square feet

1 *Unless otherwise noted, employment rates based on Los Angeles Unified School District, Developer Fee Justification Study, March 2017.*

2 *Faculty/study ratios for California schools are not readily available. For purposes of this Draft EIR, the employment rate for schools is based on the total actual enrollment of the Theodore Roosevelt High School (one of the schools within the Project Site area), divided by the total number of faculty (91). Faculty source: Theodore Roosevelt High School, https://rooseveltha-lausd-ca.schoolloop.com/faculty, accessed on November 2, 2018.*

3 *Assumes 866 sf per hotel room to account for the rooms and other square footage associated with hotel uses, consistent with the hotel use associated with the Project.*

As shown in Table IV.J-6, cumulative residential population would represent approximately 69.79 percent of the forecasted growth between 2017 and 2021 in the City and 12.13 percent of the forecasted growth in the City between 2017 and 2040. Cumulative housing units would represent approximately 60.14 percent of the forecasted growth in the City between 2017 and 2021 and 10.46 percent between 2017 and 2040. Cumulative employment growth would represent approximately 146.87

percent of the forecasted growth in the City between 2017 and 2021 and 25.53 percent of the forecasted growth in the City between 2017 and 2040.

Table IV.J-6
Cumulative Comparison to Growth Forecasts
(2017 to 2021 and 2017 to 2040)

Cumulative Population, Housing, and Employment Growth	Forecast Citywide Growth[1]	Cumulative % of Forecast Citywide Growth
As compared to Growth Forecast from 2017 to 2021 (Interpolated)[2]		
76,142 residents	+109,100	+69.79
31,334 units	+52,100	+60.14
99,141 employees[3]	+67,500	+146.87
As compared to Growth Forecast from 2017 to 2040 (Interpolated)[2]		
76,142 residents	+627,500	+12.13
31,334 units	+299,700	+10.46
99,141 employees[3]	+388,300	+25.53

[1] *Refer to Table IV.J-1.*
[2] *This conservatively assumes that all of the cumulative projects would have the same buildout year as the Project.*
[3] *Refer to Table IV.J-5.*

Similar to the Project, all of the cumulative projects are infill development in an already urbanized area, located near Downtown Los Angeles, which is among the region's largest areas for employers, and are also consistent with the 2016-2040 RTP/SCS and its focus on integrated land use planning. Additionally, all of the sites of the cumulative projects are located in SCAG-designated HQTAs.[18] The 2016-2040 RTP/SCS forecasts that these areas, while comprising only 3.0 percent of land area in the region, will make up 46 percent of future household growth and 55 percent of future job growth. The Project and the cumulative projects are in line with these anticipated growth patterns.

Also, the City's Framework Element focuses on providing strategies for accommodating growth by encouraging growth in a number of higher-intensity commercial and mixed-use districts, centers, boulevards and industrial districts particularly in proximity to transportation corridors and transit stations, while Community Plan policies call for developing new housing in a manner that reduces vehicle trips and makes services and facilities accessible to residents, by encouraging the development of multi-residential

[18] *SCAG, High Quality Transit Areas 2012 – SCAG Region, http://gisdata-scag.opendata.arcgis.com/datasets/1f6204210fa9420b87bb2e6c147e85c3_0, accessed on November 2, 2018.*

land uses in commercial zones. Many of the cumulative projects are consistent with these City plans.

Further, the vertical integration of land uses on the sites of the cumulative projects in proximity to transit would produce reductions in auto-mode share to and from the site that would help the region accommodate growth and promote public transit ridership that minimizes environmental impacts, such as those associated with traffic and pollutant emissions increases, and reduces per capita emissions consistent with the 2016-2040 RTP/SCS.[19]

As infill development, none of the cumulative projects includes development of any new facilities (i.e., roadways, new sources of water or energy supplies, airports, etc.) that may encourage or facilitate unplanned population growth.

For these reasons, cumulative population, housing, and employment growth would be consistent with the anticipated growth for the City, Therefore, cumulative impacts related to population, housing, and employment would be less than significant.

(2) Mitigation Measures

No cumulative impacts related to population, housing, and employment have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to population, housing, and employment would be less than significant.

[19] *Of the 117 cumulative projects, 113 of the cumulative projects sites are located in City-designated Transit Priority Areas. Additionally, 89 of the 113 cumulative projects qualify as SCAG-designated Transit Priority Projects, in accordance with State Bill 743.*

IV. Environmental Impact Analysis

K.1 Public Services – Fire Protection

1. Introduction

This section addresses the potential environmental impacts of the Project with respect to fire protection services and the ability of existing Los Angeles Fire Department (LAFD) facilities in the Project area to accommodate the Project's needs for such facilities. In consultation with LAFD, this need is assessed considering the types of proposed land uses, the demand created by the proposed land uses, and the distance of the Project Site from the nearest fire stations. Based on these factors, a determination is made of whether the Project would create a demand for fire protection services that would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection. The section is partly based on written correspondence from LAFD, included as **Appendix J-1** of the Draft EIR:

J-1. *Correspondence from Ralph M. Terrazas, Fire Chief, Los Angeles Fire Department, November 7, 2017.*

2. Environmental Setting

a) Regulatory Framework

(1) Federal

(a) Occupational Safety and Health Act

The Occupational Safety and Health Administration (OSHA) is an agency of the United States Department of Labor. OSHA's mission is to "assure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance." The Occupational Health and Safety Act was enacted in 1970 and governs workplace safety across a variety of economic sectors. Regulations promulgated under the Act include workplace standards applicable to individual industries, codified at 29 CFR (Code of Federal Regulations).

OSHA has oversight over the implementation of these standards. Standards which are applicable to the Proposed Project include 1926 (General Construction), 1926 Subpart F (Fire Protection and Prevention), 1926.25 (Housekeeping), 1926.27 (Sanitation), 1926.26 (Illumination), 1926.28 (Personal Protective Equipment), 1926.20 (General Safety and Health Provisions), 1926.55 (Gases, vapors, fumes, dusts, and mists), 1926 Subpart H (Materials Handling, Storage, Use, and Disposal), and 1926 Subpart I (Tools – Hand and Power).

(b) Fire Prevention Plan

Fire Prevention Plans are required under OSHA Standard 1926.24. The purpose of the Fire Prevention Plan is to prevent a fire from occurring in a workplace. It describes the fuel sources (hazardous or other materials) on site that could initiate or contribute both to the spread of a fire. A Fire Prevention Plan must be in writing, be kept in the workplace, and be made available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees.

At a minimum, a Fire Prevention Plan must include the following:

- A list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard.
- Procedures to control accumulations of flammable and combustible waste materials.
- Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials.
- The name or job title of employees responsible for maintaining equipment to prevent or control sources of ignition or fires.
- The name or job title of employees responsible for the control of fuel source hazards.

An employer must inform employees upon initial assignment to a job of the fire hazards to which they are exposed. An employer must also review with each employee those parts of the fire prevention plan necessary for self-protection.

(c) Emergency Action Plan

An Emergency Action Plan is a written document required by particular OSHA standards. The purpose of an Emergency Action Plan is to facilitate and organize employer and employee actions during workplace emergencies. Well-developed

emergency plans and proper employee training (such that employees understand their roles and responsibilities within the plan) result in fewer and less severe employee injuries and less structural damage to the facility during emergencies.

At a minimum, the Emergency Action Plan must include, but is not limited to, the following elements:

- Means of reporting fires and other emergencies
- Evacuation procedures and emergency escape route assignments
- Procedures for employees who remain to operate critical plant operations before they evacuate
- Accounting for all employees after an emergency evacuation has been completed
- Rescue and medical duties for employees performing them
- Names or job titles of persons who can be contacted

(2) State of California

(a) California Building Code

The California Building Code (California Code of Regulations [CCR], Title 24) is a compilation of building standards, including fire safety standards for residential and commercial buildings. The California Building Code standards are based on building standards that have been adopted by State agencies without change from a national model code; building standards based on a national model code that have been changed to address particular California conditions; and building standards authorized by the California legislature, not covered by the national model code. The California Fire Code is part of the California Building Code. Typical fire safety requirements of the California Fire Code include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas. The California Fire Code applies to all occupancies in California, except where more stringent standards have been adopted by local agencies. Specific California Fire Code regulations have been incorporated by reference with amendments, in the Los Angeles Municipal Code (LAMC), Fire Safety Regulations.

The LAFD participates in the California Fire Service and Rescue Emergency Mutual Aid System, as managed by the Governor's Office of Emergency Services (OES).[1] The OES Mutual Aid Plan outlines procedures for establishing mutual aid agreements at the local, operational, regional, and state levels, and divides the State into six mutual aid regions to facilitate the coordination of mutual aid. The LAFD is located in Region I. Through the Emergency Mutual Aid system, the OES is informed of conditions in each geographic and organizational area of the state, and the occurrence or imminent threat of disaster. All OES Mutual Aid participants monitor a dedicated radio frequency for fire events that are beyond the capabilities of the responding fire department and provide aid in accordance with the management direction of the OES.

(b) California Constitution Article XIII, Section 35

Section 35 of Article XIII of the California Constitution at subdivision (a)(2) provides: "The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50-percent sales tax to be expended exclusively on local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Public safety services include fire protection. Section 30056 mandates that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on fire protection services, as well as other public safety services. In *City of Hayward v. Board of Trustee of California State University* (2015) 242 Cal. App. 4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public safety services, including fire protection and emergency medical services, and that it is reasonable to conclude that the city will comply with that provision to ensure that public safety services are provided.[2]

(3) City of Los Angeles

(a) City of Los Angeles General Plan Framework Element

The City's General Plan Framework Element (Framework Element), adopted in December 1996 and readopted in August 2001, contains policies and objectives, which

[1] *California Emergency Management Agency, Mutual Aid Plan, revised February 2012.*

[2] *City of Hayward v. Board Trustee of California State University (2015) 242 Cal. App. 4th 833, 847.*

address fire services within the City. The Framework Element contains the following goals, objectives, and policies related to fire:[3]

GOAL 9J: Every neighborhood has the necessary level of fire protection service, emergency medical service (EMS) and infrastructure.

- **Objective 9.16:** Monitor and forecast demand for existing and projected fire facilities and service.
    - **Policy 9.16.1:** Collect appropriate fire and population development statistics for the purpose of evaluating fire service needs based on existing and future conditions.
- **Objective 9.17:** Assure that all areas of the City have the highest level of fire protection and EMS, at the lowest possible cost, to meet existing and future demand.
    - **Policy 9.17.1:** Complete all currently funded and, as feasible, programmed fire service capital improvements by the year 2010.
    - **Policy 9.17.2:** Identify areas of the City with deficient fire facilities and/or service and prioritize the order in which these areas should be upgraded based on established fire protection standards.
    - **Policy 9.17.3:** Develop an acquisition strategy for fire station sites in areas deficient in fire facilities.
    - **Policy 9.17.4:** Consider the Fire Department's concerns and, where feasible adhere to them, regarding the quality of the area's fire protection and emergency medical services when developing general plan amendments and zone changes, or considering discretionary land use permits.
- **Objective 9.18** Phase the development of new fire facilities with growth.
    - **Policy 9.18.1:** Engage in fire station development advance planning, acknowledging the amount of time needed to fund and construct these facilities.
- **Objective 9.19:** Maintain the Los Angeles Fire Department's ability to assure public safety in emergency situations.

[3] *City of Los Angeles, General Plan, Los Angeles Framework Element: http://cityplanning.lacity.org/Cwd/Framwk/chapters/09/09.htm, accessed October 30, 2018.*

- **Policy 9.19.1:** Maintain mutual aid or mutual assistance agreements with local fire departments to ensure an adequate response in the event of a major earthquake, wildfire, urban fire, fire in areas with substandard fire protection, or other fire emergencies.
- **Policy 9.19.2:** Maintain special fire-fighting units at the Port of Los Angeles, Los Angeles International Airport, and Van Nuys Municipal Airport capable of responding to special emergencies unique to the operations of those facilities.
- **Policy 9.19.3:** Maintain the continued involvement of the Fire Department in the preparation of contingency plans for emergencies and disasters.

(b) City of Los Angeles General Plan Safety Element

The Safety Element, adopted on November 26, 1996, replaces the 1975 General Plan Safety Element and the 1979 Fire Protection and Prevention Plan (FPPP). The Safety Element contains policies related to the City's response to hazards and natural disasters. Policy 2.1.6 of the Safety Element requires the LAFD to maintain, enforce, and upgrade requirements, procedures, and standards to facilitate effective fire suppression including peak load water flow and building and fire code regulations. In addition, the LAFD is required to revise regulations or procedures to include the establishment of minimum standards for the location and expansion of fire facilities, based on flow, intensity, and type of land use, life hazards, occupancy, and degree of hazards, to provide adequate fire and emergency medical service response.

(c) Los Angeles Municipal Code (LAMC)

(i) 2014 Fire Code

Fire regulations are set forth in Chapter V, Article 7 of the LAMC (also referred to as the City's 2014 Fire Code). The Fire Code incorporates by reference chapters of the California Fire Code, as well as amending fire regulations to local conditions. Under Section 57.103.3.2.2 (Function) of the Fire Code, the function of the Bureau of Fire Prevention and Public Safety would be to administer and enforce the fire prevention and life safety provisions of the Fire Code, which include, but are not limited to the following:

1. The prevention of fires.
2. The investigation of the cause, origin, and circumstances of fire or life safety hazards.
3. The elimination of fire and life safety hazards in any building or structure, including those under construction, any premises, marine vessel, aircraft, vehicle, or the appurtenances and equipment thereof.

4. The maintenance of fire protection equipment and systems.

5. The regulation of storage, use, and handling of hazardous materials and hazardous substances.

6. Enforcement of the basic building regulations of the State Fire Marshal as they apply to the City in matters relating to fire, panic, and explosion safety.

Section 57.503 (Fire Apparatus Access Roads) of the Fire Code defines fire apparatus access road as "a road that provides fire apparatus access from a fire station to a facility, building, or portion thereof." This is a general term inclusive of all other terms such as fire lane, public and private streets, parking lot lane and access roadway. Under Section 57.503.1.5 (Dead-End in Access) of the Fire Code, when a required access is provided by an improved street, fire lane or combination of both which results in a dead-end in access of 700 feet in length from the nearest cross street, at least one additional ingress-egress roadway shall be provided in such a manner that an alternative means of ingress-egress is accomplished.

Section 57.507.3.1 (Fire-Flow Requirements) of the Fire Code establishes minimum fire flow requirements in gallons per minute (gpm) according to designated land use. Fire flow requirements for a commercial use are 4,000 gpm for commercial uses, with a minimum residual water pressure of 20 psi (Fire Code Table 57.507.3.1, Fire Flow by Type of Land Development).

Section 57.507.3.3 (Land Use) of the Fire Code sets forth requirements for maximum response distances. Section 57.512 (Response Distances that if Exceeded Require the Installation of an Automatic Fire Sprinkler System) of the Fire Code requires the installation of automatic fire sprinkler systems for buildings that are located in excess of established response distances. Response distance relates directly to the linear travel distance (i.e., miles between a station and a project site). The Fire Code specifies the maximum response distances allowed between specific sites and engine and truck companies based on land use and fire flow requirements. Pursuant to Table 507.3.3 of the Fire Code, the maximum response distance between residential land uses and a LAFD fire station that houses an Engine Company is 1.5 miles or a Truck Company is 2.0 miles. When response distances exceed these recommendations, all structures must be equipped with automatic fire sprinkler systems and any other fire protection devices deemed necessary by the Fire Chief (e.g., fire signaling systems, fire extinguishers, smoke removal systems, etc.). Response distance requirements are shown in Table IV.K.1-1.

Table IV.K.1-1
Fire Flow and Response Distance Requirements

Type of Land Development	Fire Flow	Response Distance	
Residential		**Engine**	**Truck Co.**
Low Density Residential	2,000 gpm from three adjacent fire hydrants flowing simultaneously	1.5 miles	2 miles
High Density Residential and Neighborhood Commercial	4,000 gpm from four adjacent fire hydrants flowing simultaneously	1.5 miles	2 miles
Commercial		**Engine**	**Truck Co.**
Industrial and Commercial	6,000 to 9,000 gpm from four to six fire hydrants flowing simultaneously	1 mile	1.5 miles
High Density Industrial and Commercial (Principal Business Districts or Centers)	12,000 gpm available to any block (where local conditions indicate that consideration must be given to simultaneous fires, and additional 2,000 to 8,000 gpm will be required).	0.75 mile	1 mile

gpm = gallons per minute Co. = company

Source: Los Angeles Fire Code, Section 57.09.06.

(ii) Los Angeles Building Code

Chapter IX, Article I, Division 81 of the LAMC is also referred to as the Los Angeles Building Code. Division 7, Fire Resistive Materials and Construction, of the Building Code requires the use of fire-resistive building materials. Division 9, Fire Protection Systems, Section 91.909.3 of the Building Code requires that all smoke control systems shall be tested prior to the issuance of a Certificate of Occupancy and, after occupancy of the building, all operating parts of the smoke-control systems shall be retested every six months in accordance with the retest requirements established by the Department of Building and Safety and the LAFD.

(iii) Propositions F and Q

Proposition F, the City Fire Facilities Bond was approved by voters in November 2000. This original bond allocated $532.6 million of general obligation bonds to finance the construction and rehabilitation of fire stations and animal shelters. Of this total, the bond allocated $378.6 million to build 18 new or replacement neighborhood fire and/or paramedic stations, one regional fire station and training facility, and one emergency air

operations and helicopter maintenance facility, for a total of 20 Proposition F projects. Of these projects, construction has been completed on 19 facilities and work is in progress on the remaining bond project: construction of FS 39 in Van Nuys.[4] Measure J, which was approved by voters in November 2006 is a charter amendment and ordinance that involved technical changes to Proposition F to provide design flexibility for new regional fire stations. Measure J allows new regional fire stations funded by Proposition F located in densely developed areas to be designed and built on one or more properties equaling less than two acres, rather than on a single site of at least two acres. Under Measure J, components of a regional fire station can be built on two or more sites within close proximity, or the facility can be designed to fit on a single site of less than two acres.

Proposition Q, the Citywide Public Safety Bond Measure, approved by voters in March 2002, allocated $600 million to renovate, improve, expand and construct police, fire, 911, and paramedic facilities. The original scope of Proposition Q involved 13 overall projects consisting of the construction and/or replacement of five police stations; one police station and jail; two bomb squad facilities; one Metro Detention Center; one new Emergency Operations/Fire Dispatch Center; one Valley Traffic Division and Bureau Headquarters; renovation of existing fire facilities; and renovation of police facilities.[5] Four new projects were added in August 2008 to Proposition Q as Phase II work. Although these projects primarily involved the construction of or improvement to Police Department facilities, renovations to existing LAFD facilities throughout the City were also included.

(iv) Los Angeles Fire Department Strategic Plan 2015-2017

The Los Angeles Fire Department Strategic Plan 2015-2017 (LAFD's Strategic Plan) represents a collaborative effort between LAFD staff, City leaders, and community members to accomplish LAFD's organizational vision and maintain the LAFD as a leader in public safety. LAFD's Strategic Plan provides a broad foundation for creating a safer city and identifies nine goals and corresponding strategic actions that will guide the LAFD for the next three years. The key goals and strategic actions of LAFD's Strategic Plan focus on improving service delivery, implementing advanced technologies, employing sound budgeting practices, and enhancing leadership. In addition, the LAFD seeks to enhance LAFD risk management systems; strengthen

[4] *City of Los Angeles, Department of Public Works, Bureau of Engineering, Los Angeles 2000 Proposition F, Fire Facilities Bond Progress Report February-March 2016, http://eng.lacity.org/projects/fire_bond/index.htm.*

[5] *City of Los Angeles, Department of Public Works, Bureau of Engineering, Proposition Q Citywide Public Safety Bond Program, http://www.lapropq.org/, October 7, 2014.*

community relationships to improve infrastructure and enhance resiliency during emergency events; implement green initiatives that will improve emergency stems and reduce impact; recruit, develop and retain a professional diverse workforce; and support new business and improve development services. The LAFD is also committed to providing improved response times and superior emergency medical services by implementing modern technology, effective resource deployment, and a reorganization of the LAFD that closely aligns with the Los Angeles Police Department (LAPD) and the Emergency Management Department.

(v) Central City North Community Plan

The Central City North Community Plan (Community Plan") is one of 35 community plans that make up the land use element of the City's General Plan. The Community Plan was adopted on December 15, 2000, with CPC File No. 95-0352-CPU and Council File No. 97-0282. The Community Plan contains the following goal, objective, and policy related to fire protection:

Goal 9: Protect the community through a comprehensive fire and life safety program.

- **Objective 9-1**: Ensure that fire facilities and fire protection services are sufficient for the existing and future population and land uses of Central City North.
    - **Policy 9-1.1** Coordinate with the Fire Department as part of the review of significant development projects and General Plan Amendments affecting land use to determine the impact on service demands.

b) Existing Conditions

(1) Existing Facilities and Services

The LAFD currently has approximately 3,246 uniformed personnel and 353 non-uniformed support staff.[6] Services include fire prevention, firefighting, emergency medical care, technical rescue, hazardous materials mitigation, disaster response, public education, and community service. A professionally trained staff of 1,018 firefighters (including 270 paramedic-trained personnel) is on duty at all times throughout the 106 neighborhood fire stations located across the LAFD's 471-square-mile jurisdiction. Table IV.K.1-2 provides information about the nearest fire stations serving the Project Site, while Figure IV.K.1-1 shows their locations relative to the Project Site.

[6] *Strategic Plan 2015-2017, Los Angeles Fire Department, http://issuu.com/lafd/docs/262609736-lafd-strategic-plan-2015-?e=17034503/13744980, accessed on December 11, 2017.*

Table IV.K.1-2
Fire Stations

No.	Location	Distance to Site	Resources	Ave. Time (minutes) (Turnout + Travel)	Incident Counts
4	450 E. Temple Street	1.1 miles	Task Force Truck and Engine Company Hazardous Materials Unit	Non-EMS: 1:05 + 4:11 = 5:16 EMS: 1:06 + 4:12 = 5:18	Non-EMS: 764 EMS: 5,790
9	430 E. 7th Street	1.2 miles	Task Force Truck and Engine Company Paramedic Rescue Ambulance Battalion 1 Headquarters	Non-EMS: 0:56 + 3:17 = 4:13 EMS: 1:06 + 3:34 = 4:40	Non-EMS: 2,672 EMS: 13,747
17	1601 S. Santa Fe Avenue	1.6 miles	Task Force Truck and Engine Company Paramedic Rescue Ambulance EMT Rescue Ambulance – Division Headquarters	Non-EMS: 1:06 + 4:13 = 5:19 EMS: 1:09 + 4:04 = 5:13	Non-EMS: 493 EMS: 1,456
3	108 N. Fremont Avenue	1.8 miles	Task Force Truck and Engine Company Paramedic Rescue Ambulance EMT Rescue Ambulance - Division Headquarters	Non-EMS: 1:02 + 3:10 = 4:12 EMS: 1:03 + 4:06 = 5:09	Non-EMS: 1,471 EMS: 4,877
2	1962 E. Cesar Chavez Avenue	1.9 miles	Task Force Truck and Engine Company Paramedic Rescue Ambulance	Non-EMS: 1:03 + 4:00 = 5:03 EMS: 1:04 + 3:51 = 4:55	Non-EMS: 722 EMS: 4,308

Source: Written Correspondence, Ralph M. Terrazas, Los Angeles Fire Department, November 7, 2017.

Incident counts: year 2016 (January to November). Non-EMS is fire emergency. EMS is emergency medical service. BLS is basic life support.

Response Time: Year 2016 (January to November) average time (turnout time + travel time) in the station area. The Citywide Year 2016 response time was 6:28 minutes for emergency calls and 6:15 minutes for non-emergency calls.

Response time listed above does not include call processing, which averages 1:17 minutes Citywide in 2014. Call processing is done at a central location and does not differ by fire stations.

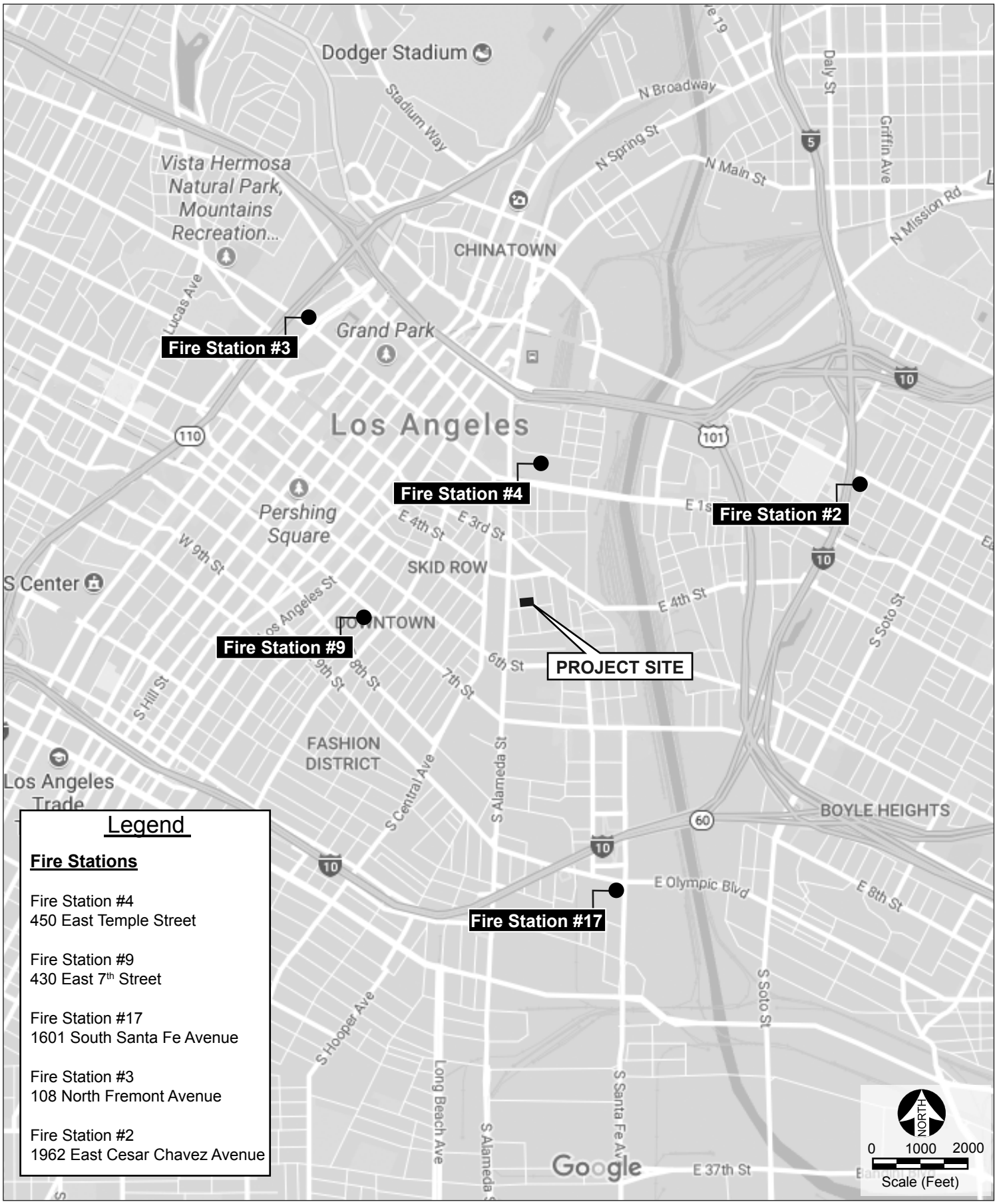
Fire Department Call Processing Time: The time interval that starts when the call is created in CAD by a Fire Dispatcher until the initial Fire or EMS2 unit is dispatched.

Turnout Time: The time interval between the activation of station alerting devices to when first responders put on their PPE3 and are aboard apparatus and en-route (wheels rolling). Both station alarm and en-route times are required to measure this for each unit that responds.

Travel Time: The time interval that begins when the first unit is en-route to the incident and ends upon arrival of any of the units first on scene. This requires one valid en-route time and one valid on-scene time for the incident. Travel time can differ considerably amongst stations. Many factors, such as traffic, topography, road width, public events and unspecified incident locations, may impact travel time.

Incident Count: The number of incidents that result in one or more LAFD units being dispatched, regardless of record qualification.

Source: http://lafd.org/fire_stations/fire-stat-la



Legend

Fire Stations

Fire Station #4
450 East Temple Street

Fire Station #9
430 East 7th Street

Fire Station #17
1601 South Santa Fe Avenue

Fire Station #3
108 North Fremont Avenue

Fire Station #2
1962 East Cesar Chavez Avenue

Figure IV.K.1-1
Fire Station Locations

Source: Google Maps, 2018.

When necessary, the LAFD can also obtain support from other fire departments and emergency services providers. The Mutual Aid Plan is based on the concept of "self-help" and "mutual aid." The State of California, all 58 counties, and nearly all city governments are signatories to a Master Mutual Aid Agreement. Functionally, the State is divided into six mutual aid regions to facilitate the coordination of mutual aid and other emergency operations. It is in the best interest of local government agencies to cooperate to achieve objectives of common interest. The LAFD has long recognized the concept of a functionally integrated fire protection system, involving federal, state, and local government resources, as the most effective method of delivering fire protection where life, property, and natural resources values are at risk.[7]

The LAFD has not established response-time standards for emergency response or adopted the National Fire Protection Association (NFPA) standard of 5 minutes for EMS response and 5 minutes, 20 seconds for fire suppression response.[8] Roadway congestion, intersection level of service (LOS), weather conditions, and construction traffic along a response route can affect response time. Generally, multi-lane arterial roadways allow emergency vehicles to travel at higher rates of speed and permit other traffic to maneuver out of a path of an emergency vehicle. Additionally, the LAFD, in collaboration with Los Angeles Department of Transportation (LADOT), has developed a Fire Preemption System (FPS), a system that automatically turns traffic lights to green for emergency vehicles traveling along designated City streets to aid in emergency response.[9] The City has over 205 miles of major arterial routes that are equipped with FPS.[10]

According to the LAFD, although response time is taken in to consideration to assess the adequacy of fire protection services, it is one factor among several that LAFD utilizes in considering its ability to respond to fires and life and health safety emergencies. Other factors include required fire flow, response distance from existing fire stations, and the LAFD's judgment for needs in an area. If the number of incidents in a given area increases, it is the LAFD's responsibility to assign new staff and equipment, and potentially build new or expanded facilities, as necessary, to maintain adequate levels of service. In conformance with the California Constitution Article XIII,

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7 *LAFD, Mutual Aid: http://lafd.org/sites/default/files/pdf_files/lafdlafdreport186489186_07312014.pdf*

8 *NFPA, NFPA 1710 – Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments, 2016 Edition. Response time is turnout time plus travel time for EMS and fire suppression incidents.*

9 *LADOT, Los Angeles Signal Synchronization Fact Sheet, http://ladot.lacity.org/sites/g/files/wph266/f/LADOT%20ATSAC%20%26%20Signals%20_%20Fact%20Sheet%202-14-2016.pdf, accessed October 30, 2018.*

10 *LAFD, Training Bulletin: Traffic Signal Preemption System for Emergency Vehicles, Bulleting No. 133, October 2008.*

Section 35(a)(2) and the *City of Hayward v. Board Trustee of California State University (2015)* ruling, the City has and will continue to meet its legal obligations to provide adequate public safety services, including fire protection and emergency medical services.

(a) Emergency Access

Emergency vehicle access to the Project Site is provided via local roadways. Important roadways in the vicinity of the Project Site include 5th Street, Alameda Street, Hewitt Street, Seaton Street, Colyton Street, 4th Street, 6th Street, and 7th Street. Emergency vehicles responding to an incident at or near the Project Site would pass through several of the traffic study intersections, especially those in the immediate vicinity of the Project Site, along Alameda Street, 5th Street, and 4th Street/4th Place. Emergency response vehicles can use a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Lights and other identifying noises compel traffic to pull to the side where available to provide access through traffic. All development in the City must comply with access requirements of the City's Building and Safety Department and the LAFD.

(b) Fire Flow and Hydrants

The Los Angeles Department of Water and Power (LADWP) provides water supply to meet fire flow requirements in the City. Fire flows are supplied by the same water mains as the domestic water system, including the lines located in local streets and major roadways. The LAFD has stated that the Project's fire-flow requirement is 4,000 gpm from four adjacent fire hydrants flowing simultaneously.[11] The Project Site is not located within an Inadequate Fire Hydrant Service Area recognized by the City.[12] Water for fire flows for the area surrounding the Project Site within the City's jurisdiction is provided by the LADWP. All water mains and lines that are designed and sized according to LADWP standards take into account fire flow and pressure requirements. The following hydrants are located near the Project Site:[13]

- 4-inch Double (4D) hydrant on an 8-inch main at the southeast corner of 5th Street and Colyton Street approximately 50 feet southeast of the Project Site;[14]

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[11] *Correspondence, Ralph M. Terrazas, Fire Chief, Los Angeles Fire Department, November 7, 2017.*

[12] *Environmental and Public Facilities Maps, Figure F-7: Inadequate Fire Hydrant Service Areas: http://cityplanning.lacity.org/HousingInitiatives/HousingElement/FrameworkEIR/GPF_DraftEIR/GPF_FEIR_DEIR2.10.pdf, accessed July 11, 2017.*

[13] *NavigateLA, DWP Fire Hydrants layer: http://navigatela.lacity.org/NavigateLA.*

[14] *4D fire hydrants contain two 4-inch nozzles for the attachment of fire hoses.*

- 4D hydrant on a 6-inch main at southeast corner of 5th Street and Seaton Street approximately 40 feet southwest of the Project Site;
- 4D hydrant on a 6-inch main midblock on the east side of Seaton Street between 5th Street and 4th Street approximately 20 feet northwest of the Project Site; and
- 2-1/2-inch Double (2-1/2D) X 4D hydrant on an 8-inch main midblock on the west side of Colyton Street approximately 20 feet northeast of the Project Site.

(c) Fire Hazard Areas

There are no wildlands located adjacent to or in the vicinity of the Project Site. In addition, the Project Site is not located within a City-designated Very High Fire Hazard Severity Zone or Fire District No. 1 (i.e., areas identified by the City that are required to meet additional development regulations to mitigate fire hazard-related risks).[15]

3. Project Impacts

a) Methodology

Project impacts related to fire protection services are assessed by the LAFD on a project-by-project basis. A project's land use, fire-protection-related needs, and whether the project site meets the recommended response distance and fire safety requirements, as well as project design features that would reduce the demand for fire protection services, are taken into consideration. Beyond the standards set forth in the Los Angeles Fire Code, consideration is given to the project size and components, required fire flow, and response distance for engine and truck companies, fire hydrant sizing and placement standards, access, and potential to use or store hazardous materials. Assessment of impacts considers whether or not implementation of the project would create the need for a new fire station or expansion, relocation, or consolidation of an existing facility to accommodate increased demand. Consultation with the LAFD is also conducted to determine the project's effect on fire protection and emergency medical services.

The need for or deficiency in adequate fire protection and emergency medical services in and of itself is not a CEQA impact, but rather a social and/or economic impact.[16] Where a project causes a need for additional fire protection and emergency medical services resulting in the need to construct new facilities or additions to existing facilities, and the construction results in a potential impact to the environment, then the impact

[15] *City of Los Angeles, Department of City Planning, ZIMAS, http://zimas.lacity.org/, accessed August 29, 2018.*

[16] *City of Hayward v. Board Trustee of California State University (2015) 242 Cal. App. 4th 833, 847.*

would need to be assessed in this EIR. The ultimate determination of whether there is a significant impact to the environment related to fire protection and emergency medical services from a project is determined by whether the construction of new or expanded fire protection and emergency medical facilities is a reasonably foreseeable direct or indirect effect of the project.

There are no current capital improvement plans for the construction or expansion of fire facilities in the impact area. Therefore, the City makes the following assumptions based on existing zoning standards and based on historical development of fire and emergency facilities, that in the event that the City determines that expanded or new emergency facilities are warranted, such facilities: (1) would occur where allowed under the designated land use, (2) would be located on parcels that are infill opportunities on lots that are between 0.5 and 1.0 acre in size, and (3) could qualify for a categorical exemption or Mitigated Negative Declaration under CEQA Guidelines Section 15301 or 15332.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the project would have a significant impact related to fire protection if the project would do the following:

(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

(2) 2006 L.A. CEQA Thresholds Guide

In accordance with the *L.A. CEQA Thresholds Guide* (Thresholds Guide), the determination of significance levels for project impacts on fire protection services shall be made on a case-by-case basis considering the following factor:

(a) If the project requires the addition of a new fire station or the expansion, consolidation or relocation of an existing facility to maintain service.

In assessing impacts related to population and housing in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the

Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

c) Project Design Features

No Project Design Features are proposed with regard to fire protection services.

d) Analysis of Project Impacts

Threshold (a) ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection?***

(1) Impact Analysis

(a) Construction

Construction activities associated with the Project may temporarily increase demand for fire protection and emergency medical services and may cause the occasional exposure of combustible materials, such as wood, plastics, sawdust, coverings and coatings, to heat sources, including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, in compliance with OSHA requirements (Standards 1926 Subpart F, 1926.150, 1926.151, 1926.24), construction managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction that meets OSHA standards would be maintained on-site (OSHA Standard 1926.28). Additionally, Project construction would comply with applicable OSHA requirements related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials (Standards 1926.20, 1926.25, 1926.27, and 1926.152). Therefore, in light of OSHA regulations that would, in part, require training of personnel in fire prevention and emergency response, maintenance of fire suppression equipment, and implementation of proper procedures for storage and handling of flammable materials on the Project Site, construction impacts on fire protection and emergency medical services would be less than significant.

Construction activities also have the potential to affect fire protection services by adding construction traffic to the street network and by necessitating partial lane closures

during street improvements and utility installations. These impacts, while potentially adverse, are considered to be less than significant for the following reasons:

- Construction activities are temporary in nature and do not create continuing risks;
- General "good housekeeping" procedures employed by the construction contractors and the work crews (e.g., maintaining mechanical equipment, proper storage of flammable materials, cleanup of spills of flammable liquid) minimize these hazards; and
- Partial lane closures would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Additionally, if there are partial closures to streets surrounding the Project Site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete under the Construction Traffic Management Plan (refer to TR-PDF-2).

Impacts on traffic that could cause delays in emergency response are addressed through the Construction Traffic Management Plan, which includes traffic management strategies for Project operations and construction (refer to TR-PDF-2 in **Section II, Project Description, and Section IV.L, Transportation/Traffic**, of the Draft EIR). The plan would formalize how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community. The Construction Traffic Management Plan must be based on the nature and timing of specific construction activities and other projects in the vicinity. Even with the Construction Traffic Management Plan, it is accepted that the Project's construction would incrementally increase traffic, which could potentially delay emergency response. Moreover, although the average response times listed above in Table IV.K.1-2 for LAFD fire stations in the Project Site vicinity (with the exception of Fire Stations 2 and 9) and the Citywide average do not meet the NFPA response time standards, LAFD has not formally adopted the NFPA standards and the current average response times are not considered deficient.

(i) Conclusion

Overall, construction is not considered to be a high-risk activity. **Project construction would not be expected to tax fire-fighting and emergency services to the extent that there would be a need for new or expanded fire facilities in order to maintain acceptable service ratios or other performance objectives of the LAFD, due to the limited duration of construction activities and compliance with applicable codes.**

Therefore, impacts associated with construction of the Project on fire protection services would be less than significant.

(b) Operation

The Project would generate new residents, visitors, and employees and would also increase the amount of developed square footage on the Project Site. Therefore, the Project could result in an increased need for fire protection and emergency medical services at the Project Site. The discussion below analyzes the criteria for determining the Project's impacts to fire protection services, including fire flow and response distance.

(i) Fire Flow

As further discussed in **Section IV.M.2, Utilities and Service Systems – Water**, of the Draft EIR, based on an initial LADWP evaluation of local water delivery infrastructure near the Project Site, it is anticipated that a water line upgrade would be required to provide pressures to supply 5,000 gpm to the Project for fire flows through a fire service connection. LADWP suggests that 190 feet of 6-inch pipe (either in Seaton or 5th Street) and 227 feet of 8-inch pipe in Colyton Street be upgraded to 12-inch mains to provide the required flow that meets a minimum velocity of 15 feet per second. A new fire service connection would consist of a separate dedicated firewater service connection with a second fire connection to provide the required redundancy for all high-rise structures per the Los Angeles Building Code. Hydrants, water lines, and water tanks would be installed per Division 7, Section 57.09.06 of the Fire Code requirements for the Project. In addition, the Project Applicant would be required to submit the proposed plot plans for the Project to the LAFD for review for compliance with applicable Los Angeles Fire Code, California Fire Code, and Los Angeles Building Code requirements, thereby ensuring that the Project would not create any undue fire hazard. LAFD review is a legal prerequisite, with which the Project would be required to comply. Furthermore, the Project Site is not located within an Inadequate Fire Hydrant Service Area recognized by the City.[17] As such, with respect to fire flows, fire protection services would be considered adequate by LAFD standards.[18] **Therefore, Project impacts regarding fire flow would be less than significant.**

[17] *Environmental and Public Facilities Maps, Figure F-7: Inadequate Fire Hydrant Service Areas:* http://cityplanning.lacity.org/HousingInitiatives/HousingElement/FrameworkEIR/GPF_DraftEIR/GPF_FEIR_DEIR2.10.pdf*, accessed July 11, 2017.*

[18] *Written correspondence from Ralph M. Terrazas, Los Angeles Fire Department, November 7, 2017.*

(ii) Response Distance

The nearest fire station with an engine and truck company is Station No. 4, approximately 1.1 miles away from the Project Site, at 450 E. Temple Street. The LAFD's ability to provide adequate fire protection and emergency response services to a site is determined by the response distance and the degree to which emergency response vehicles can successfully navigate the given accessways and adjunct circulation system. If the response distance standard cannot be achieved for a specific location, then fire sprinkler systems are required. Additionally, fire sprinklers are required under the Fire Code for all high-rise structures (such as the Project building), regardless of distance from the closest fire station, to minimize the time needed for the LAFD to respond to an emergency response. The Project Site is located within the maximum acceptable response distances for both fire engines and truck companies shown in Table IV.K.1-1.

Project-related traffic would have the potential to increase emergency vehicle response times to the Project Site and surrounding properties due to travel time delays caused by traffic. However, the area surrounding the Project Site includes an established street system, consisting of freeways, primary and secondary arterials, and collector and local streets, all of which provide regional, sub-regional, and local access and circulation within the Project's traffic study area. In addition, the drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to CVC Section 21806. As such, the increase in traffic generated by the Project would not significantly impact emergency vehicle response times to the Project Site and surrounding area. **Therefore, Project impacts regarding emergency response distance would be less than significant.**

(iii) Emergency Access

The Project Applicant is required to submit the proposed plot plans for the Project to the LAFD for review for compliance with the Los Angeles Fire Code, California Fire Code, and the Los Angeles Building Code, thereby ensuring that the Project would not create any undue fire hazard. Also, the Project Applicant would consult with neighboring land uses and prepare an emergency response plan that would include, but not be limited to, the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire departments. Additionally, the Project Site is located within approximately three miles of the following hospitals, which house 24-hour emergency departments:

- Los Angeles County/USC General Hospital & Medical Center, located at 2051 Marengo Street

- Good Samaritan Hospital, located at 1225 Wilshire Boulevard

Therefore, compliance with applicable provisions of the Los Angeles Fire Code, the California Fire Code, and the Los Angeles Building Code, and submission of an emergency response plan to the LAFD would ensure potential Project impacts pertaining to emergency access would be less than significant.

(iv) Conclusion

Overall, as described above, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for fire protection. Therefore, Project impacts related to fire protection services would be less than significant.

(2) Mitigation Measures

No significant impacts related to fire protection services have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to fire protection services would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

Generally, a "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects (CEQA Guidelines, §15355). An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered "cumulatively considerable" when the incremental impacts of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider that effect significant, but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

An adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and

probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence.

The analysis below is based on a list-based approach to determine the Project's contributing effect on potential cumulative impacts to fire protection facilities and services within the City. A total of 117 cumulative projects were identified in the study area (as shown in Table III-1 in **Section III, Environmental Setting,** of the Draft EIR). In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many cumulative projects identified below. Accordingly, it can be assumed that the projected growth reflected by the list of related projects, which itself is a conservative assumption as discussed below would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

Implementation of the Proposed Project in conjunction with these cumulative projects would increase demand for fire protection services based on an increase in residential population and daily employment. As described in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, it is estimated that the cumulative projects (Proposed Project + other proposed development projects in the downtown area) would generate approximately 31,334 housing units and 76,142 residents.[19,20] Many of the cumulative projects listed would be served by the same fire stations serving the Project Site. However, due to the relatively large geographic scope of the cumulative project locations, some would be served by additional LAFD stations that differ from those that would serve the Project. These stations would likely include the following:

- Fire Station No. 2, 1962 E. Cesar Chavez Avenue, Los Angeles 90033
- Fire Station No. 3, 108 N. Fremont Avenue, Los Angeles 90012
- Fire Station No. 10, 1335 S. Olive Street, Los Angeles 90015

[19] *Cumulative Projects = 31,205 dwelling units + 129 dwelling units from the Project = 31,334 dwelling units.*

[20] *Assumes a 2.43 persons-per-household ratio for the City from the American Community Survey, 5-year (2013-2016) Average Estimates. Refer to* ***Section IV.J, Population, Housing, and Employment*** *of the Draft EIR.*

- Fire Station No. 11, 1819 W. 7th Street, Los Angeles 90057
- Fire Station No. 20, 2144 W. Sunset Boulevard, Los Angeles 90026

While Project impacts related to fire services would be less than significant, implementation of some of the cumulative projects, in combination with the Project, would result in a net increase in the number of residents, households, and employees in the Project area and could further increase the demand for fire protection services. Cumulative development requires the LAFD to continually evaluate the need for new or physically altered facilities in order to maintain adequate service ratios. Similar to the Project, the cumulative projects would be subject to the requirements of the Los Angeles Fire Code, including Table 507.3.3, which mandates the installation of automatic fire sprinkler systems if a project is located at a distance to the nearest fire station that exceeds the LAFD required response distance. Each of the cumulative projects in the City would also be required to consult with LAFD and LADWP during their design phase to establish fire flow requirements for the land uses proposed and to determine the adequacy of existing fire flow infrastructure serving their respective project sites. Any LAFD- or LADWP-required upgrades to the water distribution systems serving the cumulative projects would be addressed for each individual project in conjunction with their project approvals. Each of the cumulative projects in the City is also individually subject to LAFD review and would be required to comply with all applicable fire safety requirements of the LAFD and the City, including hydrant and access improvements, if necessary, in order to adequately mitigate fire protection impacts.

Some of the cumulative projects may be farther than the maximum response distance requirements from the nearest fire station and thus, would be required to incorporate fire sprinklers, as well as meet other requirements that may be stipulated by the LAFD on a project-by-project basis. If any of the cumulative projects creates demands on fire protection staffing, equipment, or facilities such that a new station would be required, potential environmental impacts would be addressed in conjunction with the environmental review for that project. However, because the Project does not create such demands, its contribution to these impacts is not cumulatively considerable.

The LAFD obtains the necessary facilities and resources through the City's budget process. The cumulative projects would contribute to funding fire protection services in the area by generating annual revenue from property taxes that would be deposited into the City's General Fund, which could potentially be used to fund the construction of future fire protection facilities and support hiring more firefighters. This would further ensure that the Project's incremental effect on fire protection service would not be cumulatively considerable. Through this process, the ability of the LAFD to provide adequate facilities to accommodate future growth and maintain acceptable levels of

service would be ensured. On this basis, it is anticipated that potential impacts to fire protection would not be cumulatively considerable. Furthermore, the increased demands for additional LAFD staffing, equipment, and facilities would be funded via existing mechanisms (e.g., property taxes and government funding) to which both the Project and the cumulative projects would contribute.

With regard to cumulative impacts on fire protection, consistent with *City of Hayward v. Board Trustees of California State University* (2015) 242 Cal.App.4th 833 ruling and the requirements stated in the California Constitution Article XIII, Section 35(a)(2) in Subsection 2.b.(2) above, the obligation to provide adequate fire protection and emergency medical services is the responsibility of the City. Through the City's regular budgeting efforts, LAFD's resource needs, including staffing, equipment, trucks and engines, ambulances, other special apparatuses and possibly station expansions or new station construction, would be identified and allocated according to the priorities at the time. At this time, LAFD has not identified that it will be constructing a new station in the area impacted by this Project either because of this Project or this Project and other projects in the service area. If LAFD determines that new facilities are necessary at some point in the future, such facilities (1) would occur where allowed under the designated land use, (2) would be located on parcels that are infill opportunities on lots that are between 0.5 and 1 acre in size, and (3) could qualify for a categorical exemption or Mitigated Negative Declaration under CEQA Guidelines Section 15301 or 15332 and would not be expected to result in significant impacts.[21] Further analysis, including a specific location, would be speculative and beyond the scope of this document.

Therefore, a cumulative increase in fire protection services demand that would require a new fire station, or the expansion, consolidation, or relocation of an existing fire station, the construction of which could cause significant environmental impacts, is not anticipated from the development of the Project or the cumulative projects, and cumulative impacts related to fire protection services would be less than significant.

(2) Mitigation Measures

No significant cumulative impacts related to fire protection services have been identified. Thus, no mitigation measures are required.

[21] *Although an EIR was prepared for the construction of Fire Station 39, the EIR concluded there would be no significant impacts. See, Notice of Determination for Van Nuys Fire Station 39, at* http://eng2.lacity.org/techdocs/emg/docs/vannuys_fs39/NOD_160701.pdf*, accessed October 30, 2018.*

(3) Level of Significance after Mitigation

Cumulative impacts related to fire protection services would be less than significant.

IV. Environmental Impact Analysis

K.2 Public Services – Police Protection

1. Introduction

This section addresses the potential impacts of the Project on the demand for police protection services. The Los Angeles Police Department (LAPD) provides police protection services and law enforcement to the City of Los Angeles (City) and would serve the Project Site. The section is partly based on the following written correspondence from LAPD, included as **Appendix J-2** of the Draft EIR:

J-2. *Correspondence from Al Neal, Captain, Commanding Officer, Community Relationship Division, Los Angeles Police Department, January 24, 2018.*

2. Environmental Setting

a) Regulatory Framework

(1) State

(a) California Constitution Article XIII, Section 35

Section 35 of Article XIII of the California Constitution at subdivision (a)(2) provides: "The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50-percent sales tax to be expended exclusively on local public safety services. California Government Code Sections 30051-30056 provide rules to implement Proposition 172. Public safety services include police protection. Section 30056 mandates that cities are not allowed to spend less of their own financial resources on their combined public safety services in any given year compared to the 1992-93 fiscal year. Therefore, an agency is required to use Proposition 172 to supplement its local funds used on public safety services, including police protection. In *City of Hayward v. Board of Trustee of California State University* (2015) 242 Cal. App. 4th 833, the court found that Section 35 of Article XIII of the California Constitution requires local agencies to provide public

safety services, including police protection, and that it is reasonable to conclude that the city will comply with that provision to ensure that public safety services are provided.[1]

(b) California Vehicle Code

Section 21806 of the California Vehicle Code (CVC) pertains to emergency vehicles responding to Code 3 incidents/calls.[2] This section of the CVC states the following:

> *Upon the immediate approach of an authorized emergency vehicle which is sounding a siren and which has at least one lighted lamp exhibiting red light that is visible, under normal atmospheric conditions, from a distance of 1,000 feet to the front of the vehicle, the surrounding traffic shall, except as otherwise directed by a traffic officer, do the following: (a)(1) Except as required under paragraph (2), the driver of every other vehicle shall yield the right-of-way and shall immediately drive to the right-hand edge or curb of the highway, clear of any intersection, and thereupon shall stop and remain stopped until the authorized emergency vehicle has passed. (2) A person driving a vehicle in an exclusive or preferential use lane shall exit that lane immediately upon determining that the exit can be accomplished with reasonable safety…. (c) All pedestrians upon the highway shall proceed to the nearest curb or place of safety and remain there until the authorized emergency vehicle has passed.*

(c) County of Los Angeles Office of Emergency Management

The Office of Emergency Management was established by Chapter 2.68 of the County of Los Angeles (County) Code (County Code) with responsibility for organizing and directing the preparedness efforts, as well as the day-to-day coordination efforts, for the County's Emergency Management Organization.[3]

The County is required by State law to organize a formal mutual aid agreement between all police departments within its jurisdiction. This agreement is set forth in the Mutual Aid Operations Plan for the County. The Mutual Aid Operations Plan is a reciprocal agreement between signatory agencies (such as the County and City or other local police departments) to provide police personnel and resources to assist other member agencies during emergency and/or conditions of extreme peril. Any formal mutual aid requests by any police department within the County are made with the County Sheriff's

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1 *City of Hayward v. Board Trustee of California State University (2015) 242 Cal. App. 4th 833, 847.*

2 *A Code 3 response to any emergency may be initiated when one or more of the following elements are present: a serious public hazard, an immediate pursuit, preservation of life, a serious crime in progress, and prevention of a serious crime. A Code 3 response involves the use of sirens and flashing red lights.*

3 *County of Los Angeles, Chief Executive Office, Office of Emergency Management, About OEM, http://www.lacoa.org/aboutoem.html, April 7, 2015.*

Department. However, additional informal agreements may be made directly between the police agencies involved. The Mutual Aid Operations Plan is a formal agreement and has been signed by the Chief of Police of every police department within the County, including the Chief of the LAPD. The Mutual Aid Operations Plan provides a structure of response should an emergency arise which requires immediate response by more law enforcement personnel than would be available to LAPD using all other available resources.

(2) City of Los Angeles

(a) City Charter

The law enforcement regulations, powers, and duties of the LAPD are outlined in the City Charter, Administrative Code, and Municipal Code. City Charter Article V, Section 570 gives power and duty to the LAPD to enforce the penal provisions of the Charter, City ordinances, and State and Federal law. The City Charter also gives responsibility to the LAPD to act as peace officers and to protect lives and property in case of disaster or public calamity. Section 22.240 of the Administrative Code requires the LAPD to adhere to the state standards described in Section 13522 of the California Penal Code, which charges the LAPD with the responsibility of enforcing all Municipal Code Chapter 5 regulations related to firearms, illegal hazardous waste disposal, and nuisances (such as excessive noise), and providing support to the Department of Building and Safety Code Enforcement inspectors and the Los Angeles Fire Department (LAFD) in the enforcement of the City's Fire, Building, and Health Codes. The LAPD is given the power and the duty to protect residents and property and to review and enforce specific security related mitigation measures pertaining to new development.

(b) Los Angeles General Plan Framework Element

The Los Angeles Citywide General Plan Framework Element (Framework Element), adopted in December 1996, and readopted in August 2001, contains policies and objectives, which address the provision of police protection services within the City and the LAPD. These policies and objectives deal with ensuring adequate service infrastructure as population growth occurs via the monitoring of services, supporting the provision of additional police, and pursuing additional funding for additional officers. The Framework Element contains the following goals, objectives, and policies related to police services:[4]

[4] *City of Los Angeles, General Plan, Los Angeles Framework Element: http://cityplanning.lacity.org/Cwd/Framwk/chapters/09/09.htm#police, October 30, 2018.*

Goal 9I: Every neighborhood in the City has the necessary police services, facilities, equipment, and manpower required to provide for the public safety needs of that neighborhood.

- **Objective 9.13: Monitor and forecast demand for existing and projected police service and facilities.**
    - **Policy 9.13.1:** Monitor and report police statistics, as appropriate, and population projections for the purpose of evaluating police service based on existing and future needs.
- **Objective 9.14: Protect the public and provide adequate police services, facilities, equipment and personnel to meet existing and future needs.**
    - **Policy 9.14.1:** Work with the Police Department to maintain standards for the appropriate number of sworn police officers to serve the needs of residents, businesses, and industries.

(c) General Plan Safety Element

The City of Los Angeles General Plan Safety Element (Safety Element) describes the role of the LAPD in coordinating emergency operations in response to natural disasters in accordance with the City's Emergency Operations Organization (EOO). The Chief of Police is chair of the City's Emergency Operations Board (EOB). Under the EOO, mutual aid and other agreements provide for voluntary cooperative efforts and for provision or receipt of services and aid to or from other agencies or jurisdictions when local capabilities are exceeded by an emergency event. Through mutual aid agreements, the EOO and individual City agencies coordinate emergency response planning with adjacent cities, the County of Los Angeles, state and federal agencies and other public and private organizations. As discussed in the Safety Element, City agencies follow procedures contained in their emergency plans, under the direction of the Mayor and Chief of Police, pursuant to EOO protocols set forth in the EOO ordinance and plans.

(d) Central City North Community Plan

The Central City North Community Plan (Community Plan) is one of 35 community plans that make up the Land Use Element of the City's General Plan. The Community Plan was adopted on December 15, 2000, with CPC File No. 95-0352-CPU and Council File No. 97-0282. The Community Plan contains the following goals, objectives, and policies related to police protection:

Goal 8: A community with adequate Police facilities and services to protect the Community's residents from criminal activity, reduce the incidence of crime, and provide other necessary law enforcement services.

- **Objective 8-1:** To provide adequate police facilities and personnel to correspond with population and service demands in order to provide adequate police protection.
    - **Policy 8-1.1:** Consult with the Police Department as part of the review of new development projects and proposed land use changes to determine law enforcement needs and demands.
- **Objective 8-2:** To increase the community's and the Police Departments ability to minimize crime and provide adequate security.
    - **Policy 8-2.2:** Ensure that landscaping around buildings be placed so as not to impede visibility.
    - **Policy 8-2.3:** Ensure adequate lighting around residential, commercial, and industrial buildings in order to improve security.
    - **Policy 8-2.4:** Ensure that recreational facilities in multiple family residential complexes are designed to provide adequate visibility security.

(e) COMPSTAT Program

In 1994, the LAPD incorporated the use of crime control model computer statistics (COMPSTAT). The COMPSTAT Unit implements the General Plan Framework goal of assembling statistical population and crime data to determine necessary crime prevention actions. This system implements police protection services through statistical and geographical information system analysis of growing trends in crime through a specialized crime control model.

b) Existing Conditions

(1) Existing Facilities

The LAPD covers an area of 472.9 square miles and serves a population of over 3.8 million residents. Service is provided by 9,859 sworn officers and 2,720 civilian staff in 21 community police stations.[5] The 21 areas are divided among 4 bureaus: Central, South, Valley, and West. The Project Site is located within the Central Bureau, which includes the following Community Police Stations: Central, Hollenbeck, Newton,

[5] *LAPD: http://www.lapdonline.org, July 11, 2017.*

Northeast, and Rampart.[6] Within the Central Bureau, the Project Site is served by the Central Community Police Station, located at 251 E. 6th Street, approximately one mile west of the Project Site.[7] The area served by the Central Community Police Station (Central Area) consists of approximately 4.5 square miles, bordered by State Route (SR)-110 (Pasadena Freeway), Lilac Terrace, and Stadium Way on the north; Washington Boulevard and 7th Street on the south; SR-110 (Harbor Freeway) on the west; and the Los Angeles River on the east. The Central Area includes the downtown communities of Chinatown, Little Tokyo, South Park, Central City East, Historic Core, Financial District, Arts District, Olvera Street, Jewelry District, the Convention Center, and the Fashion District. The Central Community Police Station has approximately 370 sworn officers and 30 civilian support personnel serving approximately 40,000 people within the Central Area.[8] The officer-to-resident ratio is 1 officer per 108 residents (9.26 officers/1,000 residents). Additional special service teams are also available within the LAPD to service the Central Area. A map of the police station location and the Central Area boundaries are shown in Figure IV.K.2-1.

(2) Response Time and Crime Rate

The average response time to emergency calls for service in the Central Area during 2016 was 2.7 minutes. The average response time for non-emergency calls for service in the Central Area during 2016 was 13.7 minutes.

The crime rate, which represents the number of crimes reported, affects the "needs" projection for staff and equipment for the LAPD to some extent. Table IV.K.2-1 provides the 2017 crime statistics for the Central Area. An average of 171 crimes were committed per 1,000 persons in the Central Area during 2017.[9] The Central Area has a large number of personal thefts, burglary from motor vehicles, and other assault crimes. In 2017, the Central Area had a total of 6,829 crimes.[10]

[6] *LAPD: http://www.lapdonline.org/central_bureau, July 11, 2017.*

[7] *LAPD, http://www.lapdonline.org/central_community_police_station, July 11, 2017.*

[8] *Response from LAPD, January 24, 2018.*

[9] *Ibid.*

[10] *Ibid.*

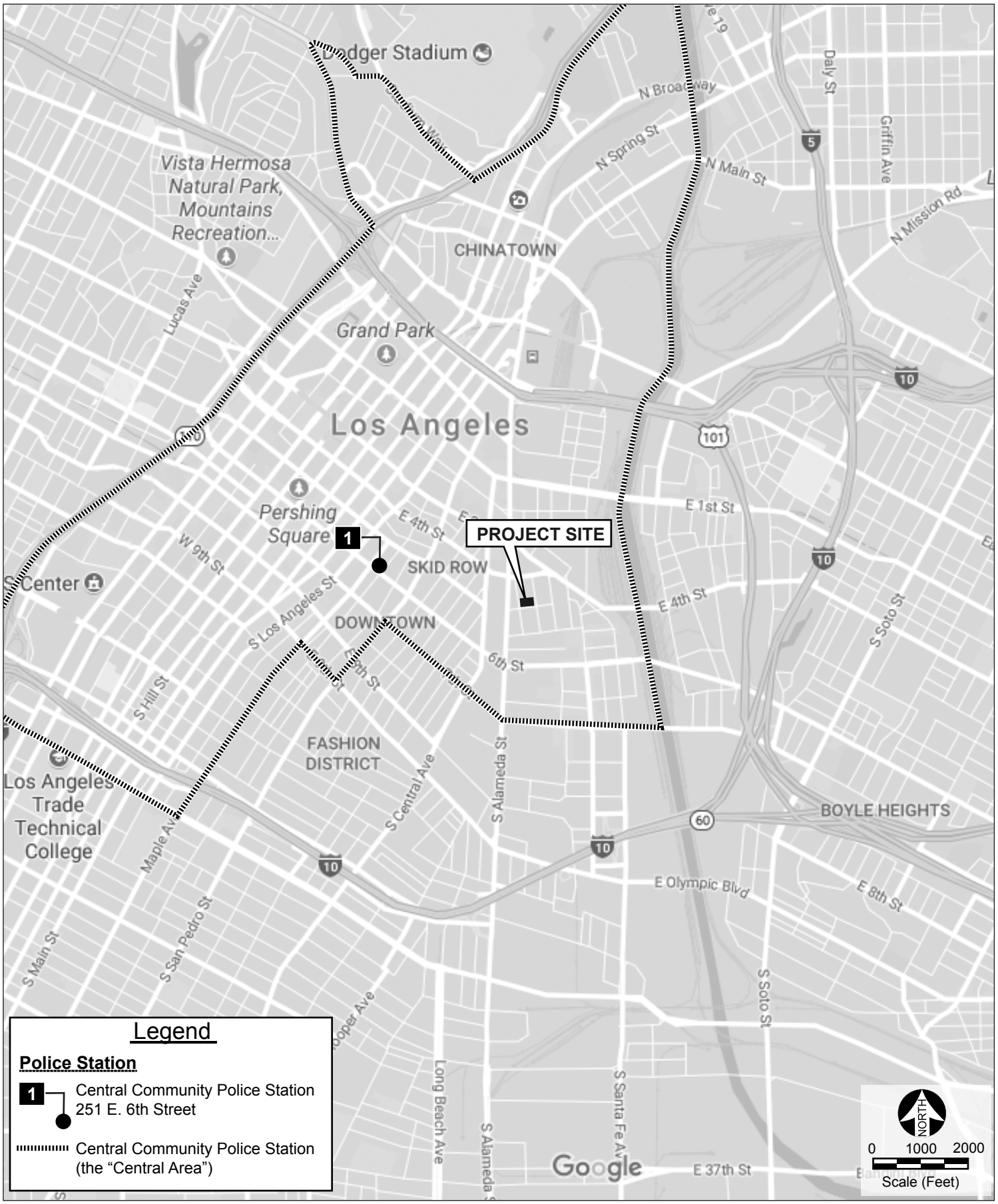

Figure IV.K.2-1
Police Station Locations

Source: Google Maps, 2018.

Table IV.K.2-1
Central Area Crime Statistics (2017)

Crime	Central Area
Homicide	21
Rape	104
Robbery	718
Aggravated Assault	1,180
Burglary	375
Motor Vehicle Theft	391
Burglary from Motor Vehicle	1,360
Personal/Other Theft	2,680
Total	**6,829**

Source: LAPD, January 24, 2018.

3. Project Impacts

a) Methodology

The determination of significance relative to impacts on police protection services is based on the ability of police personnel to adequately serve the existing and future population, including residents, workers, and daytime and nighttime visitors. Potential impacts to police protection services is evaluated based on two criteria consistent with the significance threshold criteria set forth in the *L.A. CEQA Thresholds Guide*, which are outlined in detail below. The first criterion is the ability of the Community Police Station to meet additional demand for police protection services resulting from the Project. The second criterion is to what extent the Project's proposed security and/or design features would reduce the demand for police protection services or the effect on police response times. Based on these criteria and consultation with the LAPD, a determination was made as to whether police facilities could accommodate the additional demand for police protection services resulting from the Project without the need for a new facility or the alteration of existing facilities.

The need for or deficiency in adequate police protection in and of itself is not a CEQA impact, but rather a social and/or economic impact.[11] Where a project causes a need for additional police protection resulting in the need to construct new facilities or additions to existing facilities, and the construction results in a potential impact to the environment, then the impact would need to be assessed in this EIR. The ultimate determination of whether there is a significant impact to the environment related to police protection from a project is determined by whether the construction of new or

[11] *City of Hayward v. Board Trustee of California State University (2015) 242 Cal, App. 4th 833, 847.*

expanded police station(s) is a reasonably foreseeable direct or indirect effect of the project.

The City makes the following assumptions based on existing zoning standards and based on historical development of police facilities, that in the event In the event that the City determines that expanded or new emergency facilities are warranted, such facilities: (1) would occur where allowed under the designated land use; (2) would be located on parcels that are infill opportunities on lots that are between 0.5 and 1.0 acre in size; and (3) could qualify for a categorical exemption or Mitigated Negative Declaration under CEQA Guidelines Section 15301 or 15332.

b) Thresholds of Significance

(1) Appendix G of the CEQA Guidelines

According to Appendix G of the *CEQA Guidelines*, a project could have a significant environmental impact if the project would:

(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, need for new or physically altered police protection 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.

(2) City of Los Angeles CEQA Thresholds Guide

The *L.A. CEQA Thresholds Guide* (Thresholds Guide) identifies the following factors to evaluate impacts on police protection services:

(a) The population increase resulting from the proposed project, based on the net increase of residential units or square footage of non-residential floor area;

(b) The demand for police services anticipated at the time of project buildout compared to the expected level of service available. Consider, as applicable, scheduled improvements to LAPD services (facilities, equipment, and officers) and the project's proportional contribution to the demand; and

(c) Whether the project includes security and/or design features that would reduce the demand for police services.

In assessing impacts related to police protection services in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

c) Project Design Features

The following Project Design Features (PDFs) are proposed with regard to police protection services:

POL-PDF-1 Emergency access will be maintained to the Project Site during construction through marked emergency access points approved by the LAPD.

POL-PDF-2 Temporary construction fencing will be placed along the periphery of the active construction areas to screen as much of the construction activity from view at the local street level and to keep unpermitted persons from entering the construction area.

The perimeter fence will have gates installed to facilitate the ingress and egress of equipment and the work force. Where applicable, the construction fence will be incorporated with a pedestrian walkway. Temporary lighting will be installed and maintained at the pedestrian walkway. Should sections of the site fence have to be removed to facilitate work in progress, barriers and/or K-rail will be utilized to isolate and protect the public from unsafe conditions.

POL-PDF-3 As necessary, the Project Applicant will provide for the deployment of a private security guard to monitor and patrol the Project Site, appropriate to the phase of construction throughout the construction period. The patrol will be deployed at times that are typical within the local-area construction industry for a project of this size.

POL-PDF-4 The Project Applicant will provide the LAPD with a diagram of each portion of the Project Site, showing access routes and additional access information as requested by the LAPD, to facilitate police response.

POL-PDF-5 The Project will provide for on-site security measures and controlled access systems for residents and tenants to minimize the demand for police protection services. These measures include, but are not limited to, the following:

- Perimeter lighting to supplement the street lighting and to provide increased visibility and security;
- On-site security personnel, commensurate to similar/comparable residential and retail projects of its size, as needed;
- Installation of parking garage access control; and
- Installation of residential units access control.

d) Analysis of Project Impacts

Threshold (a): ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, need for new or physically altered police protection 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?***

(1) Impact Analysis

(a) Construction

Construction sites can be sources of attractive nuisances, providing hazards, and inviting theft and vandalism. Therefore, when not properly secured, construction sites can become a distraction for local law enforcement from more pressing matters that require their attention. This could result in an increase in demand for police protection services. Consequently, developers typically take precautions to prevent trespassing through construction sites. Most commonly, temporary fencing is installed around the construction site to keep potential trespassers out. Deployment of roving security guards is also sometimes used to prevent problems during a project's construction. When such precautions are taken, there is less of a need for local law enforcement at the construction site.

The Project Site is generally open to access except on the north side, where it is shielded by existing adjacent buildings. Given the ease of potential illicit access during the construction period, the Project Site would need to be secured during construction in order to avoid potential theft. Fencing and other security features, such as perimeter fencing, lighting, and security guards (as necessary), would be provided at the Project Site during construction, thereby reducing the potential need for LAPD services (refer to Project Design Features POL-PDF-1 through POL-PDF-3). Security measures would ensure that valuable materials (e.g., building supplies and metals, such as copper

wiring), as well as construction equipment are not easily stolen or abused. This is especially important since the Project Site is located at the intersection of multiple streets that have an active walking and/or driving environment. The specific type and combination of construction site security features would depend on the phase of construction. Implementation of these security features would minimize the Project's potential need for police protection services during the construction phase.

Emergency response vehicles can use a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Although minor traffic delays due to temporary lane closures needed to facilitate specific construction activities could occur, particularly during the construction of utilities and street improvements, impacts to police protection services would be considered less than significant for the following reasons:

(1) Emergency access would be maintained to the Project Site during construction through marked emergency access points approved by the LAPD (refer to Project Design Feature POL-PDF-1);

(2) Construction impacts are temporary in nature and do not cause lasting effects; and

(3) Partial lane closures, if determined to be necessary, would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic, in accordance with Section 21806 of the CVC. Additionally, if there are partial closures to streets surrounding the Project Site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete.

Thus, construction of the Project would not be expected to affect the LAPD's ability to respond to emergencies to the extent that there would be a need for any additional new or expanded police facilities, in order to maintain acceptable service ratios, response times, or other performance objectives of the LAPD. Therefore, construction-related impacts to police protection services would be less than significant.

(b) Operation

The Project would generate new residents, visitors, and employees and would also increase the amount of developed square footage on the Project Site. Therefore, the Project would result in an increased need for police protection services at the Project Site. The following discussion analyzes the Project's impacts to police protection services.

Although the LAPD does not maintain minimum officer-to-population ratio objectives, the data presented above provide a useful metric for gauging the effect a proposed project might have on service levels. The current officer-to-resident ratio is 1 officer per 108 residents (9.26 officers/1,000 residents) within the Central Area. Thus, the additional approximately 289 residents estimated to be created by the Project would require approximately three additional officers to maintain the same ratio.[12] The Central Community Police Station has 370 sworn police officers. The addition of three officers to maintain the existing ratio represents a 0.8-percent increase over existing staffing levels. As such, the demand for three additional officers to maintain current resident service ratios would not require the expansion, consolidation, or relocation of this station.

As indicated in Table IV.K.2-1, the most common crimes in the Central Area are personal theft-related. The Project would include security features within the parking facility and along exterior building areas, such as appropriate lighting and secured access to the private areas of the Project. By providing natural surveillance (visibility from streets and sidewalks) and natural access control (landscaping buffers and other distinctions between public and private spaces), the Project can be designed to reduce crime. The Project would have defensible spaces designed to reduce opportunity for crimes to occur and ensure safety and security. In addition, the lighting and landscaping design would ensure high visibility, and the Project would provide for on-site security measures and controlled access systems for residents and tenants and hotel guests to minimize the demand for police protection services. The Project would incorporate crime prevention features into the design of the building and public spaces, such as lighting of entryways and public areas, extensive windows to allow greater visibility of areas around the building, and access controls as set forth in Project Design Feature POL-PDF-5 above.

The Project would provide the LAPD with a diagram of each portion of the Project Site, showing access routes and additional access information as requested by the LAPD, to facilitate police response (see Project Design Feature POL-PDF-4). Emergency access to the Project Site would be provided by the existing street system.

The Project's direct population increase and associated demand for police services, along with the provision of on-site security features, coordination with LAPD, and incorporation of crime prevention features, would not require the provision of new or physically altered police stations in order to maintain

[12] *Assumes a 2.43 persons-per-household ratio for the City from the American Community Survey, 5-year (2013-2016) Average Estimates. Refer to* ***Section IV.J, Population, Housing, and Employment****.*

acceptable service ratios or other performance objectives for police protection. Therefore, Project impacts on the LAPD would be less than significant.

(2) Mitigation Measures

No significant impacts related to police protection have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to police protection would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

Generally, a "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects (CEQA Guidelines, §15355). An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered "cumulatively considerable" when the incremental impacts of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider that effect significant but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

An adequate discussion of a project's significant cumulative impacts, in combination with other closely cumulative projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence.

The analysis below is based on a list approach to determine the Project's contributing effect on potential cumulative impacts to police protection services. A total of 117 cumulative projects were identified in the study area (listed in Table III-1 in **Section III, Environmental Setting**, of the Draft EIR). In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project’s future baseline forecast, as the Project is to be built out

by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many cumulative projects identified below. Accordingly, it can be assumed that the projected growth reflected by the list of related projects, which itself is a conservative assumption as discussed below would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

Implementation of the Project, in conjunction with these other cumulative projects, would increase demand for police protection services based on an increase in resident population. As described in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, it is estimated that the cumulative projects (Project + other proposed development projects in the downtown area) would generate approximately 31,334 housing units (27,545 within the LAPD's Central Area boundaries) and 76,142 residents (66,934 within the LAPD's Central Area boundaries).[13,14] All but 16 of the cumulative projects listed would be served by the Central Community Police Station. The remainder would be served by other police stations. In order to maintain the existing officer-to-resident ratio within the Central Area, this cumulative residential population growth would result in a need for approximately 619 additional officers within the Central Area.[15]

The Central Community Police Station has 370 sworn police officers. The addition of 619 officers to maintain the existing ratio would more than double existing Central Area staff levels. However, each of the cumulative projects would be individually subject to LAPD review and would be required to comply with all applicable safety and emergency access requirements of the LAPD and the City in order to adequately address police protection service demands. In addition, the Project's residential population would be approximately 0.4 percent of the overall residential population within the LAPD's Central Area boundaries (assuming all the cumulative projects are built). Accordingly, the Project's contribution to additional crime generated by the cumulative projects and the need for additional officers would also be approximately 0.4 percent, representing a substantially small contribution to the overall need for police protection services. Similar to the Project, cumulative projects would contribute to funding police protection services in the area by generating annual revenue from property taxes that would be deposited into the City's General Fund, which could potentially be used to fund the construction of

[13] *Cumulative Projects = 31,205 dwelling units + 129 dwelling units from the Project = 31,334 dwelling units.*

[14] *Assumes a 2.43 persons-per-household ratio for the City from the American Community Survey, 5-year (2013-2016) Average Estimates. Refer to* ***Section IV.J, Population, Housing, and Employment*** *of the Draft EIR.*

[15] *The current officer-to-population ratio is 9.26/1,000. 66,934 residents/1,000 = 66,94 x 9.26 = 619 (a rounded number).*

future police facilities and support hiring more police officers. This would further ensure that the Project's incremental effect on police protection service would not be cumulatively considerable. Through this process, the ability of the LAPD to provide adequate facilities to accommodate future growth and maintain acceptable levels of service would be ensured. On this basis, it is anticipated that potential impacts to police protection would not be cumulatively considerable. Furthermore, the increased demands for additional LAPD staffing, equipment, and facilities would be funded via existing mechanisms (e.g., property taxes and government funding) to which both the Proposed Project and the cumulative projects would contribute.

With regard to cumulative impacts on police protection, consistent with *City of Hayward v. Board Trustees of California State University* (2015) 242 Cal.App.4th 833 ruling and the requirements stated in the California Constitution Article XIII, Section 35(a)(2) in Subsection 2.a.(1) above, the obligation to provide adequate public safety services, including police protection, is the responsibility of the City. Through the City's regular budgeting efforts, LAPD's resource needs, including staffing and possibly station expansions or new station construction, would be identified and allocated according to the priorities at the time. At this time, LAPD has not identified that it will be constructing a new station in the area impacted by this Project either because of this Project or this Project and other projects in the service area. If LAPD determines that new facilities are necessary at some point in the future, such facilities: (1) would occur where allowed under the designated land use; (2) would be located on parcels that are infill opportunities on lots that are between 0.5 and 1.0 acre in size; and (3) could qualify for a categorical exemption or Mitigated Negative Declaration under CEQA Guidelines Section 15301 or 15332 and would not be expected to result in significant impacts. Further analysis, including a specific location, would be speculative and beyond the scope of this document.

Based on the above, the Project's contribution to cumulative operational impacts to police protection services would not be cumulatively considerable. The Project would not result in cumulative adverse impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain LAPD's capability to serve the Project Site. As the Project would not result in a substantial incremental contribution to the cumulative demand for police protection services, the Project's contribution to cumulative impacts on police protection services would be less than significant.

(2) Mitigation Measures

No significant cumulative impacts related to police protection services have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to police protection services would be less than significant.

IV. Environmental Impact Analysis

K.3 Public Services – Schools

1. Introduction

This section addresses the potential impacts of the Project on the demand for school services. Within the City of Los Angeles (City), the Los Angeles Unified School District (LAUSD) provides public education. School service needs are related to the size of the residential population, the geographic area served, and community characteristics. Projects that affect these factors (e.g., by increasing residential population in an area) may increase the demand for public school facilities. This section is partially based on written correspondence from LAUSD, included as **Appendix H-3** of the Draft EIR:

H-3. *Correspondence from Rena Perez, Los Angeles Unified School District, October 6, 2017.*

2. Environmental Setting

a) Regulatory Framework

(1) State of California

(a) Board of Education

The LAUSD is mandated by the State of California with the administration and provision of public elementary and secondary education to the residents of the City and some surrounding areas. Funds for the construction and maintenance of public schools within the LAUSD come primarily from the State government.

(b) Open Enrollment Policy

The open enrollment policy is a State-mandated policy that enables students anywhere in the LAUSD to apply to any regular, grade-appropriate LAUSD school with designated "open enrollment" seats. The number of open enrollment seats is determined annually. Each individual school is assessed based on the principal's knowledge of new housing and other demographic trends in the attendance area. Open enrollment seats are granted through an application process that is completed before the school year begins. Students living in a particular school's attendance area are not displaced by a student requesting an open enrollment transfer to that school.

(c) School Facilities Fee Plan

California Education Code Section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities. The LAUSD School Facilities Fee Plan has been prepared to support the school district's levy of the fees authorized by Section 17620 of the California Education Code.[1]

The Leroy F. Greene School Facilities Act of 1998 (SB 50) sets a maximum level of fees a developer may be required to pay to mitigate a project's impacts on school facilities. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits, and subdivisions. The provisions of SB 50 are deemed to provide full and complete mitigation of potential school facilities impacts, notwithstanding any contrary provisions in CEQA or other state or local laws (Government Code Section 65996). The fees are based on building permits. The LAUSD School Facilities Needs Analysis has been prepared to support the school district's levy of the fees authorized by Section 17620 of the California Education Code.[2] Payment of these fees would be mandatory for the Project Applicant and would fully mitigate any impact upon school services generated by the Project.

(d) Proposition 51 (Public School Facility Bonds)

In November 2016, California voters approved Proposition 51 authorizing the State of California to issue $9 billion in bonds to fund the improvement and construction of school facilities for K-12 schools and community colleges. Of this total $3 billion is to be spent on the construction of new school facilities, $3 billion is to be spent on the improvement or modernization of existing school facilities, $500 million is to be spent on providing facilities for charter schools, and the remainder is to be dedicated to technical education programs and community colleges.

(2) Regional

The LAUSD School Facilities Needs Analysis has been prepared to support the school district's levy of the fees authorized by Section 17620 of the California Education Code.[3] Per section 65995.5 and 65995.6 of the Government Code, developer fees have been imposed for new residential construction, commercial/industrial construction, self-

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[1] *LAUSD, School Facilities Fee Plan, March 2, 2002.*

[2] *LAUSD, Developer Fee Rates.*

[3] *Ibid.*

storage construction, and parking structure construction within the boundaries of the LAUSD.[4] Payment of these fees would be mandatory for the Project Applicant, and would fully mitigate any impact upon school services potentially generated by the Project.

(3) City of Los Angeles

The City's General Plan Framework Element (Framework Element), adopted in December 1996 and readopted in August 2001, contains policies and objectives that address school services within the City and the LAUSD. The Framework Element contains the following goal, objective, and policy related to schools:

GOAL 9N: Public schools that provide a quality education for all of the City's children, including those with special needs, and adequate school facilities to serve every neighborhood in the City so that students have an opportunity to attend school in their neighborhoods.

- **Objective 9.31:** Work constructively with the Los Angeles Unified School District to monitor and forecast school service demand based upon actual and predicted growth.
  - **Policy 9.31.1:** Participate in the development of, and share demographic information about, population estimates.

b) Existing Conditions

(a) Existing Facilities

Within the City, the LAUSD provides public education for nearly 602,000 students in grades K-12 at 449 elementary schools; 79 middle schools; and 94 high schools, and additional schools, including magnet centers, year-round schools, span schools, continuation schools, opportunity schools, special education schools, and community day schools. Additionally, the LAUSD provides public education partially or entirely within 26 incorporated cities in Los Angeles County.[5]

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[4] *LA Department of Building and Safety, Permit Fee Estimate.*

[5] *LAUSD, L.A. Unified Fingertip Facts 2018-2019: https://achieve.lausd.net/site/handlers/filedownload.ashx?moduleinstanceid=47248&dataid=68431&FileName=Fingertip%20Facts2018-19_EnglishFinalDS.pdf*

The Project Site is served by the following LAUSD public schools:[6]

- 9th Street Elementary School (K-5), located at 835 Stanford Avenue;
- Hollenbeck Middle School (6-8), located at 2510 E. 6th Street;
- Roosevelt High School (9-12), located at 456 S. Mathews Street; and
- Felicitas & Gonzalo Mendez High School (9-12), located at 1200 Plaza Del Sol.

The locations of these schools relative to the Project Site are shown in Figure IV.K.3-1. Information regarding the recent enrollments and capacities of these schools is provided in Table IV.K.3-1.

Table IV.K.3-1
LAUSD Schools Enrollments and Capacities

Name	Current Capacity[1]	Resident Enrollment[2]	Actual Enrollment[3]	Current Overage/ (Shortage)[4]	Overcrowded Now?	Projected Capacity	Projected Enrollment	Future Overage/ (Shortage)[6]	Overcrowding Future?
9th Street Elementary School	340	287	342	53	No	324	381	(57)	Yes
Hollenbeck Middle School	1,453	1,370	1,073	83	No	1,351	1,270	81	No
Boyle Heights Zone of Choice (High School)[5]	3,300	3,688	2,682	(388)	Yes	3,102	3,498	(396)	Yes

1 Refers to the school's current operating capacity or the number of students the school can serve while operating on its current calendar. Excludes capacity allocated to charter co-locations. Includes capacity for magnet program.

2 Refers to the total number of students living in the school's attendance area and who are eligible to attend the school. Includes magnet students.

3 Refers to the number of students actually attending the school now, including magnet students.

4 Refers to the current overage or (shortage): equal to (current capacity) – (resident enrollment).

5 Schools and programs that are part of the "school choice area" pull enrollments from the school(s) that have resident areas, as defined by attendance boundaries. The individual school and calculated total capacities and enrollments for school choice areas are reported to show current and projected seating overage/shortage and overcrowding. If any of the school choice area schools is multi-track, the service area is considered overcrowded.

6 Based upon LAUSD five-year enrollment projections covering 2017-2022.

*Source: LAUSD, October 2017. Refer to **Appendix H-3** of the Draft EIR.*

*6 Written correspondence from Rena Perez, LAUSD, October 7, 2017. Refer to **Appendix H-3** of the Draft EIR.*

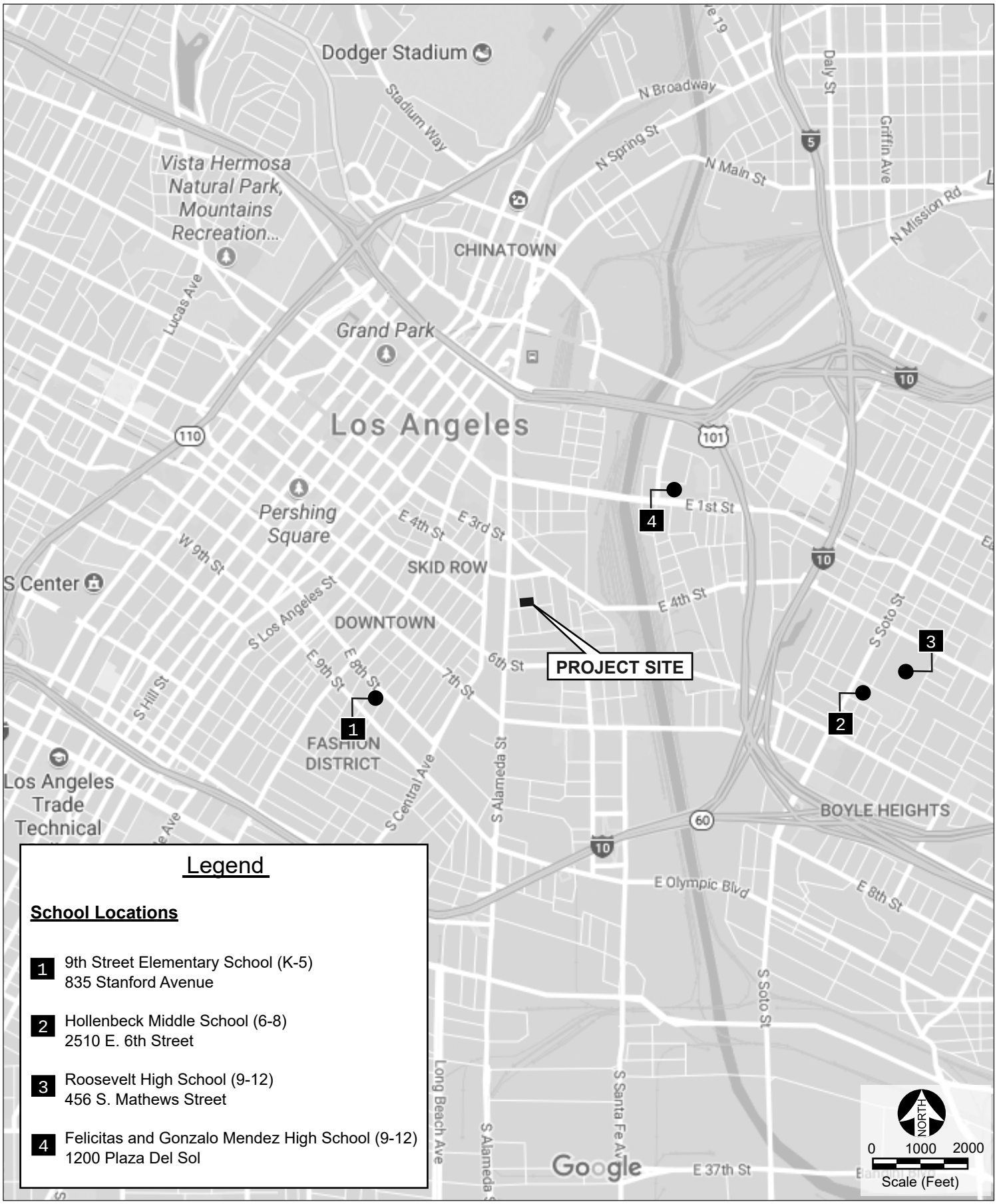

Figure IV.K.3-1
Location of Schools Serving the Project Site

Source: Google Maps, 2018.

(a) Charter Schools

Charter schools represent the opportunity to examine practices and develop structures that can help solve the many challenges facing LAUSD schools and the greater educational community. Charter schools originated from the Charter School Act of 1992. The subsequent AB 544 legislation established further guidelines and requirements for charter schools. The legislation is also intended to shift toward a performance-based system and provide competition within the public system. A charter school is granted by the LAUSD Board of Education and approved by the state for a period of up to five years. LAUSD maintains two types of charter schools: conversion charters, which are existing District schools that later become charters; and start-ups, which are charter schools that are newly created by any member of the public (e.g., educators, parents, foundations, and others). Charter schools are open to any student who wishes to attend, from any area of the City. Although certain attendance preferences may be given, enrollment is conducted by lottery.[7] The following charter schools are located near the Project Site:[8]

- Para Los Niños (K-8), located at 835 Stanford Avenue
- Puente Learning Center (K-12), located at 501 South Boyle Avenue

(b) Magnet Programs

The option to attend magnet programs is also available to students living within the service boundaries of LAUSD. Magnet programs provide specialized curriculums and instructional approaches to attract a voluntary integration of students from a variety of neighborhoods in a metropolitan area. Magnet programs typically establish a unique focus, such as gifted and talented, math and science, performing arts, or basic skills programs. Some magnet programs occupy entire school sites, while other magnet centers are located on regular school campuses with access to activities and experiences shared with the host school. Applications for magnet programs are mailed to the homes of enrolled LAUSD students in December. Typically, students applying to gifted and talented programs are required to demonstrate advanced academic achievement and/or test scores. Currently, there are 260 magnet programs located within the LAUSD. The following Magnet Schools are located in the Project area:

- Bravo Medical Magnet School, located at 1200 Cornwell Street

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[7] *LAUSD, Charter Schools: http://achieve.lausd.net/charter, July 11, 2017.*

[8] *LAUSD, Charter School Roster 2014-2015, for schools in zip codes 90016, 90035, 90034, 90019: http://achieve.lausd.net/charter.*

- Math, Science & Technology Magnet Academy at Roosevelt High School, located at 456 S. Matthews Street
- Downtown Magnets High School, located at 1081 W. Temple Street

(c) Private Schools

There are also a number of private schools in the Project area that would serve as convenient alternatives to LAUSD schools, should Project residents elect this option. These schools are listed below in Table IV.K.3-2.

Table IV.K.3-2
Private Schools in the Project Area

School	Address	Grade Level	Number of Students	Distance (mile)
Lumbini Child Development Center	505 E. 3rd Street	K-6	28	0.5
Nishi Hongwanji Child Development Center	815 E. 1st Street	K-6	44	0.9
Dolores Mission	170 S. Gless Street	K-8	230	1.2
St. Turibius Elementary	1524 Essex Street	K-8	152	1.5
White Memorial Adventist School	1605 New Jersey Street	K-8	66	1.7
Bishop Mora Salesian High School	960 S. Soto Street	9-12	455	1.8
School of Santa Isabel	2424 Whittier Boulevard	K-8	242	1.9

List of Private Schools enrollment using 90013 zip code search on http://private-schools.findthebest.com/. Only schools within a 2.0-mile radius of the Project Site are shown.

3. Project Impacts

a) Methodology

In determining the student generation of the uses proposed by the Project, generation rates based on residential and commercial/office uses were used, as shown in Table IV.K.3-3. Each rate was multiplied by the appropriate live/work unit count or square footage total to obtain an approximation of how many students would be generated based on the live/work and commercial components of the Project. The total number of students generated was then added to the existing student enrollment for the elementary school, middle school, and the high school Zone of Choice listed in Table IV.K.3-1. This number was compared to the total capacity to determine whether the schools could accommodate the Project's student generation.

Table IV.K.3-3
LAUSD Student Generation Rates

Use	School Level		
	Elementary	Middle	High
Non-Residential Per Employee	0.2691		
Students Per Household	0.4	0.1	0.2

Source: LAUSD, 2012 Developer Fee Justification Study, February 9, 2012.

The following is from the LAUSD Justification Study: Table 3 (page 6) for students per household rate and Table 12 (page 16) for students per non-residential uses. Non-residential rates are for total number of students, not broken down by elementary, middle, or high school.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with Appendix G of the *CEQA Guidelines* (Appendix G), a project would have a significant environmental impact related to schools if the project would do the following:

(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or performance objectives for the school district.

(2) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) states that the determination of significance for the Project's impacts on schools shall be made on a case-by-case basis, considering the following factors:

(a) The population increase resulting from the proposed project, based on the increase in residential units or square footage of non-residential floor area;

(b) The demand for school services anticipated at the time of project buildout compared to the expected level of service available. Consider, as applicable, scheduled improvements to LAUSD services (facilities,

equipment and personnel) and the project's proportional contribution to the demand;

(c) Whether (and the degree to which) accommodation of the increased demand would require construction of new facilities, a major reorganization of students or classrooms, major revisions to the school calendar (such as year-round sessions), or other actions which would create a temporary or permanent impact on the school(s); and,

(d) Whether the project includes features that would reduce the demand for school services (e.g., on-site school facilities or direct support to LAUSD).

In assessing impacts related to school services in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

c) Project Design Features

No specific Project Design Features (PDFs) pertaining to schools are applicable to the Project.

d) Analysis of Project Impacts

Threshold (a) ***Would the Project result substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or performance objectives for the school district?***

(1) Impact Analysis

(a) Construction

The Project would generate part-time and full-time jobs associated with its construction between the start of construction and full buildout. However, due to the employment patterns of construction workers in Southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction job opportunities. Therefore, construction employment generated by the Project would not result in a notable increase in the resident population or a corresponding demand for schools from construction workers in the vicinity of the Project Site. Impacts on school facilities during construction of the Project would be less than significant.

(b) Operation

The increase in the number of residents and employees resulting from the Project and the potential need to enroll school-aged children residing at the Project into LAUSD schools would increase the demand for school services. As shown in Table IV.K.3-4, based on LAUSD demographic analysis, the Project would result in approximately 141 additional LAUSD students (80 elementary students, 20 middle school students, and 41 high school students). This is the direct (residents' students) and indirect (employees' students) total. It is also possible that some of the future residents of the Project already reside within the service boundaries of the LAUSD, with their school-aged children currently enrolled in the LAUSD schools near the Project Site. However, to provide for a conservative analysis, it is assumed that all of the students generated as a result of the Project would not have previously enrolled in the LAUSD schools near the Project Site and would enroll in existing LAUSD (as opposed to private or newly built LAUSD) schools.

Table IV.K.3-4
Estimated Project Student Generation

Land Use	Project Amount	Student Generation			
		Elementary	Middle	High	Total
Live/Work Units	119 net new units[1]	48	12	24	**84**
Non-Residential Uses	211 net new employees[2]	32	8	17	**57**
	Total	**80**	**20**	**41**	**141**

[1] *The Project would include 129 live/work units; 10 existing live/work units are located on the Project Site. Thus, the Project would represent a net increase of 119 live/work units on the site.*

[2] *Estimated new employment at Project Site over the existing employment. See Table 4.J-3 for calculation. A net increase of 211 employees generates approximately 57 students, using 0.2691 students per employee rate from 2012 Developer Fee Justification Study. Non-residential student generation rates are for total number of students, not broken down by elementary, middle, or high school. Thus, the total is broken down by the same relative proportion as households: 57%, 14%, and 29%.*

Under both existing conditions at the Project area LAUSD schools and projected future (2022) conditions at the Project area LAUSD schools, based on the remaining capacity data shown in Table IV.K.3-1, the Hollenbeck Middle School would have sufficient capacity to accommodate the Project's student generation. However, the 9th Street Elementary School and the Boyle Heights High School Zone of Choice could experience further overcrowding in accommodating the Project's student generation. Nonetheless, pursuant to the California Government Code, the Project Applicant's payment of the school fees established by the LAUSD in accordance with existing rules and regulations regarding the calculation and payment of such fees would, by law,

provide full and complete mitigation for the Project's direct and indirect impacts to schools.

Strategies that LAUSD may implement to accommodate additional students generated by the Project include changes in attendance boundaries, grade reconfigurations, use of portable classroom buildings, and/or additions to existing schools. The number of Project-generated students that would actually attend the LAUSD schools serving the Project Site may be less than the students calculated since the analysis does not take into account options to allow Project-generated students to receive education elsewhere. These options include the following:

- Private schools;
- Home-schooling;
- Open enrollment that enables students anywhere within the LAUSD to apply to any regular, grade-appropriate LAUSD school with designated "open enrollment" seats;
- Magnet schools and magnet centers that are open to all students in the LAUSD. Transportation is provided to students who participate in magnet programs who live outside a two-mile radius for elementary students, five-mile radius for secondary students, or outside the magnet school attendance boundary;
- The Permits With Transportation (PWT) Program, which provides transportation for students seeking a more integrated experience to schools outside their home attendance area;
- Intra-district parent employment-related transfer permits that allow students to enroll in a school that serves the attendance area in which the student's parent is regularly employed;
- Sibling permits that enable students to enroll in a school where a sibling is already enrolled; and
- Child care permits that allow students to enroll in a school that serves the attendance area in which a younger sibling is cared for daily during after school hours by a known child care agency, private organization, or verifiable child care provider.

Therefore, based on the mandatory payment of the school fees established by the LAUSD in accordance with existing rules and regulations regarding the calculation and payment of such fees, the Project's direct and indirect impacts to school services would be less than significant.

(2) Mitigation Measures

No significant impacts related to schools have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to schools would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

Generally, a "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects (CEQA Guidelines, §15355). An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered "cumulatively considerable" when the incremental impacts of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider that effect significant but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

An adequate discussion of a project's significant cumulative impact, in combination with other closely cumulative projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence.

The analysis below is based on a list approach to determine the Project's contributing effect on potential cumulative impacts to schools. A total of 117 cumulative projects were identified in the study area (see Table III-1 in **Section III, Environmental Setting**, of the Draft EIR). In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many cumulative projects identified below. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects, which

itself is a conservative assumption as discussed below would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

LAUSD's facility planning assumptions are based on overall demographic trends, and although not specifically based upon new development projects, are intended to address changes in student enrollment arising from area population trends from various sources, including new development. Implementation of the Project in conjunction with the cumulative development projects would generate students based on an increase in dwelling units and non-residential uses (employees' students). It is estimated that the cumulative projects (Project + other proposed development projects in the downtown area) would generate approximately 31,334 dwelling units and 76,142 residents. It is estimated that the cumulative projects (Project + other area development) would generate approximately 56,399 employees.[9] All of the cumulative projects would be served by the LAUSD and a portion of them would be located within the same school service zones as the Project and thus, would be impacting the same schools as the Project.

As shown in Table IV.K.3-6, this increase in the cumulative residential population of the area is estimated to generate a total of approximately 21,936 students; the non-residential component of the Project plus the cumulative non-residential development projects would be estimated to generate an additional 15,177 students.

Table IV.K.3-6
Estimated Cumulative Student Generation

Land Use	Cumulative Amount	Student Generation			
		Elementary	Middle	High	Total
Residential Units	31,334 units	12,534	3,133	6,269	**21,936**
Non-Residential Uses	56,399 employees	8,651	2,125	4,401	**15,177**
				Total	**37,113**

56,399 employees generate 15,177 students, using 0.2691 students per employee rate from 2012 Developer Fee Justification Study. Non-residential rates are for total number of students, not broken down by elementary, middle, or high school. Thus, the total is broken down by the same relative proportion as households: 57%, 14%, and 29%.

[9] *The cumulative projects shown on Table III-2 plus the Proposed Project would generate approximately 25,210,982 square feet of commercial land uses = 2.2371 employees/1,000 square feet = 56,399 employees.*

Depending on their location, the cumulative projects would be served by a variety of LAUSD schools located in the area. In addition, the students could be enrolled in private schools or one of the LAUSD charter or magnet schools located in the area. For the cumulative projects that would be located within the same school service areas as the Project Site, the addition of the cumulative projects' students to existing enrollments and capacities at LAUSD facilities would result in each of the designated schools being over capacity. However, as with the Project, the applicants of the cumulative projects would be required to pay a school fee to the LAUSD to help reduce impacts that they may have on school services. **Compliance with the provisions of the California Government Code is deemed to provide full and complete mitigation of school facilities impacts. Thus, with the full payment of all applicable school fees, the Project coupled with expected cumulative growth would reduce potential projected cumulative impacts to schools. As the Project would not result in a substantial incremental contribution to the cumulative demand for school services, the Project would not have a cumulatively considerable impact to schools, and cumulative impacts would be less than significant.**

(2) Mitigation Measures

No cumulative impacts related to schools have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts to schools would be less than significant.

IV. Environmental Impact Analysis

K.4 Public Services – Parks

1. Introduction

This section addresses the potential impacts of the Project on parks and recreational facilities and focuses on whether existing facilities are sufficient to accommodate the growth that could be potentially generated by the Project. Within the City of Los Angeles (City) the Los Angeles Department of Recreation and Parks (LADRP) provides park and recreational facilities. This section is based, in part, on the following written correspondence from the LADRP, included as **Appendix H-4** of the Draft EIR:

H-4. *Correspondence from Michael A. Shull, General Manager, and Darryl Ford, Senior Management Analyst, Los Angeles Department of Recreation and Parks, September 29, 2017.*

2. Environmental Setting

a) Regulatory Framework

(1) State Quimby Act

Section 66477 of the California Government Code, also known as the Quimby Act, was enacted in an effort to promote the availability of park and open space areas in response to California's rapid urbanization and decrease in the number of parks and recreational facilities. The Quimby Act authorizes cities and counties to enact ordinances requiring the dedication of land, or the payment of fees for park and/or recreational facilities in lieu thereof, or both, by developers of residential subdivisions as a condition to the approval of a tentative map or parcel map, or a zone change. Thus, Los Angeles Municipal Code (LAMC) Section 17.12 was authorized pursuant to the Quimby Act. Compliance with the Quimby Act as set forth in the LAMC is discussed below. The Quimby Act permits the City to require dedications of land not to exceed three acres of parkland per 1,000 persons residing within a subdivision, and in-lieu fee payments for residential development projects.

(2) City of Los Angeles

(a) Los Angeles Municipal Code

(i) Park Fees

Ordinance 184,505 (Park Fee Ordinance) was passed by the City Council on September 7, 2016 with an effective date of January 11, 2017. The Park Fee Ordinance updates and replaces the City's previous park dedication and fee payment ordinance adopted pursuant to the Quimby Act. The Park Fee Ordinance requires most residential projects that create new dwelling units or joint living and work quarters to dedicate land or to pay a fee (Park Fee) for the purpose of developing park and recreational facilities. Residential projects that propose one or more additional dwelling units will be subject to the new Park Fee unless they meet one of the exceptions listed in LAMC Section 12.33 C.3 (e.g., certain affordable housing units and secondary dwelling units may be exempt from any requirement to pay the Park Fee).[1]

Residential projects that are vested per LAMC Sections 12.24-T,2, 12.26-A,3, 12.32-Q, or 17.15 prior to the effective date of the Park Fee Ordinance (January 11, 2017) are not subject to the Park Fee. Because the entitlement applications for the Project were filed with the Department of City Planning (DCP) and were deemed complete on December 1, 2016, the Project is deemed vested and, thus, will not be required to pay the updated Park Fee. However, the Project would still be subject to older applicable Recreation and Park Fee provisions that were effective on the vesting date of the entitlement (see discussion below). These provisions shall be applicable for the life of the entitlement, provided that the fee is paid prior to the recordation of a final map or effectuation of a zone change, and that the Project does not lose its vested rights.[2]

Effective January 11, 2017, the LADRP is responsible for calculating the required park fees owed by each residential development project, including subdivision projects, pursuant to the Park Fee Ordinance and issuing the Park Fee calculation letters to applicants. LADRP is also be responsible for calculating the required fees for vested projects (such as the Project) that are not subject to the Park Fee pursuant to the Park

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[1] *Los Angeles Department of Recreation and Parks, Park Fees: http://www.laparks.org/planning/park-fees; accessed July 12, 2017.*

[2] *Ibid.*

Fee Ordinance but were subject to the older Recreation and Park Fee provisions that were effective prior to January 11, 2017.[3]

In lieu of paying the Park Fee:[4]

- Land may be dedicated to the City for public park and recreational purposes, at the City's option. The LADRP shall determine whether the proposal complies with the LADRP's standards and requirements.

- Where facilities for park and recreational purposes are provided in a proposed residential development and such facilities will be privately owned and maintained by the future owners of the development, the areas occupied by such facilities may be partially credited against the requirement of dedication of land for park and recreational purposes or the payment of the Park Fee.

(ii) Quimby Ordinance Applicable to the Project

Prior to the enactment of the Park Fee Ordinance in September 2016, Section 17.12 of the LAMC, authorized under the Quimby Act, required developers to set aside land for park and recreational purposes, donate conservation elements, and/or pay fees for park improvements, provides standards for parkland acreage requirements and identifies fees per unit. The area of land within a subdivision that is required to be dedicated for park and recreation uses is determined by the maximum density permitted by the zone within which the site is located.

To implement the State Quimby Act, the City established the Subdivision Fees Trust (Section 17.12 of the LAMC) in 1971. A separate park impact fee, the Zone Change Park Fee, also known as the Finn Fee (Section 12.33 of the LAMC), which applies to the finalization of zone changes for multi-unit residential projects, including rental projects, was established by the City in 1985. The fee schedule, collection, and administration of the Subdivision Fees Trust and the Zone Change Park Fee program are identical. Together, these sections are colloquially referred to as the City's "Quimby Code."[5] If a developer fails to meet the full dedication requirement, fees for park improvements may be paid to the LADRP in lieu of the dedication of all or a portion of

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[3] *Ibid.*

[4] *Ibid.*

[5] *Los Angeles Department of Recreation and Parks, Quimby Fees: http://www.laparks.org/planning/quimby.htm.*

the land. The in-lieu fees are calculated per dwelling unit to be constructed based on the proposed zoning of the project. The Quimby and Finn fees are used to acquire necessary land and/or develop new neighborhood and community parks or recreational facilities, which would reasonably serve each residential project.

Section 17.12 of the LAMC allows recreation areas and passive areas developed within a project site for use by the particular project's residents to be credited against the project's land dedication requirement. Recreational areas that qualify under this provision of Section 17.12 of the LAMC include swimming pools and spas (when the spas are an integral part of a pool complex) and children's play areas with playground equipment comparable in type and quality to those found in City parks. Furthermore, the recreational areas proposed as part of a project must meet the following standards in order to be credited against the requirement for land dedication:

- each facility is available for use by all of the residents of a project; and
- the area and the facilities satisfy the park and recreation needs of a project so as to reduce that project's need for public park and recreation facilities.

The DCP is responsible for determining whether a project would be required to dedicate land for recreation and park purposes or pay a fee in-lieu. The amount of land required to be dedicated or the amount of Quimby Fees required to be paid is also determined and calculated by the DCP. If a project is required to pay Quimby Fees, those fees are collected and administered by the LADRP.

(iii) Parkland Taxes Applicable to the Project

Prior to the enactment of the Park Fee Ordinance in September 2016 and pursuant to Section 21.10.3(a)(1) (Dwelling Unit Construction Tax) of the LAMC, the City imposed a tax of $200 per dwelling unit on all construction of new and modification of existing dwelling units to be paid to the Department of Building and Safety. These taxes are placed into a "Park and Recreational Sites and Facilities Fund" to be used exclusively for the acquisition and development of park and recreational sites. If a developer has already paid Quimby fees, as described above, or has dedicated in lieu parkland or recreational facilities, the required Dwelling Unit Construction Tax may be reduced in the form of a credit in the amount of fees already paid.

(iv) LAMC Required Open Space

The LAMC provides minimum standards for the amount of "open space" that residential development projects should provide on-site. Open space includes both common and private greenspace and recreational amenities that meet specific standards. However, it should be noted that not all areas designated as open space in the LAMC would be

classified as park or recreational facilities under the City's Park Fee program (discussed above), under the General Plan Framework Element, or the City's Public Recreation Plan (PRP). Therefore, a project's ability to provide the required amount of on-site open space, pursuant to the LAMC, should not be used as the only basis to determine an environmental impact under CEQA with respect to parks and recreational facilities.

Pursuant to Section 12.21-G of the LAMC, new construction in the City of six or more dwelling units on a lot is required to provide, at a minimum:

- 100 square feet of usable open space for each dwelling unit having less than three habitable rooms;
- 125 square feet for each dwelling unit having three habitable rooms; and
- 175 square feet for each dwelling unit having more than three habitable rooms.

Usable open space is defined as area which is designed and intended to be used for active or passive recreation and is open to the sky and has no structures that project into the common open space area. Usable open space may consist of private and/or common area open space. However, common open space areas must be a minimum of 400 square feet and must constitute at least 50 percent of the total open space provided. Open space does not generally include parking areas, driveways, or required front and side yards. A minimum of 25 percent of the common open space area shall be planted with ground cover, shrubs, or trees, and at least one 24-inch box tree is required for every four dwelling units.

(b) LADRP Citywide Community Needs Assessment

In 2009, the LADRP commissioned the first assessment of existing City parks and recreation facilities since 1999, as a preliminary step in developing a Citywide park master plan and a five-year capital improvement plan. The report provides an inventory of existing facilities, defines geographic areas of need and recommended facilities to serve specific populations, and identifies priorities for additional parks and recreation facilities. The report provides a more current assessment of conditions and future needs than the General Plan's PRP. Based on the existing supply of parks and recreation facilities and the estimated population within the City as of 2009, the Citywide Community Needs Assessment recommends service levels of 10.6 acres of park lands per 1,000 persons Citywide, including (per 1,000 persons) 0.10 acre of mini-parks (i.e.,

parks less than 1.0 acre in size), 1.50 acres of neighborhood parks, 2.0 acres of community parks, and 6.0 acres of regional and large urban parks.[6] This Citywide Community Needs Assessment recommends service levels but does not establish requirements for individual development projects.

(c) Los Angeles General Plan

The City's General Plan indicates that a park and recreation system should address standards in the following three areas: (1) sufficient land area reserved for parks and recreation; (2) appropriate distribution of park and recreation facilities throughout the City; and (3) a full complement of park and recreation facility types (i.e., active and passive recreation for all age groups) to accommodate a wide variety of users. Within the City's General Plan, the PRP establishes policies and standards related to parks, recreation facilities, and open space areas in the City. The PRP provides Citywide goals, objectives, and recommendations concerning parks and recreation facilities.

(i) Public Recreation Plan[7]

The PRP is part of the Service Systems Element of the City's General Plan and categorizes parks into three groups: neighborhood, community, and regional. Neighborhood parks are typically five to 10 acres in size, have a service radius of approximately one-half mile, and are pedestrian-accessible without crossing a major arterial street or highway/freeway. Community parks are generally 15 to 20 acres, have a service radius of two miles, and a minimum of two acres of community parkland should be provided for every 1,000 residents with equal distribution throughout the City. Regional parks are greater than 50 acres, provide specialized recreational facilities and/or attractions, have a service radius encompassing the entire Los Angeles region, and a minimum of six acres of regional parkland should be provided for every 1,000 residents with equal distribution throughout the City.[8] It should be noted that these minimum acreages are the City's desired long-range standards. These long-range standards may not be reached during the life of the PRP, and, as such, the PRP includes more attainable short- and intermediate-range standards of one acre per 1,000

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[6] *City of Los Angeles Department of Recreation and Parks, 2009 Citywide Community Needs Assessment, Summary Report, page 63.*

[7] *Public Recreation Plan, Section 13: http://cityplanning.lacity.org/Code_Studies/GeneralElement/PublicRecreationPlan.pdf.*

[8] *City of Los Angeles Citywide General Plan Framework Final Environmental Impact Report, June 8, 1996, (See DEIR Chapter 2.14: Recreation and Open Space, page 2.14-2).*

persons for neighborhood parks and one acre per 1,000 persons for community parks. These standards are Citywide goals and are not intended to be requirements for individual development projects.

(ii) General Plan Framework Element

The City's General Plan Framework Element (Framework Element), adopted in December 1996 and readopted in August 2001, contains policies and objectives that address parks within the City. The Framework Element contains the following goal, objective, and policy related to parks:[9]

GOAL 9L: Sufficient and accessible parkland and recreation opportunities in every neighborhood of the City, which gives all residents the opportunity to enjoy green spaces, athletic activities, social activities, and passive recreation.

- **Objective 9.22:** Monitor and forecast demand for existing and projected recreation and park facilities and programs.
    - **Policy 9.22.1:** Monitor and report appropriate park and recreation statistics and compare with population projections and demand to identify the existing and future recreation and parks needs of the City.

(iii) Central City North Community Plan

The Central City North Community Plan (Community Plan) is one of 35 community plans that make up the Land Use Element of the City's General Plan. The Community Plan was adopted on December 15, 2000, with CPC File No. 95-0352-CPU and Council File No. 97-0282. The Community Plan contains the following goal, objective, and policy related to parks and recreation:

GOAL 4: Adequate recreation and park facilities which meet the needs of the residents in the Plan Area.

- **Objective 4-1:** To conserve, maintain and better utilize existing recreation and park facilities which promote the recreational needs of the community.
    - **Policy 4-1.1:** Preserve the existing recreational facilities and park space.

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[9] *Los Angeles Framework Element: http://cityplanning.lacity.org/Cwd/Framwk/chapters/09/09.htm.*

The Community Plan area has a parkland acres-to-population ratio of neighborhood and community parks of 0.84 acres per 1,000 residents.[10] As stated previously, the PRP establishes short- and intermediate-range standards of one acre per 1,000 persons for neighborhood parks and one acre per 1,000 persons for community parks as an attainable Citywide standard. Thus, the parkland-to-resident ratio for the Community Plan area currently falls below the short- and intermediate-range PRP standard of one acre per 1,000 persons, and below the long-range PRP standard of two acres per 1,000 persons, for both neighborhood parks and community parks.

b) Existing Conditions

(1) Existing Parks and Recreational Facilities

The LADRP manages all municipally owned and operated recreation and park facilities within the City, which includes approximately 16,000 acres of parkland between 444 neighborhood and regional parks, 13 lakes, 184 recreation centers, and 13 golf courses.[11] In addition, parkland managed by the County of Los Angeles and by the State of California is also available within or near the City. Table IV.K.4-1 lists the neighborhood, community, and regional parks and recreation centers that serve the Project Site.[12] The park locations are shown in Figure IV.K.4-1.

According to the LADRP, the following park is currently under construction by the LADRP within two miles of the Project Site and is anticipated to be completed by 2020:[13]

- 1st and Broadway Park located at 217 West 1st Street – 1.96 acres

As discussed above, the Community Plan Area has a parkland acres-to-population ratio of neighborhood and community parks of 0.84 acre per 1,000 residents, as compared to the goal of 4.0 acres per 1,000 residents established in the PRP.[14]

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[10] *Los Angeles Department of Recreation and Parks, Darry Ford, correspondence, September 29, 2017. See **Appendix H-4** of the Draft EIR.*

[11] *Los Angeles Department of Recreation and Parks: http://www.laparks.org/department/who-we-are; accessed July 12, 2017.*

[12] *Los Angeles Department of Recreation and Parks, Darry Ford, correspondence, September 29, 2017. See **Appendix H-4** of the Draft EIR.*

[13] *"Downtown's $28 Million Park Remodel Seeks Giant New Restaurant Tenant", Eater Los Angeles, November 8, 2017: https://la.eater.com/2017/11/8/16624346/downtown-outdoor-fab-park-new-restaurant-tenant-coming*

Table IV.K.4-1
Parks and Recreational Facilities Serving the Project Site

Park/Recreation Facility Name	Address
Neighborhood Park (within two-mile radius)[1]	
1. 6th and Gladys Street Park	824 East 6th Street
2. Prospect Park	612 North Echandia Street
3. Spring Street Park	428 South Spring Street
Community Park (within five-mile radius)[1]	
4. Aliso-Pico Recreation Center	370 South Clarence Street
5. Alpine Recreation Center	817 Yale Street
6. Bellevue Recreation Center	826 Lucille Avenue
7. Boyle Heights Sports Center	933 South Mott Street
8. Central Recreation Center	1357 East 22nd Street
9. Cypress Recreation Center	2630 Pepper Avenue
10. Denker Recreation Center	1550 West 35th Place
11. Downey Pool	1775 North Spring Street
12. Downey Recreation Center	1772 North Spring Street
13. Echo Park	751 Echo Park Boulevard
14. Echo Park Boys and Girls	303 Patton Street
15. Echo Park Deep Pool	1419 Colton Street
16. El Sereno North Park	4410 Garden Homes Avenue
17. El Sereno Recreation Center	4721 Klamath Street
18. El Sereno Senior Citizens Center	4818 Klamath Place
19. Elysian Valley Recreation Center	1811 Ripple Street
20. Evergreen Recreation Center	2839 East 4th Street
21.EXPO Center	3980 South Menlo Avenue
22. Fred Roberts Recreation Center	4700 Honduras Street
23. Gilbert W. Lindsay Community Center	429 East 42nd Place
24. Hazard Park	2230 Norfolk Street
25. Hollenbeck Park	415 South St. Louis Street
26. Hoover Recreation Center	1010 West 25th Street
27. Hostetter Park	3141 East Olympic Boulevard
28.James Slauson Recreation Center	5306 South Compton Avenue
29. Lafayette Park	2830 West 6th Street
30. Lake Street Park	227 North Lake Street
31. Lemon Grove Recreation Center	4959 Lemon Grove Avenue

[14] *Los Angeles Department of Recreation and Parks, Darry Ford, correspondence, September 29, 2017. See* ***Appendix H-4*** *of the Draft EIR.*

Table IV.K.4-1
Parks and Recreational Facilities Serving the Project Site

Park/Recreation Facility Name	Address
32. Lincoln Heights Youth Center	2500 Griffin Avenue
33. Lincoln Park	3501 Valley Boulevard
34. Loren Miller Recreation Center	2717 Halldale Avenue
35. MacArthur Park	2230 West 6th Street
36. Martin Luther King Jr. Park	2934 South Western Avenue
37. Miguel Contreras Learning Center Pool	322 South Lucas Avenue
38. Montecito Heights Recreation Center	4545 Homer Street
39. Msgr. Ramon D. Garcia Recreation Center	1016 Fresno Avenue
40. Normandie Recreation Center	1550 South Normandie Avenue
41. Parkview Photo Center	2332 West 4th Street
42. Pecan Recreation Center	127 South Pecan Street
43. Pershing Square	525 South Olive Street
44. Pueblo del Rio Recreation Center	5350 Alba Street
45. Ramona Gardens Park	2830 Lancaster Avenue
46. Ramona Hall Community Center	4580 North Figueroa Street
47. Rio de Los Angeles State Park	1900 North San Fernando Road
48. Roosevelt High School Pool	456 South Mathews Street
49. Rose Hill Park	3606 Boundary Avenue
50. Rose Hill Recreation center	4530 Mercury Avenue
51. Seoul International Park	3250 San Marino Street
52. Shatto Recreation Center	3191 West 4th Street
53. Silverlake Recreation Center and Dog Park	1850 West Silverlake Boulevard
54. South Park Recreation Center	345 East 51st Street
55. South Seas House Park	2301 West 24th Street
56. State Street Recreation Center	716 North State Street
57. Sycamore Grove Park	4702 North Figueroa Street
58. Toberman Recreation Center	1725 Toberman Street
59. Trinity Recreation Center	2415 Trinity Street
60. Vista Hermosa Soccer Filed	1301 West 1st Street
61. Wabash Recreation Center	2765 Wabash Avenue
Regional Parks (within ten-mile radius)	
62. Arroyo Seco Park	5568 Via Marisol
63. Ascot Hills Park	4370 Multnomah Street
64. Barnsdall Park	4800 Hollywood Boulevard
65. Cahuenga Peak Phase I	3698 West Wonderview Road (in Griffith Park)
66. Cahuenga Peak Phase II	3698 West Wonderview Road (in Griffith Park)
67. Campo de Cahuenga	3919 Lankershim Boulevard

Table IV.K.4-1
Parks and Recreational Facilities Serving the Project Site

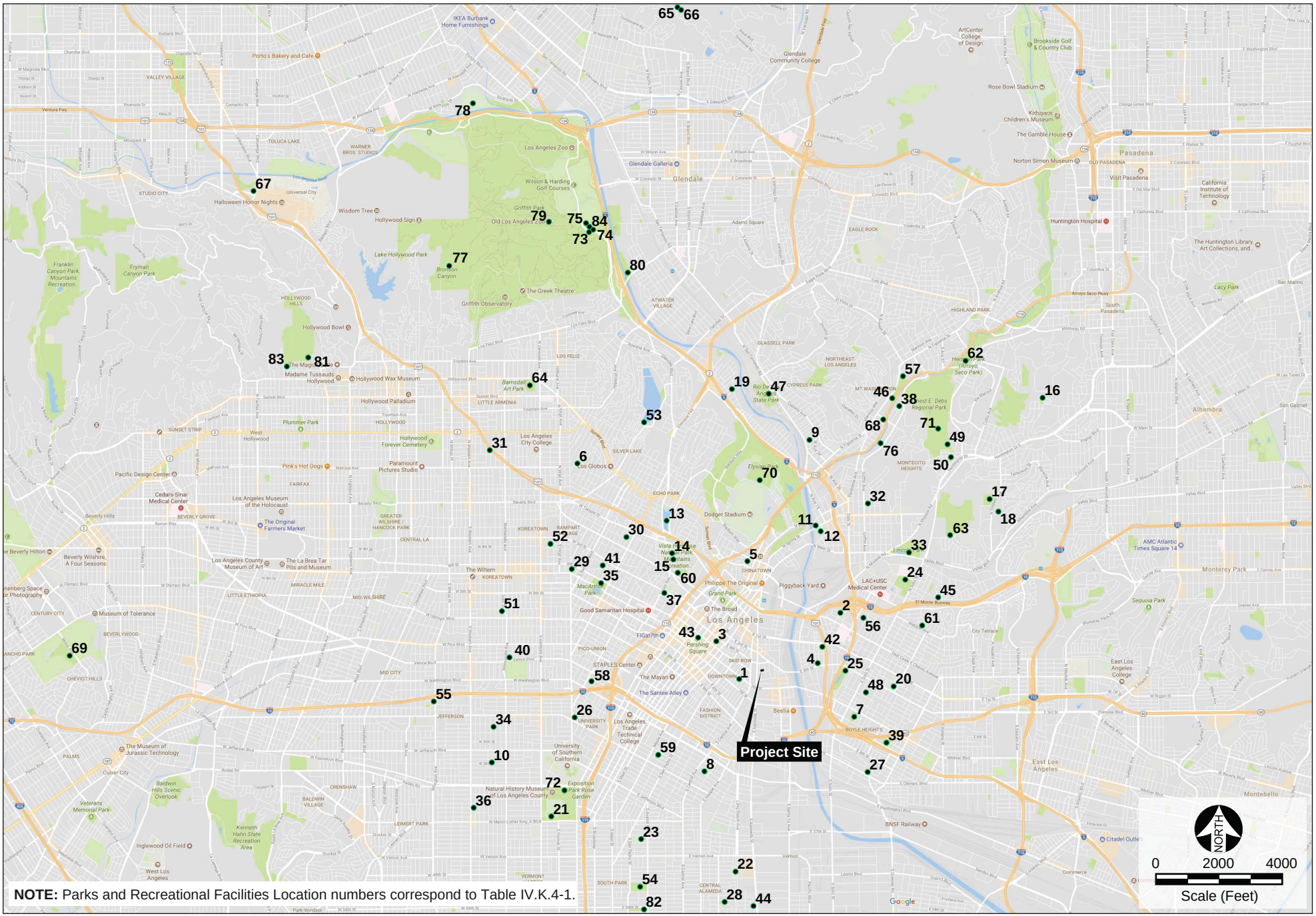
Park/Recreation Facility Name	Address
68. Charles F. Lummis Home	200 East Avenue 43
69. Cheviot Hills Park	2551 Motor Avenue
70. Elysian Park	929 Academy Road
71. Ernest E. Debs Regional Park	4235 Monterey Road
72. Exposition Park Rose Garden	701 State Drive
73. Griffith Park	4730 Crystal Springs Drive
74. Griffith Park Boys Camp	4730 Crystal Springs Drive
75. Harding Golf Course	4730 Crystal Springs Drive
76. Heritage Square	3800 Homer Street
77. Hollywoodland Girl's Camp	3200 Canyon Drive
78. LA Equestrian Center	500 Riverside Drive
79. LA Live Steamers	5202 Zoo Drive
80. Los Feliz Golf Course	3207 Los Feliz Boulevard
81. Runyon Canyon Park	2000 North Fuller Avenue
82. South LA Wetlands Park	5413 South Avalon Boulevard
83. Wattles Garden Park	1824 North Curson Avenue
84. Wilson Golf Course	4730 Crystal Springs Drive

[1] *Written correspondence from Darryl Ford, Assistant General Manager, Los Angeles Department of Recreation and Parks, September 29, 2017. Numbers correspond to those shown on Figure IV.K.4-1.*

3. Project Impacts

a) Methodology

The methodology used to evaluate potential parks and recreation impacts included the following: (1) reviewing the existing parks and recreational facilities serving the Project Site; (2) projecting the future population associated with the Project; and (3) evaluating the demand for parks and recreation service anticipated at the time of Project buildout compared to the expected level of service available, considering both DRP facilities, as well as the Project's recreational amenities. The analysis also considers whether the Project would conflict with the parks and recreation standards set forth in regulatory documents (i.e., the Quimby Act, the LAMC, and the General Plan, including the PRP).



NOTE: Parks and Recreational Facilities Location numbers correspond to Table IV.K.4-1.

Legend

- # Parks and Recreational Facilities Locations

Source: Google Maps and CAJA Environmental Services, LLC, 2018.

Figure IV.K.4-1
Parks and Recreational Facilities Locations

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

According to Appendix G of the *CEQA Guidelines* (Appendix G), a project would have a significant impact related to parks and recreation if the project would do the following:

(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks;

(b) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and

(c) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

(2) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) identifies the following criteria to evaluate Project's impacts on parks and recreation:

(a) The net population increase resulting from the project;

(b) The demand for recreation and park services anticipated at the time of project buildout compared to the expected level of service available. Consider, as applicable, scheduled improvements to recreation and park services (renovation, expansion, or addition) and the project's proportional contribution to the demand; and

(c) Whether the project includes features that would reduce the demand for recreation and park services (e.g., on-site recreation facilities, land dedication or direct financial support to the Department of Recreation and Parks).

In assessing impacts related to parks and recreational facilities in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from

the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

(c) Project Design Features

No specific Project Design Features (PDFs) related to parks are proposed as part of the Project.

(d) Analysis of Project Impacts

Threshold (a) ***Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?***

(1) Impact Analysis

(a) Public Recreation Plan

As discussed in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, the Project would generate a net increase of approximately 289 residents and a net increase of approximately 211 employees (after removal of the existing uses). Employees generated by the hotel/retail/commercial uses of the Project would not typically enjoy long periods of time during the workday to visit parks and/or recreational facilities and would, therefore, not contribute to the future demand on park services. In addition, the Project would include amenity areas, which would provide passive lounge area uses for employees to enjoy on breaks or before or after work.

The City's desired standard ratio of neighborhood- and community parks-to-population is four acres per 1,000 persons, per the PRP's long-range citywide standard (two acres per 1,000 persons for neighborhood parks and two acres per 1,000 persons for community parks). The City's desired standard ratio of regional parks-to-population is six acres per 1,000 persons, per the PRP's desired long-range citywide standard. Based on the combined neighborhood and community parkland per population ratio of four acres per 1,000 persons, the Project would generate a demand of approximately 1.16 acres of new neighborhood and community parkland. Based on six acres of regional parkland per 1,000 residents, the Project would generate an additional demand for approximately 1.73 acres of regional parkland. It should be noted that these minimum acreages are the City’s desired long-range standards. Based on the PRP’s short- and intermediate-range standards of one acre per 1,000 persons for neighborhood parks

and one acre per 1,000 persons for community parks, the Project would generate a demand for 0.29 acres of neighborhood parkland and 0.29 acres of community parkland.

The total demand based on the Project's estimated population generation is approximately 2.89 total acres of new parks (neighborhood/community + regional) and recreational facilities. The increased residential population in a currently underserved area would potentially increase the demand on existing parks and recreational facilities unless the Project includes features that would otherwise reduce or offset the additional demand for recreation and park services. The Project would include approximately 0.52 acres (22,500 square feet) of usable open space, which would consist of a variety of open space features and recreational amenities that would serve the residents' recreational needs, as discussed below. Therefore, the Project's 0.52 acre of usable open space would fall short of the PRP's guidelines for neighborhood sites and facilities, community sites and facilities, and regional recreational sites and facilities. However, as previously stated, the PRP parkland guidelines are Citywide goals and do not constitute requirements for individual development projects.

Although the Project would not dedicate any new parkland to the City, it would include a variety of recreational amenities for the use of its residents, guests, and employees. The Project includes a gym and spa on the third level, as well as a pool and spa, with adjacent roof garden and event spaces and lounging areas on the roof level. These amenities would serve to reduce the Project's demand for and use of existing recreation and park facilities in the local area.

Furthermore, compliance with regulatory requirements would ensure that the intent of the PRP's parkland guidelines would be addressed through compliance with State law as enforced through applicable LAMC requirements related to the provision and/or funding of parks and recreational spaces. Such requirements include the provision of on-site recreational amenities and open space and payment of the Dwelling Unit Construction Tax and Quimby fees, where applicable.

(b) Los Angeles Municipal Code

The Project would be subject to one or more of the following LAMC requirements that are intended to reduce the increased demands for parks and recreational facilities that are created by residential development projects:

(1) The on-site open space requirements set forth in LAMC Section 12.21-G.

(2) The Dwelling Unit Construction Tax imposed by LAMC Section 21.10.3.

(3) The Quimby Act parkland dedication requirements or in-lieu fees as set for the in LAMC Section 17.12.

(4) The Finn Fees (also called Zone Change Park Fees), imposed by LAMC Section 12.33.

As noted previously, because the Project was deemed fully vested by the City prior to the effective date of the Park Fee Ordinance, the Project would not be subject to the requirements of this ordinance. However, the Project would be required to comply with the above-listed sections of the LAMC pertaining to the payment of Quimby and Finn fees that were in place prior to the effective date of the Park Fee Ordinance. If a final map is recorded or there is a zone change (the Project is seeking a zone/height district change), then the Project would be subject to Quimby Fees. However, if a final map is not recorded and apartments are pursued (to a certificate of occupancy), the Project instead would be subject to the Dwelling Unit Construction Tax and if the requested zone change is approved, to the Finn Fees applicable to multi-unit residential projects, such as rental projects.[15] The Project's compliance with the above-referenced LAMC requirements collectively would address the Project's future demand upon recreation and park facilities by requiring the dedication of parkland or contribution of funds to be placed in a City-controlled account to be used to acquire and develop new parkland areas within the Project Site's service area. The formulas for calculating fees and/or land dedication are established to ensure that the provision of new park and recreation facilities is commensurate with the level of development that is built.

Table IV.K.4-2 shows the amount of LAMC-required open space for the Project. The Project would provide approximately 22,500 square feet of open space, which exceeds the code-required open space of 16,275 square feet, in the form of various common open space areas, landscaping, and private open space (unit balconies).

[15] *Quimby Program: http://www.laparks.org/planning/quimby.htm*

Table IV.K.4-2
Project Open Space

Use	Amount	Rate[1]	Total size (sf)
Required			
<3 Habitable rooms	50 units	100 sf / unit	5,000
=3 Habitable rooms	51 units	125 sf / unit	6,375
>3 Habitable rooms	28 units	175 sf / unit	4,900
		Total	**16,275**

[1] *Source: LAMC Section 12.21-G.*

Habitable room includes each room other than a "lobby, hall, closet, storage space, water closet, bath, toilet, slop sink, general utility room or service porch" or kitchen that is less than 100 sf.

A 1-bedroom unit would typically have 1 bedroom and a living room = 2 habitable rooms.

A 2-bedroom unit would typically have 2 bedrooms and a living room = 3 habitable rooms.

(c) Central City North Community Plan Consistency

The Project would support the objectives and policies of the Community Plan through the provision of on-site open space, recreational amenities, and landscaping, as discussed above, which would offset the demand that would be generated by Project residents for public parks and recreational facilities in the Community Plan area. In addition, Project development would not diminish the quality or accessibility of, or result in the removal of, existing parks or recreational facilities in the Community Plan area. As such, impacts with respect to consistency with the Community Plan would be less than significant.

The Project, through the payment of the required Quimby/Finn fees and/or Dwelling Unit Construction Tax, would help the LADRP achieve progress toward its goal of ensuring adequate park facilities for existing and future residential populations within the Community Plan area. The Project would not conflict with, or impede implementation of, any of the policies or goals related to parks described in the Framework Element of the General Plan or Community Plan, which describe the planning of facilities.

(d) Conclusion

In determining the Project's potential impacts to parks and recreational facilities, this analysis evaluates the potential demand of Project residents for public parks and recreational facilities, as well as the Project's consistency with applicable plans, policies,

and regulations related to parks and recreational facilities. As discussed above, due to the amount, variety, and availability of the Project's proposed open space and recreational amenities, it is anticipated that Project residents would generally utilize on-site open space to meet their recreational needs. As such, the Project would meet the applicable requirements set forth in LAMC Section 12.21. Furthermore, in accordance with the regulatory requirements discussed above, the Project would pay a Dwelling Unit Construction Tax in accordance with LAMC Section 21.10.3(a)(1) and comply with the requirements of LAMC Section 17.12 regarding payment of Quimby/Finn fees. The Project would not meet the parkland provision goals set forth in the PRP. However, as previously indicated, these are Citywide goals and are not intended to be requirements for individual development projects. Implementation of regulatory requirements would ensure that the intent of the PRP's parkland standards would be addressed through compliance with applicable LAMC requirements related to the provision and/or funding of parks and recreational spaces. **Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. Therefore, Project impacts would be less than significant.**

(2) Mitigation Measures

No significant impacts related to parks have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to parks would be less than significant.

Threshold (b) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

(1) Impact Analysis

(a) Construction

Construction of the Project would result in a temporary increase in the number of construction workers at the Project Site. Due to the employment patterns of construction workers in Southern California, and the operation of the market for construction labor,

the likelihood that construction workers would relocate their households as a consequence of working on the Project is negligible. Therefore, the construction workers associated with the Project would not result in a notable increase in the residential population of the Project vicinity, or a corresponding permanent demand for parks and recreational facilities in the vicinity of the Project Site.

During Project construction, the use of public parks and recreational facilities by construction workers would be expected to be limited, as construction workers are highly transient in their work locations and are more likely to utilize parks and recreational facilities near their places of residence. Although there is a potential for construction workers to spend their lunch breaks at the parks and recreational facilities near the Project Site, it is unlikely to occur at parks and recreational facilities beyond the immediate vicinity of the Project Site as lunch breaks typically are not long enough for workers to take advantage of such facilities and return to work within the allotted time (e.g., 30 to 60 minutes). As shown in Table IV.K.4-1, the closest neighborhood park facility to the Project Site is the 6th & Gladys Street Park, which is located approximately 0.6 miles to the west; all other parks identified in Table IV.K.4-1 are at least 0.9 miles from the Project Site. Therefore, the resulting increase, if any, in the use of such parks and recreational facilities would be temporary and negligible.

As described in **Section IV.L, Transportation/Traffic**, of the Draft EIR, the Project's primary construction haul route would most likely be Alameda Street and I-10. Trucks would enter and exit from 5th Street from either Colyton Street or Seaton Street. There are no park or recreational facilities shown in Table IV.K.4-1 that are located along this primary haul route. Therefore, Project construction would not be expected to result in access restrictions to City parks and recreation facilities in the vicinity of the Project Site or interfere with existing park usage.

Based on the above analysis, Project construction would not generate a demand for park or recreational facilities that could not be adequately accommodated by existing or planned facilities and services. **Project construction would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Therefore, impacts on parks and recreational facilities during Project construction would be less than significant.**

(b) Operation

As discussed in **Section II, Project Description**, of the Draft EIR, the Project would redevelop the Project Site with a mixed-use residential, hotel, and commercial development. The 10 existing live/work units present at the Project Site generate a current demand for parks and recreational facilities in the Project vicinity. The Project's

new residential units would result in a net increase in the residential population at the Project Site of 289 persons, as shown in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR. The population increase associated with the Project would generate additional demand for parks and recreational facilities in the Project vicinity.

As shown in Table II-7 in **Section II, Project Description**, of the Draft EIR, the Project would provide a total of approximately 22,500 square feet of open space and recreational amenities to serve the recreational needs of Project residents and guests. Specifically, the Project would include an art plaza on the ground level (refer to Figure II-5); a terrace, gym, and locker rooms on level 3 (refer to Figure II-7); outdoor residential terraces on levels 4 through 11 (refer to Figures II-8 through II-10); a pool on level 11 (refer to Figure II-10); and a pool, roof garden, and clubhouse on level 12 (refer to Figure II-11). As such, the open space and recreational amenities for the Project would exceed the open space requirements of 16,275 square feet as set forth by LAMC Section 12.21-G,2. In addition, a total of approximately 42 new trees would be provided by the Project.

Due to the amount, variety, and availability of the proposed open space and recreational amenities, it is anticipated that Project residents would generally utilize on-site open space to meet their recreational needs. Thus, while the Project's residents would be expected to utilize off-site public parks and recreational facilities to some degree, the Project would not be expected to cause or accelerate substantial physical deterioration of off-site public parks or recreational facilities given the provision of on-site open space and recreational amenities. Similarly, the Project's commercial component, which is estimated to generate a net increase of approximately 211 employees, would create a negligible indirect demand for parks and recreational facilities. Employees generated by the retail/commercial uses of the cumulative projects would not typically enjoy long periods of time during the workday to visit parks and/or recreational facilities, and would, therefore, not contribute to the future demand on park services.

Furthermore, as discussed above primarily with respect to Project-level impacts and further below for cumulative impacts, the Project would pay a Dwelling Unit Construction Tax in accordance with Section 21.10.3(a)(1) of the LAMC and comply with the requirements of Section 17.12 of the LAMC regarding payment of Quimby/Finn fees. As such, the Project would not significantly increase the demand for off-site public parks and recreational facilities. **Project operation would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Therefore, impacts on parks and recreational facilities during Project operation would be less than significant.**

(2) Mitigation Measures

No significant impacts related to parks have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to parks would be less than significant.

Threshold (c) Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

(1) Impact Analysis

As detailed above in the discussions under **Thresholds (a)** and **(b)**, the Project would comply with regulations regarding open space and recreational facilities. In addition, although the Project would increase the residential population on-site that would generate a demand for parks and recreational facilities, Project residents, guests, and employees would be anticipated to utilize the Project's on-site open space and recreational facilities to a greater extent than off-site facilities. **Therefore, the Project would not include or require the construction or expansion of recreational facilities that would result in adverse physical effects on the environment. Impacts would be less than significant.**

(2) Mitigation Measures

No significant impacts related to parks have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to parks would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

Generally, a "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects (CEQA Guidelines Section 15355). An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered "cumulatively considerable" when the incremental impacts of an individual project are significant when

viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider that effect significant but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

An adequate discussion of a project's significant cumulative impact, in combination with other closely cumulative projects, can be based on either: (1) a list of past, present, and probable future producing related impacts, or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence.

The analysis below is based on a list approach to determine the Project's contributing effect on potential cumulative impacts to parks. A total of 117 cumulative projects were identified in the study area (see Table III-1 in **Section III, Environmental Setting**, of the Draft EIR). In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many cumulative projects identified below. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects, which itself is a conservative assumption as discussed below would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

Implementation of the Project, in conjunction with these other development projects, would increase demand for parks and recreational facilities based on an increase in resident population. It is estimated that the cumulative projects (Project + other proposed development projects in the downtown area) would generate approximately 31,334 dwelling units and 76,142 residents.[16,17] The increase in residential population

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[16] *Cumulative Projects = 31,205 dwelling units + 129 dwellings units from the Project = 31,334 dwelling units.*

[17] *The source for the 2.43 persons-per-household rate for the City is the American Community Survey, 5-year (2013-2016) Average Estimates. Refer to* ***Section IV.J, Population, Housing, and Employment****, of the Draft EIR.*

by the cumulative development projects would increase the demand for parks and recreation facilities. This increase in the residential population of the area is estimated to generate a need for approximately 305 acres of additional community/neighborhood park area (per the PRP ratio for neighborhood parks). Employees generated by the retail/commercial uses of the cumulative projects would not typically enjoy long periods of time during the workday to visit parks and/or recreational facilities, and would, therefore, not contribute to the future demand on park services. All of the cumulative projects listed are served by the LADRP and some may be impacting the same park facilities as the Project.

The extent to which the residential cumulative projects are proposing to include parks/recreational amenities is unknown. However, similar to the Project, residential cumulative projects would be required to comply with the requirements of Sections 12.21, 17.12, and 21.10.3(a)(1) of the LAMC, including some that would be required to comply with the requirements of Section 12.33 of the LAMC and the Park Fee Ordinance, as applicable.

In accordance with CEQA Guidelines section 15130(a)(3), a project's contribution to cumulative impacts is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure designed to alleviate the cumulative impact. As discussed previously, the City imposes either a Park Fee or a combination of Quimby/Finn fees and the Dwelling Unit Construction Tax pursuant to the LAMC, based on the number of units proposed within a project and the date a project application was deemed vested by the City. Accordingly, the fees are established to be proportionate to a project's demand for recreation and park facilities, as the demands for such facilities are primarily based on residential population of a given area.

The Project would be required to mitigate its impacts upon public recreation and park facilities by paying applicable Quimby/Finn fees and the Dwelling Unit Construction Tax in addition to providing the mandatory code-required open space areas and on-site recreational amenities. **Therefore, pursuant to CEQA Guidelines Section 15130(a)(3), the Project's impacts would not be considered cumulatively considerable, as these fees are mandatory and proportionate based upon the Project's residential density. Therefore, the Project's contribution to cumulative impacts would not be cumulatively considerable, and impacts would be less than significant.**

(2) Mitigation Measures

No significant cumulative impacts related to parks have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to parks and recreation would be less than significant.

IV. Environmental Impact Analysis

K.5 Public Services – Libraries

1. Introduction

This section addresses the potential impacts of the Project on library facilities, as well as the ability of existing library facilities to accommodate any increase in demand resulting from the Project. Within the City of Los Angeles (City), the Los Angeles Public Library (LAPL) provides library services. This section is based on the following written correspondence from the LAPL, included as **Appendix H-5** of the Draft EIR:

H-5. *Correspondence from Los Angeles Public Library, Arts District Center Project, January 24, 2018.*

2. Environmental Setting

a) Regulatory Framework

(1) Los Angeles General Plan Framework Element

The City's General Plan Framework Element (Framework Element), adopted in December 1996 and readopted in August 2001, contains policies and objectives that address libraries within the City. The Framework Element contains the following objective and policy related to libraries:

- **Objective 9.21:** Ensure library services for current and future residents and businesses.
    - **Policy 9.21.1:** Seek additional resources to maintain and expand library services.

Policy 13 within the Framework Implementation Programs Chapter holds the LAPL responsible for updating the Library Master Plan, as well as providing sufficient capacity to correct existing deficiencies, identifying improvements to new library facilities, developing strategies to increase the distribution of library services, establishing a new library service standard based on the needs of the City, and identifying funding sources

for facility improvements.[1] The implementation plans and policies set forth in the Framework Element have been addressed through the LAPL Branch Facilities Plans.

(2) LAPL Branch Facilities Plan

(a) 1988 Plan

The 1988 Branch Facilities Plan, adopted by the Board of Library Commissioners in 1988, established criteria for the size of libraries, recommending building a 10,500-square-foot library for communities with less than a population of 50,000 residents, and a 12,500-square-foot library for communities with more than a population of 50,000 residents. The 1988 Branch Facilities Plan was implemented through two Bond Measures, the 1989 Bond Program (Phase I) and the 1998 Bond Program (Phase II). Phase I provided $53.4 million for 26 projects, with 29 libraries built using additional funds from the Community Development Block Grant award of Federal funds, from the California State Library Proposition 85, and from Friends of the Library groups for a total construction program of $108 million.

Phase II provided $178.3 million for 32 projects, with four additional projects added through managed savings, Friends of the Library contributions, and a California State Library Proposition 14 grant for a total construction program of $226.3 million. All four of the added projects have been completed, including the Exposition Park Regional Branch, which opened in August 2008, and the Silver Lake Branch, which opened in November 2009. Through separate funding, during this same time period, the Central Library was also renovated and expanded. Regular funding of the operation of the LAPL system comes from the General Fund and fluctuates with City priorities. Funding for specific branch projects is funded by bond measures presented to voters.

(b) 2007 Plan

The LAPL Branch Facilities Plan, Criteria for New Libraries, adopted by the Board of Library Commissioners on February 8, 2007, contains the required facilities expansion needs of the City Public Library system. According to this plan, service criteria are based on floor area required to serve varying amounts of residential population. Current LAPL branch building size standards are presented below in Table IV.K.5-1. These standards supersede the 1988 requirements. The 2007 Branch Facilities Plan's Proposed Project List includes a total of 19 projects, although none of them are located in the Project area.

[1] *City of Los Angeles, General Plan, Chapter 10, Policy 13: http://cityplanning.lacity.org/cwd/framwk/chapters/10/10.htm.*

Table IV.K.5-1
Los Angeles Public Library Branch Facilities Plan Service Criteria

Resident Population Served	Size of Facility Square Feet (sf)
Above 45,000	14,500 sf
Below 45,000	12,500 sf
Expansion or Special Situations	Special Size[1]
Regional Branch	Up to 20,000 sf
Above 90,000	Consider second branch

sf = square feet

[1] *Due to available property size and configuration, architectural constraints or opportunities, or building code requirements, some facilities may differ from the recommended sizes.*

Source: LAPL, January 24, 2018.

(3) Measure L

On March 8, 2011, voters approved Measure L, the Public Library Funding Charter Amendment. Measure L gradually restores library funding over four years, without raising taxes. It restored service on Mondays and two evenings a week at all 73 libraries. Beginning January 12, 2014, Measure L re-opened the Central Library and eight regional branch libraries on Sundays, one year ahead of schedule. Measure L also provides funds to purchase additional books and materials.[2]

(4) Los Angeles Public Library Strategic Plan 2015-2020

The Los Angeles Public Library Strategic Plan 2015-2020 (Strategic Plan) identifies the LAPL's goals to ensure that the LAPL provides the best possible access to services, information, and resources.[3] The Strategic Plan sets forth the following six goals for the LAPL over the planning period:

- Cultivate and inspire young readers;
- Nurture student success;
- Champion literacy and lifelong learning;
- Contribute to L.A.'s economic growth;
- Stimulate the imagination; and

[2] *LAPL: http://www.lapl.org/measure-l, April 9, 2015*

[3] *LAPL Strategic Plan: https://www.lapl.org/sites/default/files/media/pdf/about/LAPL_Strategic_Plan_2015-2020.pdf, accessed January 11, 2017.*

- Strengthen community connections and celebrate L.A.

(5) Central City North Community Plan

The Central City North Community Plan (Community Plan) is one of 35 community plans that make up the Land Use Element of the City's General Plan. The Community Plan was adopted on December 15, 2000, with CPC File No. 95-0352-CPU and Council File No. 97-0282. The Community Plan contains the following goal and objective related to libraries:

Goal 7: Ensure that adequate library facilities are provided for the community's residents.

- **Objective 7-1:** To encourage the City's Library Department to provide adequate library service which responds to the needs of the community.

b) Existing Conditions

(1) Existing Library Facilities

The LAPL serves the City through one Central library, 8 regional branches, and 64 community branches. The LAPL has a collection of approximately 6.4 million books, magazines, CDs, DVDs; 100 online databases; 90,400 electronic items; and 3 million photos.[4] The largest collection is located at the Central Library, 2.8 miles west of the Project Site.

Table IV.K.5-2 lists the features of the libraries that serve the Project Site area. The locations of the libraries are shown in Figure IV.K.5-1. The LAPL uses the most recent Census data to determine if a branch should be constructed in a given area. The LAPL has no planned improvements to add capacity through expansion of the existing libraries listed in Table IV.K.5-2 or plans for the development of any new libraries within the vicinity of the Project Site.[5] Nevertheless, based upon the service criteria presented in Table IV.K.5-1, existing levels of service at the Ben Franklin and Little Tokyo Branch Libraries do not meet the standards established by the LAPL.

[4] *LAPL, Facts: http://www.lapl.org/about-lapl/press/2013-library-facts, January 11, 2017.*

[5] *Correspondence, Los Angeles Public Library, January 24, 2018.*

Table IV.K.5-2
Libraries Serving the Project

Library Name	Location	Size (sf)	Volumes / Circulation	Staffing Levels	Service Population
Richard J. Riordan Central Library	630 W. 5th Street	538,000	2.6 million/1.2 million	390 FT	40,319
Ben Franklin Branch Library	2200 E. 1st Street	9,656	35,545/98,218	11 FT	3,792,662
Chinatown Branch Library	639 N. Hill Street	14,500	74,709/193,627	13.5 FT	11,225
Little Tokyo Branch Library	203 S. Los Angeles Street	12,500	66,634/142,247	10 FT	45,796

sf = square feet *FT = full time employees*

Source: Los Angeles Public Library, January 24, 2018.

3. Project Impacts

a) Methodology

The methodology used to evaluate the Project's potential library impacts consisted of the following steps: (1) identifying the primary library that would serve the Project Site; (2) determining the service population capacity within the library service area; (3) comparing the future service population, including the number of new Project residents, to the service population of the LAPL building size standards as set forth in the LAPL Branch Facilities Plan; and (4) determining whether the Project's contribution to the service population would cause the library to operate beyond its service capacity.

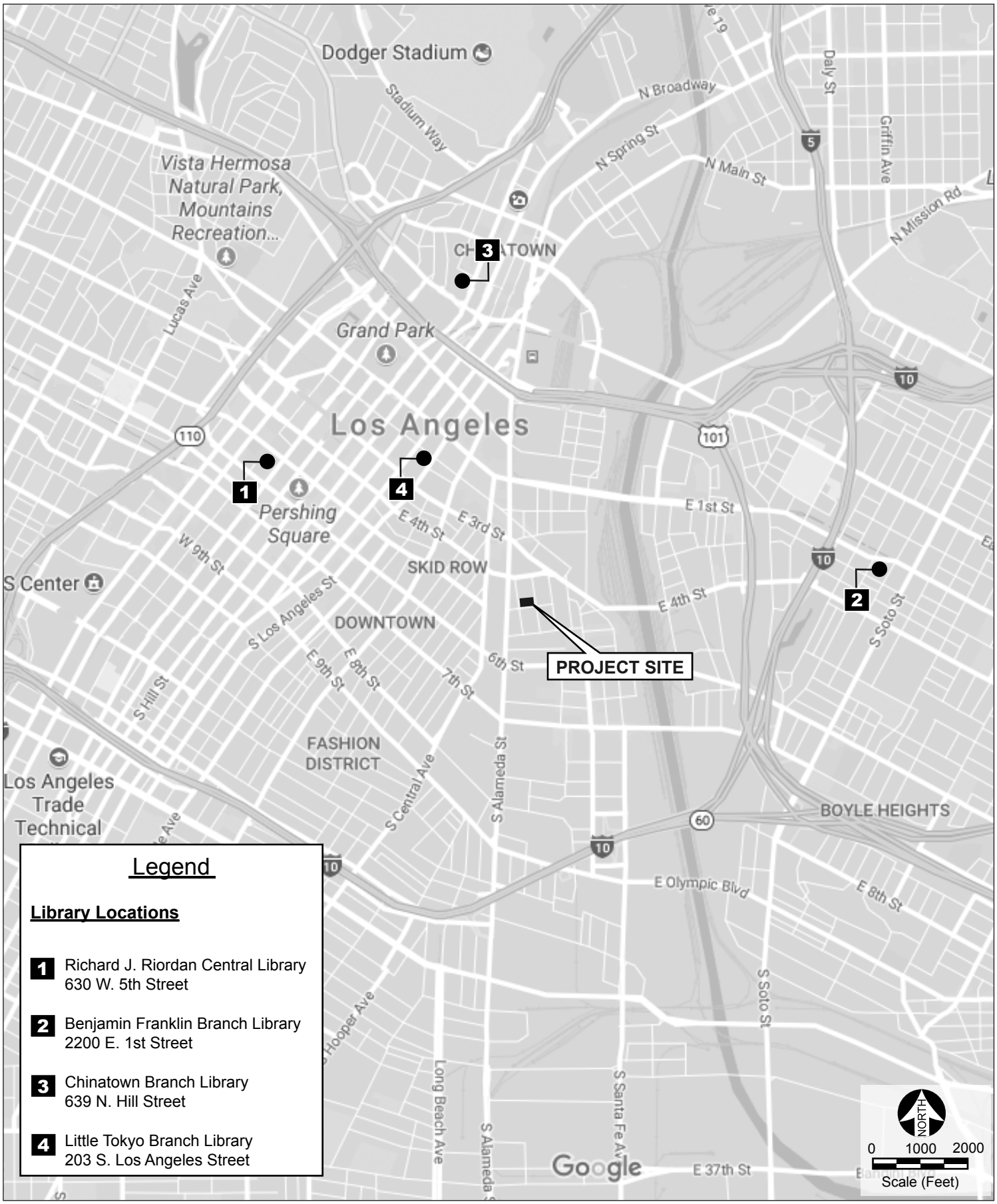

Figure IV.K.5-1
Library Locations

Source: Google Maps, 2018.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the project would have a significant impact related to libraries if the project would do the following:

(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services.

(2) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) identifies the following criteria to evaluate impacts to library services:

(a) The net population increase resulting from the project;

(b) The demand for library services anticipated at the time of project buildout compared to the expected level of service available. Consider, as applicable, scheduled improvements to library services (renovation, expansion, or addition) and the project's proportional contribution to the demand; and

(c) Whether the project includes features that would reduce the demand for library services (e.g., on-site library facilities or direct support to the LAPL).

In assessing impacts related to library services in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

c) Project Design Features

No Project Design Features (PDFs) pertaining to library services are applicable to the Project.

d) Analysis of Project Impacts

Threshold (a) ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for library services?***

(1) Impact Analysis

(a) Construction

Construction of the Project would result in a temporary increase of construction workers on the Project Site. Due to the employment patterns of construction workers in southern California, and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of Project construction. Therefore, Project-related construction workers would not result in a notable increase in the resident population within the service area of the Richard J. Riordan Central Library, Little Tokyo Branch Library, Ben Franklin Branch Library, or Chinatown Branch Library. Furthermore, Project-related construction workers would not result in a notable increase in an overall corresponding demand for library services in the vicinity of the Project Site; it is unlikely that construction workers would visit Project area libraries on their way to/from work or during their lunch hours. Construction workers would likely use library facilities near their places of residence because lunch break times are typically not long enough (30 to 60 minutes) for construction workers to take advantage of library facilities, eat lunch, and return to work within the allotted time. It is also unlikely that construction workers would utilize library facilities on their way to work as the start of their workday generally occurs before the libraries open for service. Similarly, it is unlikely that construction workers would utilize library facilities at the end of the workday and would likely use library facilities near their places of residence. Therefore, any increase in usage of the libraries by construction workers is anticipated to be negligible.

As such, Project construction would not cause local libraries to exceed its capacities to adequately serve the existing residential population based on target service populations or as defined by the LAPL. Project construction would not substantially increase the demand for library services for which current demand exceeds the ability of the facility to adequately serve the population. **As such, Project construction would not result in the need for new or physically altered libraries, the construction of which would cause significant environmental impacts. Therefore, impacts on library facilities during Project construction would be less than significant.**

(b) Operation

As discussed in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, the Project would generate a net increase of approximately 289 residents at the Project Site, increasing the demand for library services in the Project Site area, conservatively assuming that all 289 residents would be new to the area. Employees generated by the non-residential uses of the Project would not typically enjoy long periods of time during the workday to visit libraries during work hours, as they are more likely to use libraries near their homes during non-work hours, and so are not included for purposes of determining a service impact to libraries.

As described above, based on information provided by the LAPL, the Project Site is located within the service areas of the Central Library, Little Tokyo Branch Library, Chinatown Branch Library, and Ben Franklin Branch Library. These libraries are located within a 2-mile radius of the Project Site, the distance that is generally considered to comprise the service area of a library.

The Project Site currently includes 10 live/work housing units with a residential population of approximately 25 persons. These residents represent existing users of the four identified libraries. Thus, the Project's population of approximately 314 residents (a net increase of 289 residents over existing conditions at the Project Site) would increase the demand for library services compared to existing conditions.

As shown in Table IV.K.5-2, according to the LAPL, the Central Library's current service population is 3,792,662 persons. With the addition of the Project's 289 estimated net new residents, and conservatively assuming that all of the Project's residents are newcomers to the LAPL's service area, the service population of the Central Library would increase to 3,792,951 persons. As discussed above, the Central Library is not only a resource for the local population, but it is also a destination for regional, domestic, and international patrons. While the 2007 Branch Facilities Plan recommends the addition of a second branch for communities with populations above 90,000 persons, as previously described, there are three other branch libraries within a two-mile radius of the Project Site. Therefore, for the purpose of this Draft EIR, the Central Library is sufficient when considered with the other three identified libraries.

Currently, the Chinatown Branch Library meets the recommended building size standard of 12,500 square feet for a service population of less than 45,000 persons.[6] With the addition of the Project's 289 estimated net new residents, the service population for the 14,500-square-foot Chinatown Branch Library from 11,225 persons to

[6] *Ibid.*

11,514 persons. Therefore, this library would continue to meet the recommended building size standard.

However, the Little Tokyo Branch Library and Ben Franklin Branch Library currently do not meet the recommended building size standards of 14,500 square feet for a service population of more than 45,000 persons and 12,500 square feet for a service population of less than 45,000 persons, respectively. With the addition of the Project's 289 estimated net new residents, the service population for the 12,500-square-foot Little Tokyo Branch Library would increase from 45,796 persons to 46,085 persons and for the 9,656-square-foot Ben Franklin Branch Library from 40,319 persons to 40,608 persons. As such, both libraries would continue their operations without meeting the recommended building size standards without or with the Project.

With regard to anticipated library service at Project buildout, the Southern California Association of Governments (SCAG) projects population growth for the City of Los Angeles Subregion. According to the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS), the population of the City of Los Angeles Subregion is projected to grow by approximately 2.74 percent between 2017 (Project's baseline year) and 2021 (Project's occupancy year) (see **Section IV.J, Population, Housing, and Employment**, of the Draft EIR). Applying this growth rate anticipated for the City of Los Angeles to the service areas of the Central Library, Little Tokyo Branch Library, Chinatown Branch Library, and Ben Franklin Branch Library, the estimated service populations for these libraries in 2021 would be 3,896,581 persons (Central Library), 47,051 persons (Little Tokyo Branch), 11,533 persons (Chinatown Branch), and 41,424 persons (Ben Franklin Branch).

As noted above, with the addition of the Project's 289 estimated net new residents, the estimated service population of the Central Library would be 3,896,870 persons in 2021. Even as the Central Library continues to be the LAPL headquarters and a resource and destination for visitors both near and far, the LAPL has not indicated any current service deficiencies for the Central Library. The Chinatown Branch Library would continue to meet the recommended building size standard. The Little Tokyo Branch Library and Ben Franklin Branch Library would continue their operations without meeting the applicable recommended building size standards.

The Thresholds Guide also considers whether a project includes features that would reduce the demand for library services. The Project's residential units would be equipped to receive individual internet service, which provides information and research capabilities that studies have shown to reduce demand at physical library locations.[7,8]

[7] *Denise A. Troll, How and Why Libraries are Changing: What We Know and What We Need to Know, Carnegie Mellon University, 2002.*

Furthermore, the Project would generate revenues to the City's General Fund (in the form of property taxes, sales tax, and business tax, etc.) that could be applied toward the provision of new library facilities and related staffing for any one of the libraries serving the Project area, as deemed appropriate.[9] The Project's revenue to the General Fund would help offset the Project-related increase in demand for library services. As such, the Project would not conflict with or impede implementation of the applicable policies and goals related to libraries in the Framework Element or the Community Plan.

With regard to the potential for the employees of the proposed retail, hotel, art gallery, and restaurant uses to use nearby library facilities, the Project would generate a net increase of approximately 211 employees over existing uses at the Project Site (see **Section IV.J, Population, Housing, and Employment**, of the Draft EIR). The 211 employment opportunities anticipated by the Project would include a range of full-time and part-time positions that would be primarily filled by persons who already reside in the vicinity of the workplace and already generate a demand for the libraries in the Project Site's vicinity. Furthermore, employees at the Project Site would have Internet access, which results in reduced demand at physical library locations. As such, any indirect or direct new demand for library services generated by employees of the proposed hotel, retail, art gallery, and restaurant uses would be negligible.

Based on the above, and pursuant to the library sizing standards recommended in the 2007 Branch Facilities Plan, operation of the Project would not create any new exceedance of the capacity of local libraries to adequately serve the existing residential population based on target service populations or as defined by the LAPL, which would result in the need for new or altered facilities, or substantially increase the demand for library services for which current and future demand exceeds the ability of the facility to adequately serve the population. In addition, although the Little Tokyo Branch Library and Ben Franklin Branch Library would continue operations without meeting recommended building standards under existing and future conditions, a percentage of the residents of the Project would likely frequent the Central Library. To the extent that Project residents would travel within the 2-mile library service area, library usage would be expected to be dispersed between the Central Library and the other three local branch libraries identified by the LAPL. Furthermore, as the Little Tokyo Branch Library and Ben Franklin Branch Library are already undersized with regard to existing service populations, the Project would not be anticipated to result in a substantial increase in demand for library services for which current demand exceeds the ability of the facility to adequately serve the population. **As such, the Project would not result in the**

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[8] *Carol Tenopir, "Use and Users of Electronic Library Resources: An Overview and Analysis of Recent Research Studies", 2003.*

[9] *City of Los Angeles, Budget for the Fiscal Year 2017–18.*

need for new or altered facilities, the construction of which would cause significant environmental impacts. Therefore, impacts on library facilities during operation of the Project would be less than significant.

Nonetheless, the LAPL has recommended a fair share fee of $200 per capita based upon the projected population of the Project, which would be applied towards staff, books, computers, and other library materials.[10] This fee payment requirement would be required as a Condition of Project Approval by the City.

(2) Mitigation Measures

No significant impacts related to library services have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to library services would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

Generally, a "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects (CEQA Guidelines, §15355). An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered "cumulatively considerable" when the incremental impacts of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider that effect significant but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

An adequate discussion of a project's significant cumulative impact, in combination with other closely cumulative projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence.

[10] *Correspondence, Los Angeles Public Library, January 24, 2018.*

The analysis below is based on a list approach to determine the Project's contributing effect on potential cumulative impacts to libraries. A total of 117 cumulative projects were identified in the study area (see Table III-1 in **Section III, Environmental Setting**, of the Draft EIR). In addition, the Community Plan Update, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many cumulative projects identified below. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects, which itself is a conservative assumption as discussed below would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

Implementation of the Project, in conjunction with these other development projects, would increase demand for library services based on an increase in resident population. As described in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, it is estimated that the cumulative projects (Project + other proposed cumulative projects in the downtown area) would generate approximately 31,334 housing units and 76,142 residents; the Project's contribution to the increase in resident population in the Project area would be 0.26 percent. Employees generated by the cumulative projects would not typically enjoy long periods of time during the workday to visit library facilities and would, therefore, not contribute to the future demand on library services and so are not included for purposes of determining a service impact to libraries. Depending on their location, the cumulative projects would also be served by the same libraries as the Project, although some would be served by additional branches.

The increase in demand for library facilities as a result of these additional residents would be spread among the many libraries that are within a two-mile radius of each individual project, including those listed on Table IV.K.5-2, which includes the Central Library. Although the LAPL has indicated that no new libraries in the Project Site vicinity are currently planned, existing levels of service at two of the three local branch libraries are below LAPL service standards.[11] The addition of the cumulative demand for library services generated by the Project and the cumulative projects together would exacerbate this existing service shortfall. However, as previously noted, Measure L has gradually increased LAPL funding to keep libraries open longer and improve library services, thereby providing LAPL a mechanism to address the needs of additional population. Additionally, the Project and cumulative projects, through the generation of revenue into the City's General Fund, would help the LAPL achieve progress toward its

[11] *Ibid.*

goal to ensure adequate library facilities and service, including the future construction of new libraries or expansion of existing libraries. **Therefore, the Project's contribution to cumulative library services impacts would not be cumulatively considerable, and cumulative impacts would be less than significant.**

(2) Mitigation Measures

No significant cumulative impacts related to library services have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to library services would be less than significant.

IV. Environmental Impact Analysis

L. Transportation/Traffic

1. Introduction

The section includes information from the following, which are included in **Appendix I** of the Draft EIR:

I-1. *Arts District Center Project Draft Traffic Impact Analysis, Fehr & Peers, August 2018.*

I-2. *Transportation Impact Analysis, LADOT, May 3, 2018.*

The scope of analysis for the Traffic Impact Analysis (i.e., Traffic Study) was developed in consultation with the Los Angeles Department of Transportation (LADOT). The base assumptions and technical methodologies (i.e., trip generation, study locations, analysis methodology, etc.) were identified as part of the study approach and were outlined in a Memorandum of Understanding (MOU) dated January 18, 2018, which was reviewed and approved by LADOT. A copy of the signed MOU is provided in Appendix A of the Traffic Study (see **Appendix I-1** of the Draft EIR).

Pursuant to the provisions of Senate Bill (SB) 743, the parking impacts associated with the Project are not considered significant because parking impacts of qualified projects in transit priority areas are not considered to be an impact under the California Environmental Quality Act (CEQA). For informational purposes, an analysis of the Project's proposed and Los Angeles Municipal Code (LAMC)-required parking is presented in **Section IV.H, Land Use and Planning**, of the Draft EIR (see Table IV.H-7).

2. Environmental Setting

a) Regulatory Framework

(1) Senate Bill 743

On September 27, 2013, Governor Brown signed SB 743 (Steinberg, 2013). Among other things, SB 743 required the Governor's Office of Planning and Research (OPR) to change the way public agencies evaluate transportation impacts of projects under CEQA. Specifically, SB 743 required OPR to amend the CEQA Guidelines to provide an

alternative to automobile level of service (LOS) for evaluating transportation impacts. After four years of development, OPR transmitted its proposed CEQA Guidelines implementing SB 743 to the State of California Natural Resources Agency (NRA) in November 2017.[1] The proposed CEQA Guidelines recommend that LOS be replaced by vehicle miles traveled (VMT) as the metric for considering significant transportation impacts under CEQA. OPR also prepared a technical advisory on evaluating transportation impacts for CEQA, the most recent version of which was released in April 2018.[2] The advisory contains OPR's technical recommendations regarding assessment of VMT, significance thresholds and mitigation measures. The NRA is currently engaged in a formal administrative rulemaking process on the CEQA Guidelines. That rulemaking process will entail additional public review and may lead to further revisions. The City is currently in the process of developing the recommended VMT tools/metrics that will be used to conduct VMT analyses in traffic studies for projects. While any agency may immediately apply the proposed new CEQA Guidelines section (proposed Guidelines section 15064.3), a statewide application of that new section would not be required until January 1, 2020.

(2) County of Los Angeles Congestion Management Program

To address the increasing public concern that traffic congestion is impacting the quality of life and economic vitality of the State of California, Proposition 111 enacted the Congestion Management Program (CMP) in 1990. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. A countywide approach has been established by the Los Angeles County Metropolitan Transportation Authority (Metro), the local CMP agency, designating a highway network that includes all state highways and principal arterials within the County of Los Angeles (County). The LOS at each CMP monitoring station is managed by local jurisdictions. If LOS standards deteriorate, then local jurisdictions must prepare a deficiency plan to meet conformance standards outlined by the countywide plan. The local CMP requires that all CMP arterial monitoring intersections be analyzed where a project would likely add 50 or more trips during the peak hours and that all CMP freeway monitoring locations be analyzed where a project would likely add 150 or more trips in either direction during the peak hours.

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1 *State of California, Governor's Office of Planning and Research, Proposed Updates to the CEQA Guidelines, Final, November 2017.*

2 *State of California, Governor's Office of Planning and Research, Technical Advisory on Evaluating Transportation Impacts in CEQA, April 2018.*

(3) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, the Southern California Association of Governments (SCAG) adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS). The 2016-2040 RTP/SCS includes a commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards (NAAQS) as set forth by the Federal Clean Air Act. The 2016-2040 RTP/SCS contains a regional commitment for the broad deployment of zero- and near-zero-emission transportation technologies in the 2023-2040 timeframe and clear steps to move toward this objective. This is especially critical for the goods movement system. The development of a zero- or near-zero-emission freight transportation system is necessary to maintain economic growth in the region, to sustain quality of life, and to meet federal air quality requirements. The 2016-2040 RTP/SCS puts forth an aggressive strategy for technology development and deployment to achieve this objective. This strategy will have many co-benefits, including energy security, cost certainty, increased public support for infrastructure, greenhouse gas (GHG) emissions reduction, and economic development.

The 2016-2040 RTP/SCS includes a consideration of the economic impacts and opportunities provided by the transportation infrastructure plan set forth in the document, considering the economic and job creation impacts of the direct investment in transportation infrastructure, and the efficiency gains in terms of worker and business economic productivity and goods movement.

The 2016-2040 RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play, and how they will move around. It is designed to promote safe, secure, and efficient transportation systems to provide improved access to opportunities, such as jobs, education, and healthcare. Its emphasis on transit and active transportation is designed to allow residents to lead a healthier, more active lifestyle. Its goal is to create jobs, ensure the region's economic competitiveness through strategic investments in the goods movement system, and improve environmental and health outcomes for its 22 million residents by 2040.

Within the 2016-2040 RTP/SCS, the overarching strategy includes plans for High Quality Transit Areas (HQTA), Livable Corridors, and Neighborhood Mobility Areas as key features of a thoughtfully planned, maturing region in which people benefit from increased mobility, more active lifestyles, increased economic opportunity, and an overall higher quality of life. HQTAs are described as generally walkable transit villages or corridors that are within 0.5 miles of a well-served transit stop or a transit corridor

with a 15-minute or less service frequency during peak commute hours.[3] Local jurisdictions are encouraged to focus housing and employment growth within HQTAs.[4] The Project Site is located within an HQTA as designated by the 2016-2040 RTP/SCS.[5]

(4) 2010 Bicycle Plan

The 2010 Bicycle Plan (Chapter 9 of the Transportation Element of the General Plan) was adopted on March 1, 2011. The purpose of the 2010 Bicycle Plan is to increase, improve, and enhance bicycling in the City as a safe, healthy, and enjoyable means of transportation and recreation. Toward that end, the 2010 Bicycle Plan establishes policies and programs to increase the number and type of bicyclists in the City, to make every street a safe place to ride a bicycle and to transform the City into a bicycle-friendly community.

The 2010 Bicycle Plan identifies Class I Bicycle Paths, Class II Bicycle Lanes, Class III Bicycle Routes, and Bicycle Friendly Streets throughout the City. The 2010 Bicycle Plan also introduces three new bikeway networks: the Backbone, the Neighborhood Network, and the Green Network. The Backbone concentrates on providing an interconnected system of streets that facilitate 24/7 bicyclist mobility on key arterials along with Bicycle Lanes; the Neighborhood Network enhances the pleasant environment of local streets to facilitate relaxed riding through Bicycle Friendly Streets; and the Green Network enhances pedestrian and bicyclist access to the City's green corridors with Bike Paths, particularly along river channels and segregated transit rights-of-way.

(5) City of Los Angeles Mobility Plan 2035

The City of Los Angeles (City) adopted Mobility Plan 2035 on September 7, 2016 as an intended replacement for the General Plan Transportation Element and City of Los Angeles Bicycle Plan. Mobility Plan 2035 provides a roadmap for achieving a transportation system that balances the needs of all road users. As an update to the Transportation Element (last adopted in 1999), Mobility Plan 2035 incorporates "Complete Streets" principles that will provide safe and efficient transportation for bicyclists, transit riders, and car and truck drivers. The contents of the 2010 Bicycle Plan have been integrated into Mobility Plan 2035 and include the identification of a Bicycle Enhanced Network consisting of Bicycle Paths and Tier 1 Protected Bicycle Lanes and a Neighborhood Enhanced Network consisting of Tier 2 and 3 Bicycle Lanes.

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[3] *SCAG, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, April 2016, p. 189.*

[4] *SCAG, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, April 2016, p. 76.*

[5] *SCAG, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, April 2016, Exhibit 5.1: High Quality Transit Areas in the SCAG Region for 2040, p. 77.*

Mobility Plan 2035 contains the following policies that are germane to the Project:

- **Policy 2.3**: Recognize walking as a component of every trip, and ensure high-quality pedestrian access in all site-planning and public right-of-way modifications to provide a safe and comfortable walking environment.
- **Policy 2.10**: Facilitate the provision of adequate on- and off-street loading areas.
- **Policy 3.3**: Promote equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs, destinations, and other neighborhood services.
- **Policy 3.8**: Provide bicyclists with convenient, secure, and well-maintained bicycle parking facilities.
- **Policy 4.8**: Encourage greater utilization of Transportation Demand Management (TDM) strategies to reduce dependence on single-occupancy vehicles.
- **Policy 4.9**: Partner with the private sector to foster the success of Transportation Management Organizations (TMOs) in the City's commercial districts.
- **Policy 5.2**: Support ways to reduce VMT per capita.

(6) Vision Zero Action Plan and Safety Study

In January 2017, LADOT released the City's first Vision Zero Action Plan and Safety Study. The Action Plan outlines the city's blueprint to reduce pedestrian fatalities by 20 percent by the end of 2017 with the ultimate goal of eliminating traffic deaths by 2025. The Action Plan identifies the highest concentrations of fatal and severe injury collisions on the City's High-Injury Network and focuses on 40 priority corridors. Additionally, the Action Plan highlights a series of projects, including a scramble crosswalk at the intersection of Hollywood and Highland. The Action Plan aims to achieve the following Vision Zero goals:

- Create Safe Streets for All
- Develop a Culture of Safety
- Adopt New Policies and Legislation to Strengthen Safety
- Respond to Relevant Data

In addition, LADOT has also published a technical companion, called the Vision Zero Safety Study. The study expands on the data that were used to develop the High-Injury Network.

b) Existing Conditions

(1) Study Area

The study area selected for analysis extends to San Pedro Street to the west, 16th Street to the south, I-5 to the east, and US-101 to the north. All of the streets in the study area are under the jurisdiction of the City.

Twenty-one intersections were selected for analysis in consultation with LADOT. In addition, two unsignalized intersections were selected and, in accordance with LADOT's 2016 *Transportation Impact Study Guidelines* these intersections were analyzed to determine whether they meet traffic signal warrants.

(a) Signalized Intersections

The following 21 signalized intersections, illustrated in Figure IV.L-1, were identified in conjunction with LADOT to be analyzed as part of the traffic impact analysis for the Project:

- San Pedro Street & East 4th Street
- San Pedro Street & East 6th Street
- Central Avenue & East 4th Street
- Central Avenue & East 6th Street
- North Alameda Street & Arcadia Street
- North Alameda Street & East Commercial Street
- North Alameda Street & East 1st Street
- South Alameda Street & East 4th Place/3rd Street
- South Alameda Street & East 4th Street
- South Alameda Street & East 6th Street
- South Alameda Street & East 7th Street
- South Alameda Street & East 8th Street
- South Alameda Street & Olympic Boulevard
- South Alameda Street & I-10 Eastbound On-Ramp

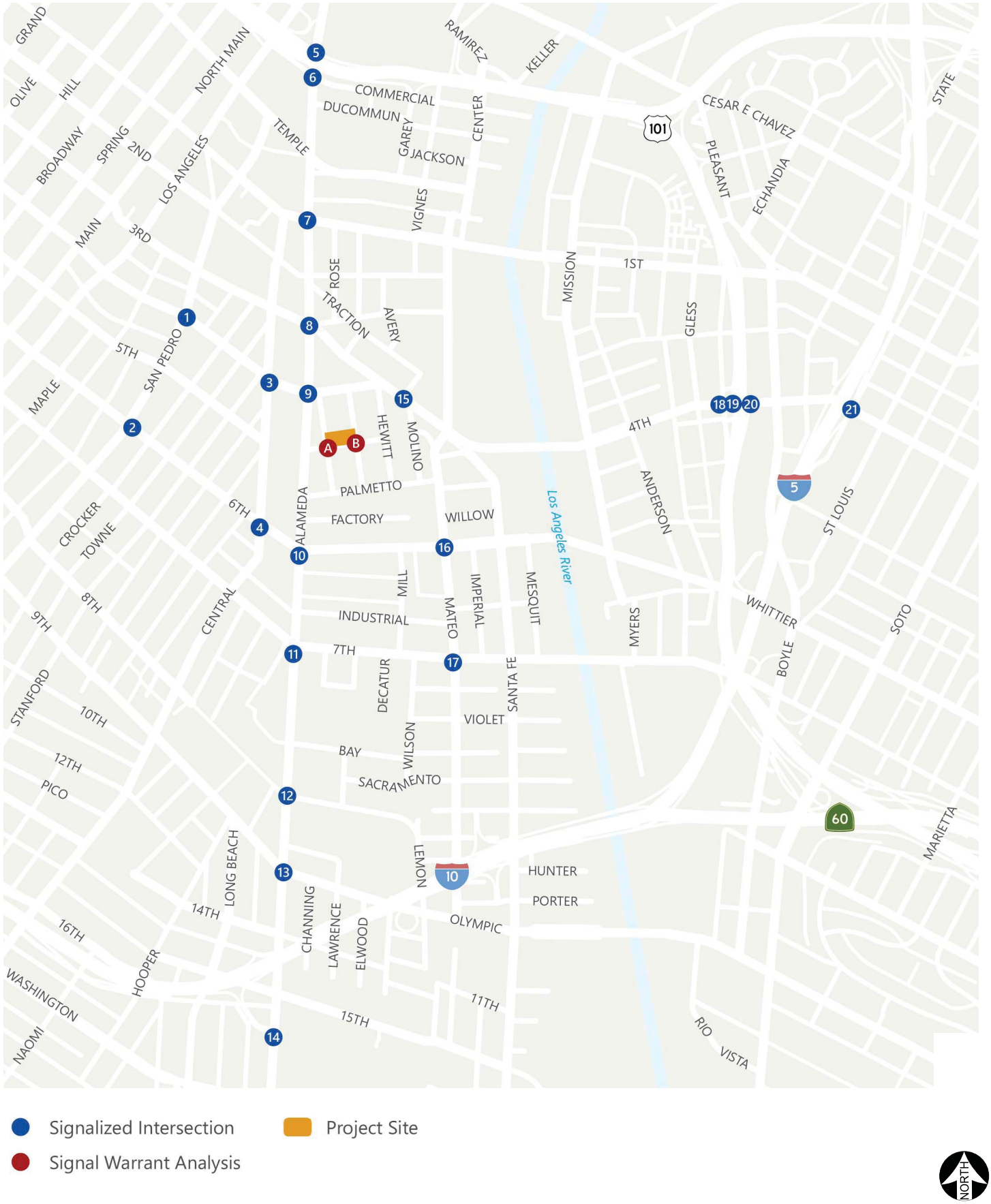


Figure IV.L-1
Project Study Intersections

Source: Fehr & Peers, 2018.

- Merrick Street/Molino Street & East 4th Street
- Mateo Street & East 6th Street
- Mateo Street & East 7th Street
- Pecan Street & East 4th Street
- US-101 Southbound Ramp & East 4th Street
- US-101 Northbound Ramp & East 4th Street
- I-5 Northbound Ramp & East 4th Street

(b) Unsignalized Intersections

Per LADOT's *Transportation Impact Study Guidelines*, a signal warrant analysis was conducted for the following two unsignalized intersections:[6]

- Seaton Street & East 5th Street
- Colyton Street & East 5th Street

(2) Existing Street System

Major arterials serving the study area include 1st, 3rd, 4th, 6th, and 7th Streets and Olympic Boulevard in the east-west direction and San Pedro, Central, and Alameda Streets in the north-south direction.

Street classifications/standards are designated in Mobility Plan 2035. Mobility Plan 2035 modified the City's street standards originally included in the City's Transportation Element to create a better balance between traffic flow and other important street functions including transit routes and stops, pedestrian environments, bicycle routes, building design and site access. The roadways in the study area are defined as follows in Mobility Plan 2035.

- Arterial Streets are major streets that serve through traffic and provide access to major commercial activity centers. Arterials are divided into two categories:
    - Boulevards represent the widest streets that typically provide regional access to major destinations and include the following two categories:
        - Boulevard I provides up to four travel lanes in each direction with a target operating speed of 40 miles per hour (mph).

[6] *Transportation Impact Study Guidelines, LADOT, December 2016.*

        - Boulevard II provides up to three travel lanes in each direction with a target operating speed of 35 mph.

    - Avenues pass through both residential and commercial areas and include three categories:

        - Avenue I provides up to two travel lanes in each direction with a target operating speed of 35 mph.

        - Avenue II provides up to two travel lanes in each direction with a target operating speed of 30 mph.

        - Avenue III provides up to two travel lanes in each direction with a target operating speed of 25 mph.

- Collector Streets are generally located in residential neighborhoods and provide access to and from arterial streets for local traffic and are not intended for cut-through traffic. Collector Streets provide one travel lane in each direction with a target operating speed of 25 mph.

- Local Streets are intended to accommodate lower volumes of vehicle traffic and provide parking on both sides of the street. Local Streets provide one travel lane in each direction with a target operating speed of 15 to 20 mph. Local Streets can be:

    - Continuous local streets that connect to other streets at both ends

    - Non-Continuous local streets that lead to a dead-end

In addition, Mobility Plan 2035 identifies corridors proposed to receive improved bicycle, pedestrian, transit, and vehicle infrastructure improvements. Each of the networks are defined as the following:

- The Neighborhood-Enhanced Network (NEN) is a selection of streets that provide comfortable and safe routes for localized travel of slower-moving modes such as walking, bicycling, or other slow speed motorized means of travel.

- The Transit-Enhanced Network (TEN) is the network of arterial streets prioritized to improve existing and future bus service for transit riders.

- The Bicycle-Enhanced Network (BEN) is a network of streets that will receive treatments that prioritize bicyclists. Tier 1 Protected Bicycle Lanes are bicycle facilities that are separated from vehicular traffic. Tier 2 and Tier 3 Bicycle Lanes are facilities on roadways with striped separation. Tier 2 Bicycle Lanes are those more likely to be built by 2035.

- The Vehicle-Enhanced Network (VEN) identifies streets that prioritize vehicular movement and offer safe, consistent travel speeds and reliable travel times.
- The Pedestrian-Enhanced Districts (PEDs) identify where pedestrian improvements on arterial streets could be prioritized to provide better walking connections to and from the major destinations within communities.

(a) East-West Streets

Commercial Street/Aliso Street is designated as Avenue II east of Alameda Street and Avenue I west of Alameda Street. Commercial Street (east of Alameda Street) has two through lanes in each direction and provides access to eastbound vehicles on US-101. Parking is only permitted east of the US-101 ramps. Aliso Street (west of Alameda Street) is a one-way street that serves as a frontage road for US-101 with access to the freeway for eastbound vehicles. Parking is not permitted on Aliso Street.

1st Street is designated as a Boulevard II west of San Pedro Street and is designated an Avenue II east of San Pedro Street. 1st Street is part of the TEN east of Alameda Street and carries the Metro Gold Line in the median with no parking. 1st Street also has bike lanes between San Pedro Street and Figueroa Street. Parking is permitted between Main Street and Alameda Street. 1st Street east of San Pedro Street is also part of the BEN.

3rd Street is designated as an Avenue III west of Alameda Street and a collector street east of Alameda Street. 3rd Street is one-way west of Alameda Street with four westbound lanes and is two-way east of Alameda Street with one lane in each direction. Parking is permitted along most portions of the roadway on both sides of the street. 3rd Street also has a bike lane between Alameda Street and Santa Fe Avenue and is part of the BEN.

4th Street is designated as Avenue II west of Alameda Street and Avenue III east of Alameda Street. 4th Street has three to four travel lanes all in the eastbound direction running north of the Project Site up to Hewitt Street. Parking is permitted along most portions of the roadway on both sides of the street, with peak-hour restrictions west of San Pedro Street. A center running reversible lane exists along 4th Street east of Hewitt Street to the I-5 interchange. The reversible lane runs westbound during the AM peak period and eastbound during the PM peak period. The lane functions as a two-way left-turn lane outside the peak periods.

5th Street is designated as a collector street east of Alameda Street and has one lane of travel in each direction. 5th Street is directly south of the Project Site. Parking is permitted on both sides of the street, with parallel parking on the south side and perpendicular parking on the north side.

6th Street is designated as Avenue II near the Project Site. 6th Street is part of the TEN and part of the Bicycle Lane Network. West of Central Avenue, 6th Street has four travel lanes in the eastbound direction. 6th Street is currently under construction between Mateo Street and US-101. When construction is completed in 2021, 6th Street east of Mateo Street will provide two travel lanes in each direction with left-turn pockets at major intersections. East of Central Avenue, 6th Street has two travel lanes in each direction with left-turn pockets at major intersections. Parking is generally permitted on both sides of the street east of Mateo Street, with peak-hour restrictions west of Maple Avenue.

7th Street is designated as an Avenue II and is part of the TEN and BEN. East of Main Street, 7th Street has two travel lanes in each direction, which is reduced to one travel lane in each direction west of Main Street. Left-turn pockets are present at major intersections. Parking is permitted on both sides of the street. There are bike lanes in each direction west of Main Street.

8th Street is designated as a collector street east of Alameda Street and an Avenue II west of Central Avenue. Between Santee Street and Central Avenue, 8th Street has two travel lanes in each direction. West of Santee Street, there are four travel lanes all in the westbound direction. Parking is generally permitted on both sides of the street. 8th Street between Central Avenue and Alameda Street runs through the Los Angeles Wholesale Produce Market and is a private street with no through traffic allowed.

Olympic Boulevard is designated as an Avenue I two travel lanes in each direction with left-turn pockets at intersections. Olympic Boulevard runs south of the Project Site. Parking is permitted on both sides of the street.

(b) North-South Streets

San Pedro Street is designated as an Avenue I south of 5th Street and an Avenue II north of 5th Street. San Pedro Street is part of the TEN and NEN. San Pedro Street has two travel lanes running in each direction and turn pockets are major intersections. Parking is generally permitted on both sides of the street in the study area.

Central Avenue is designated as an Avenue I in the study area and part of the TEN and BEN. Central Avenue has two travel lanes running in each direction with turn pockets at most intersections. Central Avenue runs to the west of the Project Site. Parking is generally permitted on both sides of the street in the study area.

Alameda Street is designated as an Avenue I in the study area and is part of the VEN. Alameda Street has two travel lanes running in each direction and turn pockets at most intersections. Parking is permitted between 7th Street and Olympic Boulevard on the west side of the street and between 7th Street and Bay Street on the east side of the

street. Alameda Street is part of the BEN as the Alameda Corridor runs parallel to the roadway below grade.

Mateo Street is designated as an Avenue III with one travel lane in each direction and parking on both sides of the street. Mateo Street is part of the BEN and the NEN.

Colyton Street is designated as a collector street with one through lane in each direction. Parking is permitted on both sides of the street, with both parallel and front-in parking. Colyton Street is adjacent to the Project Site on the east.

Seaton Street is designated as a collector street with one through lane in each direction. Parking is permitted on both sides of the street, with both parallel and head-in parking. Seaton Street is adjacent to the Project Site on the west.

Santa Fe Avenue is designated as a Modified Avenue III north of the 4th Street Bridge and an Avenue II south of the 4th Street Bridge. Santa Fe Avenue has one travel lane running in each direction north of 7th Street, and two travel lanes in each direction south of 7th Street. Santa Fe Avenue is part of the NEN.

(3) Regional Transportation System

Regional access to the Project Site is provided by Interstate 10 (I-10 or Santa Monica Freeway) approximately 1.1 miles to the south, U.S. Highway 101 (US-101 or Santa Ana Freeway) and Interstate 5 (I-5 or Golden State Freeway) approximately one mile to the east, US-101 approximately 0.9 miles to the north, and California Route 110/I-110 (SR-110/I-110) approximately 1.7 miles to the west. Freeways are high-volume, high-speed roadways with limited access provided by interchanges that carry regional traffic through and do not provide local access to adjacent land uses. Freeways are under the jurisdiction of Caltrans.

(a) Freeways

Interstate 10 runs in an east-west direction and extends from the Pacific Ocean eastward through Los Angeles County and beyond. In the vicinity of the study area, I-10 lies to the south of the Project Site and provides five lanes in each direction. Interchanges are provided at Alameda Street, Santa Fe Avenue, Boyle Avenue, and 4th Street in the study area.

US 101 runs in a southeast-northwest direction and extends from Downtown Los Angeles to Ventura County and beyond. In the vicinity of the study area, US-101 lies north and east of the Project Site and provides three to four lanes in each direction. Freeway ramps closest to the Project Site are located at Alameda Street, 4th Street, and 1st Street.

Interstate 110/California Route 110 runs in a north-south direction and extends from Pasadena to the Port of Long Beach. In the vicinity of the study area, the freeway lies west of the Project Site and provides four lanes in each direction. Freeway ramps closest to the Project Site are located at 4th Street, 6th Street, 8th Street, and 9th Street.

Interstate 5 runs in a north-south direction and extends from San Diego County to the Oregon border and beyond. In the vicinity of the study area, the freeway lies east of the Project Site and provides five lanes in each direction. Freeway ramps closest to the Project Site are located at 4th Street, Boyle Avenue, and Soto Street.

(b) CMP Facilities

The CMP arterial monitoring station closest to the Project Site is the intersection of Alameda Street and Washington Boulevard located south of the Project Site and south of I-10. The CMP freeway monitoring stations closest to the Project Site are as follows:

- US-101 north of Vignes Street;
- I-10 at Budlong Avenue;
- I-10 at the East Los Angeles city limit;
- I-5 at Stadium Way; and
- I-5 at Ferris Avenue.

(4) Transit System

Due to its proximity to the transit hubs in downtown Los Angeles, the Project Site is served by several transit lines. The Project is located within a 0.5 miles walking distance to the Metro Gold Line Little Tokyo/Arts District Station and 0.25 miles to the Metro Rapid 720 bus stop at Alameda Street and 6th Street. Table IV.L-1 details the transit service near the Project Site. Figure IV.L-2 shows the various local and express bus routes providing service in the study area.

Table IV.L-1
Existing Transit Service in the Project Site Vicinity

Line Number	Operator	Service Type	Service From	Via	Weekday Headways	
					AM	PM
60	Metro	Local	Downtown Long Beach to Downtown Los Angeles	7th St	7-12 min.	6-10 min.
760	Metro	Rapid	Lynwood to Downtown Los Angeles	7th St	10-15 min.	12-15 min.
62	Metro	Local	Hawaiian Gardens to Downtown Los Angeles	Central Ave	15-20 min.	20-25 min.
720	Metro	Rapid	Santa Monica to Commerce	6th St	4-9 min.	3-10 min.
53	Metro	Local	Carson to Downtown Los Angeles	Central Ave	5-16 min.	7-15 min.
18	Metro	Local	Koreatown to Montebello	Central Ave	4-10 min.	6-12 min.
55	Metro	Local	Watts to Downtown Los Angeles	6th St	10-15 min.	8-15 min.
Dash Downtown A	LADOT	Shuttle	Financial District to Arts District	3rd St	7 min.	7 min.
Dash Downtown D	LADOT	Shuttle	South Park to Little Tokyo	Temple St	10 min.	10 min.
Gold Line	Metro	Light Rail	Azusa to East Los Angeles	1st St	7 min.	7 min.
733	Metro	Rapid	Santa Monica to Downtown Los Angeles	Main St	5-20 min.	10-15 min.
33	Metro	Local	Santa Monica to Downtown Los Angeles	Main St	5-20 min.	10-15 min.
442	Metro	Express	Hawthorne to Downtown Los Angeles	1st St	40 min.	40 min.
2	Metro	Local	Pacific Palisades to Downtown Los Angeles	Broadway	5-10 min.	10 min.
745	Metro	Rapid	West Athens to Downtown Los Angeles	Broadway	4-15 min.	10-12 min.
45	Metro	Local	Carson to Downtown Los	Broadway	5-10 min.	5-10 min.

Table IV.L-1
Existing Transit Service in the Project Site Vicinity

Line Number	Operator	Service Type	Service From	Via	Weekday Headways	
					AM	PM
			Angeles			
728	Metro	Rapid	Century City to Downtown Los Angeles	Spring St	7-15 min.	10-12 min.
35	Metro	Local	West Los Angeles to Downtown Los Angeles	Broadway	12 min.	12 min.
83	Metro	Local	Eagle Rock to Downtown Los Angeles	Spring St	30 min.	20-30 min.
4	Metro	Local	Santa Monica to Downtown Los Angeles	Broadway	10-20 min.	10-15 min.
30	Metro	Local	West Hollywood to Boyle Heights	Spring St	8-10 min.	5-10 min.
66	Metro	Local	Montebello to Koreatown	San Pedro St	2-15 min.	6-10 min.
330	Metro	Limited	West Hollywood to Downtown Los Angeles	Spring St	5-10 min.	15 min.
68	Metro	Local	Montebello to Downtown	Main St	12-20 min.	15 min.
40	Metro	Local	Torrance to Downtown Los Angeles	Spring St	10 min.	7-15 min.
92	Metro	Local	Burbank to Downtown Los Angeles	Main St	15-18 min.	20 min.
355	Metro	Limited	Watts to Downtown Los Angeles	6th St	12 min.	N/A

Source: Fehr & Peers, 2018.

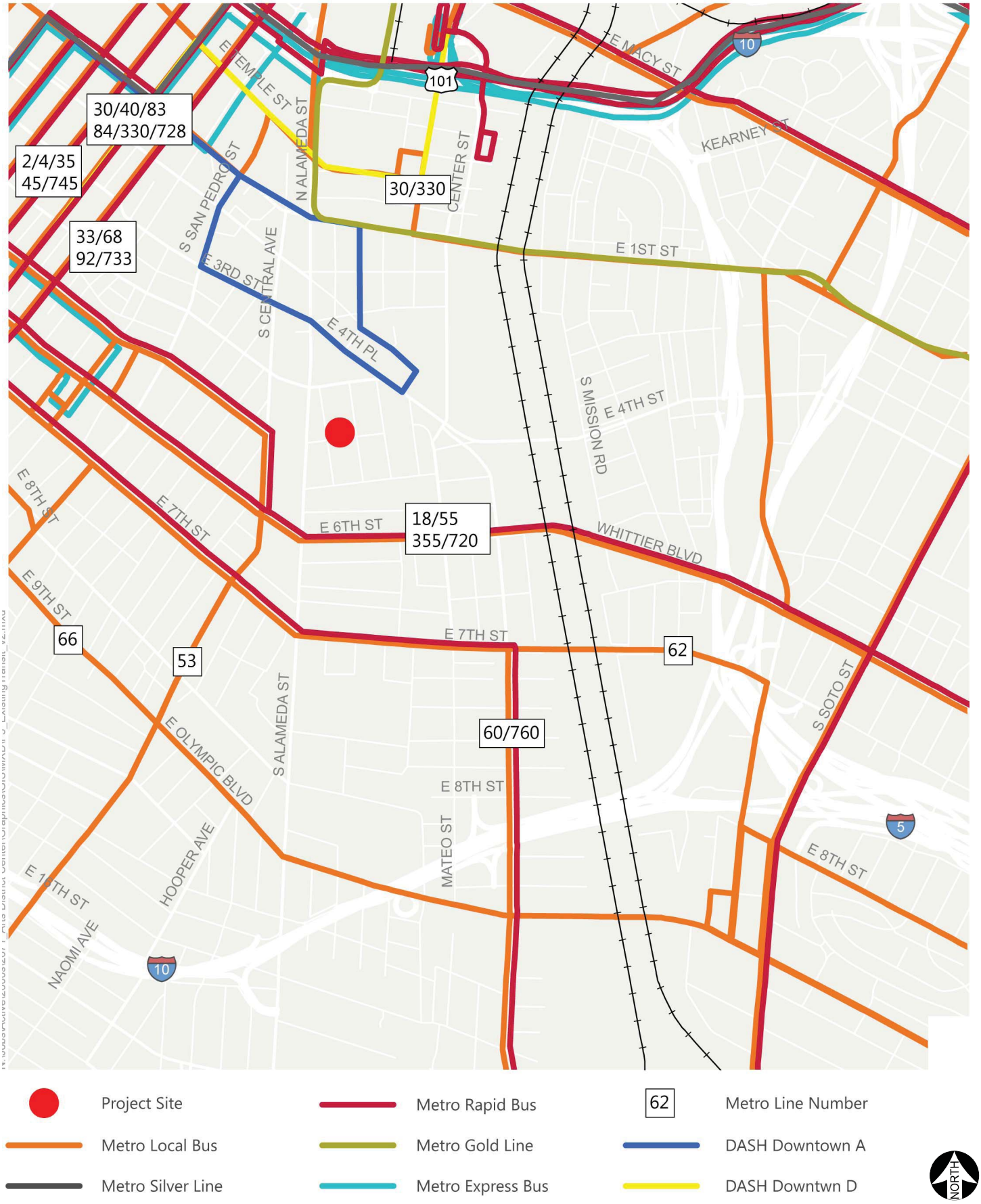


Figure IV.L-2
Existing Transit in Project Vicinity

Source: Fehr & Peers, 2018.

(5) Bicycle System

Figure IV.L-3 shows existing and planned citywide designated bicycle facilities near the Project Site. As shown in the figure, the following streets are designated bicycle routes, with or without sharrows (shared lane markings):

- 1st Street (from San Pedro Street to Boyle Avenue)
- 2nd Street (west of Spring Street)
- Broadway

Bike lanes currently exist on the following streets near the Project Site:

- 1st Street
- 2nd Street
- 3rd Street
- Spring Street
- Main Street
- Los Angeles Street

Mobility Plan 2035 identifies the following corridors that are proposed to receive improved bicycle, pedestrian and vehicle infrastructure improvements:

- Planned protected bicycle lanes in the study area include Spring Street, Main Street, Central Avenue, Mission Street, 1st Street, 2nd Street, 3rd Street, 6th Street, and 7th Street.
- Planned bicycle lanes in the study area anticipated to be built by 2035 include 2nd Street, 6th Street, and 7th Street.
- Planned bicycle lanes in the study area anticipated to be built after 2035 include 10th Street and Olympic Boulevard.

Metro operates a bike-share program with stations throughout the Downtown Los Angeles area, as well as within other areas of the City. A Metro bike-share station is located at Arts District Park, approximately one block east of the Project Site near the corner of 5th Street and Hewitt Street.

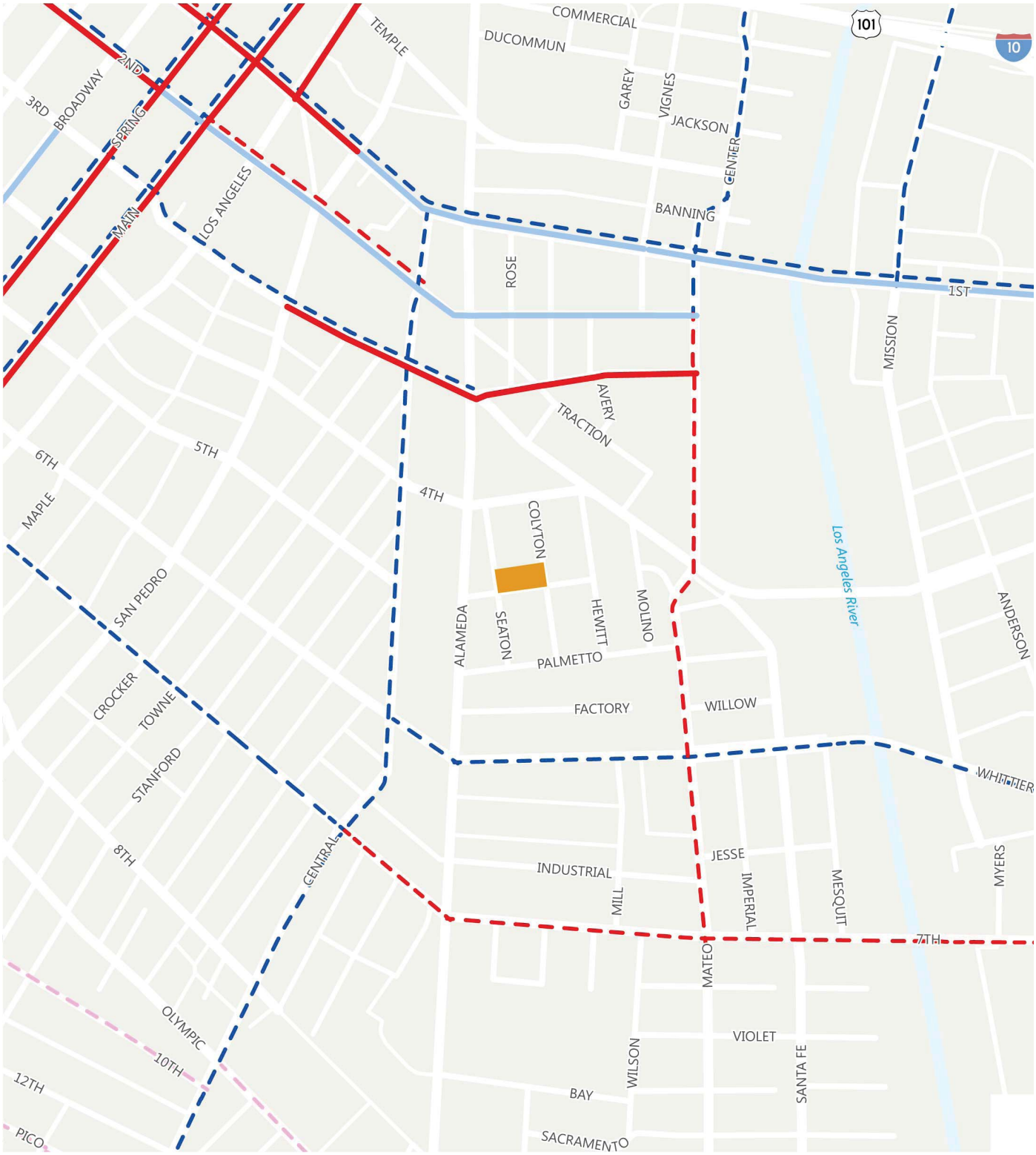


Figure IV.L-3
Existing and Planned Bicycle Facilities in Project Vicinity

Source: Fehr & Peers, 2018.

(6) Pedestrian Facilities

Downtown Los Angeles generally has a mature network of pedestrian facilities, including sidewalks, crosswalks, and pedestrian safety features. Approximately 8- to 12-foot sidewalks are provided. However, at the Project Site, many of the properties within a one-block radius do not currently provide sidewalks, specifically along 5th Street, Colyton Street, and Hewitt Street. Sidewalks are provided along both sides of Seaton Street adjacent to the Project Site.

(7) High-Injury Network

Vision Zero (discussed previously) has identified the High Injury Network (HIN) to spotlight streets with a high concentration of traffic collisions that result in severe injuries and deaths, with an emphasis on those involving people walking and bicycling. The Project Site vicinity contains several streets that have been identified by the City as part of the HIN. These include:

- Alameda Street
- 1st Street
- 4th Street
- 6th Street
- 7th Street

(8) Existing Traffic Conditions

(a) Analysis Methodology

(i) Existing (2017) Conditions

The purpose of the existing conditions evaluation is to provide an evaluation of the existing transportation network surrounding the study area. The Traffic Study evaluated existing traffic conditions on the street system in the vicinity of the Project Site. Intersection conditions were evaluated for typical weekday morning (7:00 AM to 10:00 AM) and afternoon (3:00 PM to 6:00 PM) peak periods. The analysis of existing traffic conditions provides a basis for the assessment of future traffic conditions.

New weekday AM and PM peak-hour turning movement counts were collected at the study intersections on Wednesday, April 19, 2017 and Thursday, June 1, 2017. These counts were used in the existing conditions evaluation. The existing weekday morning and afternoon peak-hour volumes at the study intersections are provided in Appendix B

of the Traffic Study (see **Appendix I-1** of the Draft EIR). Count sheets for these intersections and street segments are contained in Appendix C of the Traffic Study.

According to LADOT's 2016 *Transportation Impact Study Guidelines*, this analysis is required to use the Critical Movement Analysis (CMA) methodology of intersection capacity calculation to analyze signalized intersections in the City. The volume-to-capacity (V/C) ratio is then used to find the corresponding intersection LOS based on the definitions shown in Table IV.L-2. Under the CMA methodology, a V/C ratio is generated for each study intersection based on factors such as the volume of traffic and the number of lanes providing for such vehicle movement and an LOS grade. LOS worksheets are included in Appendix D of the Traffic Study in **Appendix I-1** of the Draft EIR.

Table IV.L-2
Level of Service Definitions for Signalized Intersections
(CMA Methodology)

Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>0.600 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	>0.700 - 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800 - 0.900	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.
E	>0.900 - 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	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.

Source: Transportation Research Circular No. 212, Interim Materials on Highway Capacity, Transportation Research Board, 1980.0

The City's Automated Traffic Surveillance and Control (ATSAC) system is a computer-based traffic signal control system that monitors traffic conditions and system performance to allow ATSAC-operations to manage signal timing to improve traffic flow

conditions. The Adaptive Traffic Control System (ATCS) is an enhancement to ATSAC and provides fully traffic-adaptive signal control based on real-time traffic conditions. All of the study intersections located in the City are currently operating under the City's ATSAC system and ATCS control. The ATSAC system and ATCS control provide improved operating conditions. Therefore, in accordance with City procedures, a credit of 0.07 V/C reduction was applied at each intersection where the ATSAC system is implemented and an additional 0.03 V/C reduction was applied at each intersection where ATCS control is implemented.

For the driveway analysis, the Transportation Research Board's *2010 Highway Capacity Manual* (HCM) methodology was used to analyze the delay.[7] Under the HCM methodology, delay is calculated in seconds and given an LOS grade, as shown in Table IV.L-3.

Table IV.L-3
Level of Service Definitions for Stop-Controlled Intersections

Level of Service	Average Control Delay (seconds/vehicle)
A	≤ 10.0
B	> 10.0 and ≤ 15.0
C	> 15.0 and ≤ 25.0
D	> 25.0 and ≤ 35.0
E	> 35.0 and ≤ 50.0
F	> 50.0

Source: Highway Capacity Manual, Transportation Research Board, 2010.

The analysis of existing traffic conditions is intended to provide an evaluation of the existing transportation network surrounding the Project Site. The existing 2017 traffic volume counts were conducted when the Sixth Street Bridge Viaduct was under construction and 6th Street was closed between Mateo Street and the US-101 Freeway. With the closure of 6th Street, the existing 2017 traffic counts reflect travel patterns with vehicles diverted to parallel routes, resulting in higher travel volumes on 1st Street, 4th Street, and 7th Street, and lower volumes on 6th Street. As such, the existing 2017 counts presented below would not be a valid representation of the existing baseline conditions. The intersection LOS below are presented for informational purposes only.

Existing year traffic volumes presented in Appendix B of the Traffic Study were analyzed using the intersection capacity analysis methodology described above to determine the existing operating conditions at the study intersections. Analysis sheets are provided in Appendix D of the Traffic Study. As shown in Table IV.L-4, all of the 21

[7] *2010 Highway Capacity Manual, Transportation Research Board, 2010.*

signalized intersections analyzed for impacts currently operate at LOS D or better during both peak periods.

Table IV.L-4
Existing (2017) Intersection Level of Service

No.	Intersection	Peak Hour	Existing 2017 V/C	Existing 2017 LOS
1	San Pedro St & E 4th St	AM PM	0.285 0.783	A C
2	San Pedro St & E 6th St	AM PM	0.221 0.399	A A
3	Central Ave & E 4th St	AM PM	0.154 0.667	A B
4	Central Ave & E 6th St	AM PM	0.286 0.592	A A
5	N Alameda St & Arcadia St	AM PM	0.642 0.647	B B
6	N Alameda St & E Commercial St	AM PM	0.397 0.633	A B
7	N Alameda St & E 1st St	AM PM	0.565 0.431	A A
8	S Alameda St & E 4th Pl/3rd St	AM PM	0.696 0.593	B A
9	S Alameda St & E 4th St	AM PM	0.306 0.719	A C
10	S Alameda St & E 6th St	AM PM	0.468 0.553	A A
11	S Alameda St & E 7th St	AM PM	0.708 0.718	C C
12	S Alameda St & E 8th St	AM PM	0.411 0.344	A A
13	S Alameda St & Olympic Blvd	AM PM	0.643 0.719	B C
14	S Alameda St & I-10 EB On-Ramp	AM PM	0.629 0.663	B B
15	Merrick St/Molino St & E 4th St	AM PM	0.554 0.586	A A
16	Mateo St E 6th St	AM PM	0.245 0.319	A A
17	Mateo St E 7th St	AM PM	0.539 0.518	A A
18	Pecan St E 4th St	AM PM	0.553 0.490	A A
19	US-101 SB Ramp & E 4th St	AM PM	0.542 0.345	A A

Table IV.L-4
Existing (2017) Intersection Level of Service

No.	Intersection	Peak Hour	Existing 2017 V/C	Existing 2017 LOS
20	US-101 NB Ramp & E 4th St	AM PM	0.651 0.363	B A
21	I-5 NB Ramp & E 4th St	AM PM	0.703 0.699	C B

*Source: Fehr & Peers, January 2018. Refer to **Appendix I-1** of the Draft EIR.*

(ii) Baseline (2017) Levels of Service

The analysis of baseline traffic conditions is intended to provide an evaluation of the existing transportation network surrounding the Project Site that does not include the effect of the Sixth Street Viaduct Bridge construction. Therefore, for Baseline 2017 Conditions, intersection traffic counts collected prior to the construction of the Sixth Street Viaduct Bridge were used to represent baseline conditions without the effects of the bridge construction, such as diverted vehicles. Counts collected on May 29, 2014 were used to develop the Baseline scenario for all study intersections, except the Pecan Street and 4th Street intersection and US-101 southbound ramp and 4th Street intersection, which were counted during the Sixth Street Viaduct Bridge construction. An ambient growth rate of one percent per year was applied to the 2014 counts to reflect 2017 baseline conditions absent the current effect of construction activity. Modifications to the traffic volumes are intended to present a realistic assessment of the Project's traffic impacts on the existing setting. As shown in Table IV.L-5, all of the 21 signalized intersections analyzed for impacts operate at LOS C or better during both peak periods under baseline conditions.

Table IV.L-5
Baseline (2017) Intersection Level of Service

No.	Intersection	Peak Hour	Baseline V/C	Baseline LOS
1	San Pedro St & E 4th St	AM PM	0.274 0.759	A C
2	San Pedro St & E 6th St	AM PM	0.235 0.407	A A
3	Central Ave & E 4th St	AM PM	0.176 0.598	A A
4	Central Ave & E 6th St	AM PM	0.440 0.701	A C
5	N Alameda St & Arcadia St	AM PM	0.474 0.659	A B
6	N Alameda St & E Commercial St	AM PM	0.378 0.648	A B
7	N Alameda St & E 1st St	AM PM	0.561 0.574	A A
8	S Alameda St & E 4th Pl/3rd St	AM PM	0.703 0.420	C A
9	S Alameda St & E 4th St	AM PM	0.308 0.623	A B
10	S Alameda St & E 6th St	AM PM	0.591 0.624	B B
11	S Alameda St & E 7th St	AM PM	0.658 0.631	B B
12	S Alameda St & E 8th St	AM PM	0.458 0.457	A A
13	S Alameda St & Olympic Blvd	AM PM	0.603 0.747	B C
14	S Alameda St & I-10 EB On-Ramp	AM PM	0.652 0.694	B B
15	Merrick St/Molino St & E 4th St	AM PM	0.551 0.562	A A
16	Mateo St E 6th St	AM PM	0.367 0.368	A A
17	Mateo St E 7th St	AM PM	0.366 0.357	A A
18	Pecan St E 4th St	AM PM	0.553 0.490	A A
19	US-101 SB Ramp & E 4th St	AM PM	0.542 0.345	A A
20	US-101 NB Ramp & E 4th St	AM PM	0.737 0.323	C A
21	I-5 NB Ramp &	AM	0.579	A

Table IV.L-5
Baseline (2017) Intersection Level of Service

No.	Intersection	Peak Hour	Baseline	
			V/C	LOS
	E 4th St	PM	0.633	B
*Source: Fehr & Peers, January 2018. Refer to **Appendix I-1** of the Draft EIR.*				

c) Future without Project Conditions

(1) Analysis Methodology

(a) Traffic Volumes

To evaluate the potential impacts of the Project on future (Year 2021) conditions, it was necessary to develop estimates of future traffic conditions in the area both without and with Project traffic. 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 (i.e., related projects) in the vicinity of the Project Site.

These projected traffic volumes, identified herein as the future base conditions, represent the future conditions without the Project. The traffic generated by the Project was then estimated and assigned to the surrounding street system. Project traffic was added to the Future Base to form Future plus Project traffic conditions, which were analyzed to determine the incremental traffic impacts attributable to the Project itself.

(b) Background or Ambient Growth

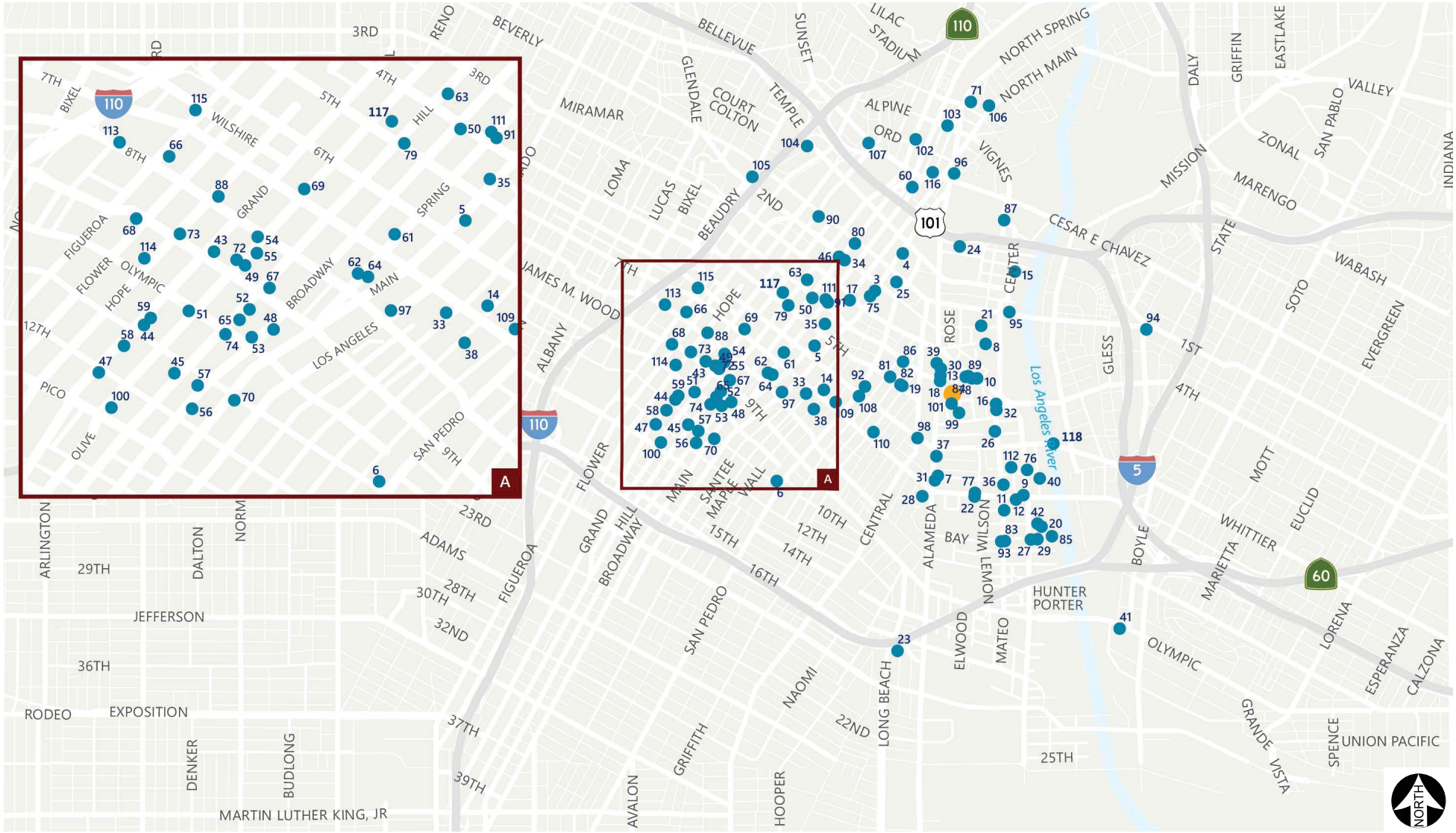
Based on historic trends and at the direction of LADOT, it was established that an ambient growth factor of one percent per year should be applied to adjust the base year traffic volumes to reflect the effects of regional growth and development by 2021, the projected year of Project completion. As the May 29, 2014 counts were used for the development of the future base and future plus conditions, this adjustment was applied to the 2014 traffic volume data to reflect the effect of ambient growth by 2021. This ambient growth factor is conservative as the CMP growth rate for this area of the City is 0.2 percent, or substantially less than the one percent growth factor that was utilized in this analysis. In addition to the use of this ambient growth factor, the inclusion of traffic from specific known development projects in the area (discussed below) results in a conservative set of assumptions regarding future traffic growth.

(c) Related Project Traffic Generation and Assignment

Future base traffic forecasts include the effects of known specific projects, referred to as "cumulative projects," expected to be implemented in the vicinity of the Project Site within a similar approximate timeframe. The list of cumulative projects was prepared based on data from LADOT and was verified by DCP. A total of 117 cumulative projects were identified in the study area; these projects are listed in Table III-1 in **Section III, Environmental Setting**, of the Draft EIR, and their locations are illustrated in Figure IV.L-4. The City is currently preparing the DTLA 2040 plan, which is an update to two community plans: Central City and Central City North. The DTLA 2040 plan, once adopted, will be a long-range plan designed to guide and accommodate growth in the downtown area through 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be completed in 2021. It is assumed that the projected growth reflected by the 117 specific cumulative projects accounts for any overlapping growth that may be assumed in the DTLA 2040 plan upon its adoption.

Trip generation estimates for the cumulative projects were calculated using a combination of previous study findings, publicly available environmental documentation, and trip generation rates contained in *Trip Generation, 9th Edition*. Trip generation estimates for these cumulative projects are shown in Table 5 of the Traffic Study (included as **Appendix I-1** of the Draft EIR). These projections are conservative in that they do not in every case account for either the existing uses to be removed or the possible use of non-motorized travel modes (transit, walking, etc.), nor do they include the trip-reducing effects of any mitigation that may be included with these development proposals.

The geographic distribution of the traffic generated by the cumulative 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 employees and potential patrons of proposed commercial developments may be drawn, the locations of employment and commercial centers to which residents of residential projects may be drawn, and the location of the projects in relation to the surrounding street system. Additionally, if the traffic study or environmental document for a cumulative project was available, the trip distribution from that study was used. Using the estimated trip generation and trip distribution patterns described above, traffic generated by the cumulative projects was assigned to the street network.



Source: Fehr & Peers, 2018.

Figure IV.L-4
Cumulative Projects Location Map

(d) Future Transportation Infrastructure Projects

In addition to the ambient traffic growth and traffic generated by cumulative development projects in the area, programmed improvements to local streets were considered for this analysis. One infrastructure project in the vicinity of the Project Site is anticipated to be completed and opened for use by 2021: Sixth Street Viaduct Replacement Project. The construction of the Sixth Street Viaduct Replacement Project currently results in the closure of 6th Street east of Mateo Street. Future base and Future plus Project conditions in this analysis reflect the westbound approach lane geometry. Using the 2014 counts for the Baseline, Baseline plus Project, Future Base, and Future plus Project conditions reflects typical traffic conditions in the study area with the Sixth Street Viaduct Bridge completed.

(e) Future Base (2021) Intersection Levels of Service

Future (2021) Base weekday AM and PM peak-hour traffic volumes for the analyzed intersections are provided in Appendix B of the Traffic Study. The future base traffic conditions represent an estimate of future conditions without the Project and with the Sixth Street Bridge Viaduct complete.

The Future Base peak-hour traffic volumes were analyzed to determine the projected V/C ratio and LOS for each of the analyzed intersections. Table IV.L-6 summarizes the future LOS. As indicated in the table, eight of the 21 signalized intersections analyzed for impacts are projected to operate at LOS D or better during the morning and afternoon peak hours under Future Base conditions. The following intersections are projected to operate at LOS E or worse during one or both of the peak hours:

1. San Pedro Street & 4th Street (PM peak hour)
4. Central Avenue & 6th Street (PM peak hour)
5. Alameda Street & Arcadia Street (both peak hours)
6. Alameda Street & Commercial Street (PM peak hour)
7. Alameda Street & 1st Street (both peak hours)
8. Alameda Street & 4th Place/3rd Street (both peak hours)
9. Alameda Street & 4th Street (PM peak hour)
10. Alameda Street & 6th Street (both peak hours)
11. Alameda Street & 7th Street (both peak hours)
13. Alameda Street & Olympic Boulevard (PM peak hour)
14. Alameda Street & I-10 Eastbound On-Ramp (PM peak hour)
15. Merrick Street/Molino Street & 4th Street (PM peak hour)
16. Mateo Street & 6th Street (both peak hours)

Table IV.L-6
Future Base (2021) Intersection Level of Service

No.	Intersection	Peak Hour	Future Base	
			V/C	LOS
1	San Pedro St & E 4th St	AM	0.485	A
		PM	1.023	F
2	San Pedro St & E 6th St	AM	0.348	A
		PM	0.537	A
3	Central Ave & E 4th St	AM	0.299	A
		PM	0.765	C
4	Central Ave & E 6th St	AM	0.757	C
		PM	1.130	F
5	N Alameda St & Arcadia St	AM	0.907	E
		PM	1.101	F
6	N Alameda St & E Commercial St	AM	0.647	B
		PM	1.079	F
7	N Alameda St & E 1st St	AM	1.171	F
		PM	1.190	F
8	S Alameda St & E 4th Pl/3rd St	AM	1.151	F
		PM	0.932	E
9	S Alameda St & E 4th St	AM	0.673	B
		PM	1.066	F
10	S Alameda St & E 6th St	AM	1.054	F
		PM	1.215	F
11	S Alameda St & E 7th St	AM	1.254	F
		PM	1.344	F
12	S Alameda St & E 8th St	AM	0.651	B
		PM	0.655	B
13	S Alameda St & Olympic Blvd	AM	0.836	D
		PM	1.049	F
14	S Alameda St & I-10 EB On-Ramp	AM	0.885	D
		PM	0.950	E
15	Merrick St/Molino St & E 4th St	AM	0.828	D
		PM	1.073	F
16	Mateo St E 6th St	AM	0.941	E
		PM	0.985	E
17	Mateo St E 7th St	AM	0.807	D
		PM	0.897	D
18	Pecan St E 4th St	AM	0.641	B
		PM	0.556	A
19	US-101 SB Ramp & E 4th St	AM	0.633	B
		PM	0.449	A
20	US-101 NB Ramp & E 4th St	AM	0.861	D
		PM	0.437	A

Table IV.L-6
Future Base (2021) Intersection Level of Service

No.	Intersection	Peak Hour	Future Base	
			V/C	LOS
21	I-5 NB Ramp & E 4th St	AM	0.711	C
		PM	0.787	C
*Source: Fehr & Peers, 2018. Refer to **Appendix I-1** of the Draft EIR*				

3. Project Impacts

a) Methodology

The methodology and base assumptions used in this analysis were established by LADOT, and, where LADOT does not prescribe a specific methodology, the L.A. CEQA Thresholds Guide was used. This analysis addresses a wide range of issues, including, but not limited to, the following:

- Construction: an analysis of the potential temporary impacts on traffic, access, transit, and parking resulting from the Project's construction activities;
- Intersections: an analysis of the potential changes in operating conditions at the 21 signalized intersections identified within the study area;
- Regional Transportation System: an analysis of potential impacts along the nearest CMP arterial monitoring stations and mainline freeway monitoring locations and on the capacity of transit lines serving the Project area; and
- Project Access: an analysis of potential impacts associated with access to and from the Project Site by automobiles, bicyclists, and pedestrians.

(1) Construction Impacts

The assessment of the Project's potential construction impacts was conducted considering the following factors:

- Temporary Traffic Impacts:
    - The length of time of temporary street closures or closures of two or more traffic lanes;
    - The classification of the street (major arterial, state highway) affected;

- The existing traffic levels and LOS on the affected street segments and intersections;
- Whether the affected street directly leads to a freeway on- or off-ramp or other state highway;
- Potential safety issues involved with street or lane closures;
- The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.

- Temporary Loss of Access:
  - The length of time of any loss of vehicular or pedestrian access to a parcel fronting the construction area;
  - The availability of alternative vehicular or pedestrian access within 0.25 miles of the lost access;
  - The type of land uses affected, and related safety, convenience, and/or economic issues.
- Temporary Loss of Bus Stops or Rerouting of Bus Lines:
  - The length of time that an existing bus stop would be unavailable or that existing service would be interrupted;
  - The availability of a nearby location (within 0.25 miles) to which the bus stop or route can be temporarily relocated;
  - The existence of other bus stops or routes with similar routes/ destinations within a 0.25 mile radius of the affected stops or routes;
  - Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s).
- Temporary Loss of On-Street Parking:
  - The current utilization of existing on-street parking;
  - The availability of alternative parking locations or public transit options (e.g. bus, train) within 0.25 miles of the Project Site;
  - The length of time that existing parking spaces would be unavailable.

(2) Operational Impacts

This analysis assumes that the Project would be completed by 2021 and is directed at analyzing the potential Project generated traffic impact on the local street system under both baseline (2017) and future year traffic conditions. The following traffic scenarios have been developed and are analyzed in the Traffic Study and this Draft EIR:

- Baseline (Year 2017) Conditions – The Project is planned to be completed and opened in 2021, after the completion of the new Sixth Street Bridge Viaduct. Therefore, a baseline traffic scenario was developed to provide a basis for the remainder of the study, which represents traffic conditions without the effect of the Sixth Street Bridge Viaduct construction on study intersections. The baseline analysis utilizes traffic volume counts collected in 2014, prior to the start of the Sixth Street Viaduct Bridge construction and associated roadway closures and includes regional growth from 2014 to reflect baseline 2017 conditions.

- Baseline (Year 2017) plus Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under baseline conditions with the addition of Project-generated traffic. The impacts of the Project on baseline traffic operating conditions are then identified.

- Future Base (Year 2021) Conditions – Future traffic projections without the Project were developed for 2021. The objective of this analysis is to project future traffic growth and operating conditions that could be expected to result from regional growth and other development projects in the vicinity of the Project Site by the year of anticipated Project completion.

- Future Base (Year 2021) plus Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under future conditions with the addition of Project-generated traffic. The impacts of the Project on future traffic operating conditions are then identified.

(a) Project Trip Generation

The development of trip generation estimates for the Project involves the use of a three-step process: trip generation, trip distribution, and traffic assignment. Trip generation rates from *Trip Generation, 9th Edition* (Institute of Transportation Engineers [ITE], 2012) were used to estimate the number of trips associated with the Project and are shown in Table IV.L-7. The total number of trips generated by the individual land uses within the Project were adjusted to account for internalization, transit, pass-by, and trips generated by the existing land uses on the Project Site.

Per LADOT's 2016 Transportation Impact Study Guidelines' Attachment 1 Policy on Pass-By Trips, a 50-percent pass-by credit was applied to the Project's retail and fast-food restaurant uses, a 20-percent pass-by credit was applied to the Project's high-turnover restaurant uses, and a 10-percent pass-by credit was applied to the Project's quality restaurant uses. Pass-by credits account for the patrons making an intermediate stop on the way from an origin to a primary trip destination without a route diversion. These trips would be attracted from traffic passing the site on Alameda Street and other nearby streets.

Internal trip credits can be defined as a reduction that can be applied to the trip generation estimates for individual land uses to account for trips internal to the site. These are trips usually made via walking within the site. Transportation Research Board (TRB) National Cooperative Highway Research Program (NCHRP) Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* was used to determine the internal trip credits for each of the Project land uses. Based on the NCHRP analysis, the internal trip credits shown in Table IV.L-7 were used. The internal trip calculation analysis sheets are provided in Appendix E of the Traffic Study.

An existing credit was applied to the Project's trip generation due to the removal of the existing land uses. The existing uses include ten live/work units and 45,000 square feet of other commercial and light industrial uses that, for the purposes of assigning trip generation rates, has been characterized as 22,000 square feet of shopping center, 16,000 square feet of creative office space, and 7,000 square feet of warehouse space. These uses would be demolished to make way for the Project. Approximately 40 vehicular trips (30 inbound/10 outbound) during the AM peak hour and 63 trips (24 inbound/39 outbound) during the PM peak hour were estimated to no longer enter or leave the site with the removal of these existing uses from the site. As such, these trips were subtracted from the Project's overall trip generation as an existing use credit.

As shown in Table IV.L-7, the Project is projected to generate an estimated net increase of 4,713 daily trips, including 273 trips (133 inbound/140 outbound) during the AM peak hour and 229 trips (157 inbound/72 outbound) during the PM peak hour.

Table IV.L-7
Project Trip Generation

Land Use	ITE Land Use Code	Size		Trip Generation Rates [a]							Estimated Trip Generation						
					AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour		
				Daily	Rate	In%	Out%	Rate	In%	Out%	Daily	In	Out	Total	In	Out	Total
Proposed Project																	
Shopping Center	820	26.979	ksf	42.7	0.96	62%	38%	3.71	48%	52%	1,152	16	10	26	48	52	100
Less: Internal Capture [b]				*18%*		*15%*	*12%*		*62%*	*60%*	*(207)*	*(2)*	*(1)*	*(3)*	*(30)*	*(31)*	*(61)*
Total Driveway Trips											945	14	9	23	18	21	39
Less: Pass-by [c]				*50%*	*50%*			*50%*			*(472)*	*(7)*	*(4)*	*(11)*	*(9)*	*(10)*	*(19)*
Net External Vehicle Trips											473	7	5	12	9	11	20
Quality Restaurant	931	15.197	ksf	89.95	0.81	50%	50%	7.49	67%	33%	1,367	6	6	12	76	38	114
Less: Internal Capture [b]				*5%*		*6%*	*2%*		*15%*	*30%*	*(68)*	*(0)*	*0*	*(0)*	*(11)*	*(11)*	*(22)*
Total Driveway Trips											1,299	6	6	12	65	27	92
Less: Pass-by [c]				*10%*	*10%*			*10%*			*(129)*	*0*	*0*	*0*	*(6)*	*(2)*	*(8)*
Net External Vehicle Trips											1,170	6	6	12	59	25	84
Fast-Food Restaurant	933	2.888	ksf	716	43.87	60%	40%	26.15	51%	49%	2,068	76	51	127	39	37	76
Less: Internal Capture [b]				*7%*		*6%*	*2%*		*15%*	*30%*	*(145)*	*(5)*	*(1)*	*(6)*	*(6)*	*(11)*	*(17)*
Total Driveway Trips											1,923	71	50	121	33	26	59
Less: Pass-by [c]				*50%*	*50%*			*50%*			*(961)*	*(35)*	*(25)*	*(60)*	*(16)*	*(13)*	*(29)*
Net External Vehicle Trips											962	36	25	61	17	13	30
High-Turnover Restaurant	932	13.634	ksf	127.15	10.81	55%	45%	9.85	60%	40%	1,734	81	66	147	80	54	134
Less: Internal Capture [b]				*6%*		*6%*	*2%*		*15%*	*30%*	*(104)*	*(5)*	*(1)*	*(6)*	*(12)*	*(16)*	*(28)*
Total Driveway Trips											1,630	76	65	141	68	38	106
Less: Pass-by [c]				*20%*	*20%*			*20%*			*(326)*	*(15)*	*(13)*	*(28)*	*(13)*	*(7)*	*(20)*
Net External Vehicle Trips											1,304	61	52	113	55	31	86
Hotel	310	113	rooms	8.17	0.53	59%	41%	0.6	51%	49%	923	35	25	60	35	33	68
Less: Internal Capture [b]				*16%*		*3%*	*12%*		*57%*	*58%*	*(148)*	*(1)*	*(3)*	*(4)*	*(20)*	*(19)*	*(39)*
Total Driveway Trips											775	34	22	56	15	14	29
Residential	230	129	DU	5.81	0.44	17%	83%	0.52	67%	33%	749	10	47	57	45	22	67
Less: Internal Capture [b]				*18%*		*7%*	*21%*		*52%*	*52%*	*(135)*	*(1)*	*(10)*	*(11)*	*(24)*	*(11)*	*(35)*

Table IV.L-7
Project Trip Generation

Land Use	ITE Land Use Code	Size		Trip Generation Rates [a] Daily	AM Peak Hour Rate	AM Peak Hour In%	AM Peak Hour Out%	PM Peak Hour Rate	PM Peak Hour In%	PM Peak Hour Out%	Estimated Trip Generation Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Total Driveway Trips											614	9	37	46	21	11	32
Design Incubator [d]	540	3.430	ksf	27.49	2.99	74%	26%	2.54	58%	42%	94	7	3	10	5	4	9
Total Driveway Trips											94	7	3	10	5	4	9
Art Gallery [e]	580	10.341	ksf	1.8	0.28	86%	14%	0.18	16%	84%	19	3	0	3	0	2	2
Total Driveway Trips											19	3	0	3	0	2	2
Total Driveway Trips											7,299	220	192	412	225	143	368
Total Project External Vehicle Trips											5,411	163	150	313	181	111	292
Existing Use Credit																	
Shopping Center	820	22	ksf	42.7	0.96	62%	38%	3.71	48%	52%	939	13	8	21	39	43	82
Less: Internal Capture [b]				*4%*		*5%*	*7%*		*8%*	*5%*	*(38)*	*(1)*	*(1)*	*(2)*	*(3)*	*(2)*	*(5)*
Total Driveway Trips											901	12	7	19	36	41	77
Less: Pass-by [c]				*50%*	*50%*			*50%*			*(450)*	*(6)*	*(3)*	*(9)*	*(18)*	*(20)*	*(38)*
Net External Vehicle Trips											451	6	4	10	18	21	39
Creative Office	710	16	ksf	11.03	1.56	88%	12%	1.49	17%	83%	176	22	3	25	4	20	24
Less: Internal Capture [b]				7%		4%	33%		25%	18%	*(12)*	*(1)*	*(1)*	*(2)*	*(1)*	*(4)*	*(5)*
Net External Vehicle Trips											164	21	2	23	3	16	19
Warehousing	150	7	ksf	3.56	0.3	79%	21%	0.32	25%	75%	25	2	0	2	1	1	2
Net External Vehicle Trips											25	2	0	2	1	1	2
Residential	220	10	DU	6.65	0.51	20%	80%	0.62	65%	35%	67	1	4	5	4	2	6
Less: Internal Capture [b]				*13%*		*0%*	*0%*		*50%*	*33%*	(9)	0	0	0	(2)	(1)	(3)
Net External Vehicle Trips											58	1	4	5	2	1	3
Total Existing Use Credit											698	30	10	40	24	39	63
Net Incremental External Trips											**4,713**	**133**	**140**	**273**	**157**	**72**	**229**

[a] Source: Institute of Transportation Engineers [ITE}, Trip Generation, 9th Edition, 2012.
[b] 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.

Table IV.L-7
Project Trip Generation

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Estimated Trip Generation						
				AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour		
			Daily	Rate	In%	Out%	Rate	In%	Out%	Daily	In	Out	Total	In	Out	Total
[c] The pass-by credit is based on Attachment I of LADOT's Traffic Study Policies and Procedures, December, 2016.																
[d] Trip generation rates for community college used for design incubator.																
[e] Trip generation rates for museum used for Art Gallery. Since ITE does not provide a daily trip rate for this use, the peak-hour rate was multiplied by 10 to develop a daily trip estimate.																
*Source: Fehr & Peers, 2018. See **Appendix I-1** of the Draft EIR.*																

(b) Project Trip Distribution

The geographic distribution of trips generated by the Project is dependent on characteristics of the street system serving the Project Site; the level of accessibility of routes to and from the Project Site; locations of employment and commercial centers to which residents of the Project would be drawn; and residential areas from which the office employees and other commercial visitors would be drawn. A select zone analysis was conducted for the proposed uses using the City's Travel Demand Model to inform the general distribution pattern for this study. Two separate trip distributions were used, to show differences in the trip distribution for commercial based trips and residential trips. The distribution of Project trips is illustrated in Figure IV.L-5 for residential trips and Figure IV.L-6 for retail trips.

(c) Project Traffic Assignment

The traffic to be generated by the Project was assigned to the street network using the distribution pattern illustrated in Figures IV.L-5 and IV.L-6. Appendix B of the Traffic Study provides the assignment of the Project-generated peak-hour traffic volumes at the analyzed intersections during the AM and PM peak hours. The assignment of traffic volumes took into consideration the locations of the Project driveways on Colyton Street and 5th Street, as well as the turning movements permitted at the two driveways.

(d) Congestion Management Program

To determine whether the Project would require preparation of a CMP Traffic Impact Analysis, the number of Project net new trips that would be distributed to the nearest CMP facilities was reviewed to determine if the Project would add 50 or more trips to an arterial monitoring intersection during either the AM or PM weekday peak hours, or add 150 or more trips to a mainline freeway monitoring location in either direction during the AM or PM weekday peak hours

(e) Transit System

Potential increases in transit person trips generated by the Project were also estimated. Appendix B-4 of the 2010 CMP provides a methodology for estimating the number of transit trips expected to result from a 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 0.25 miles of the Project Site and express bus routes and rail service within two miles of the Project Site.

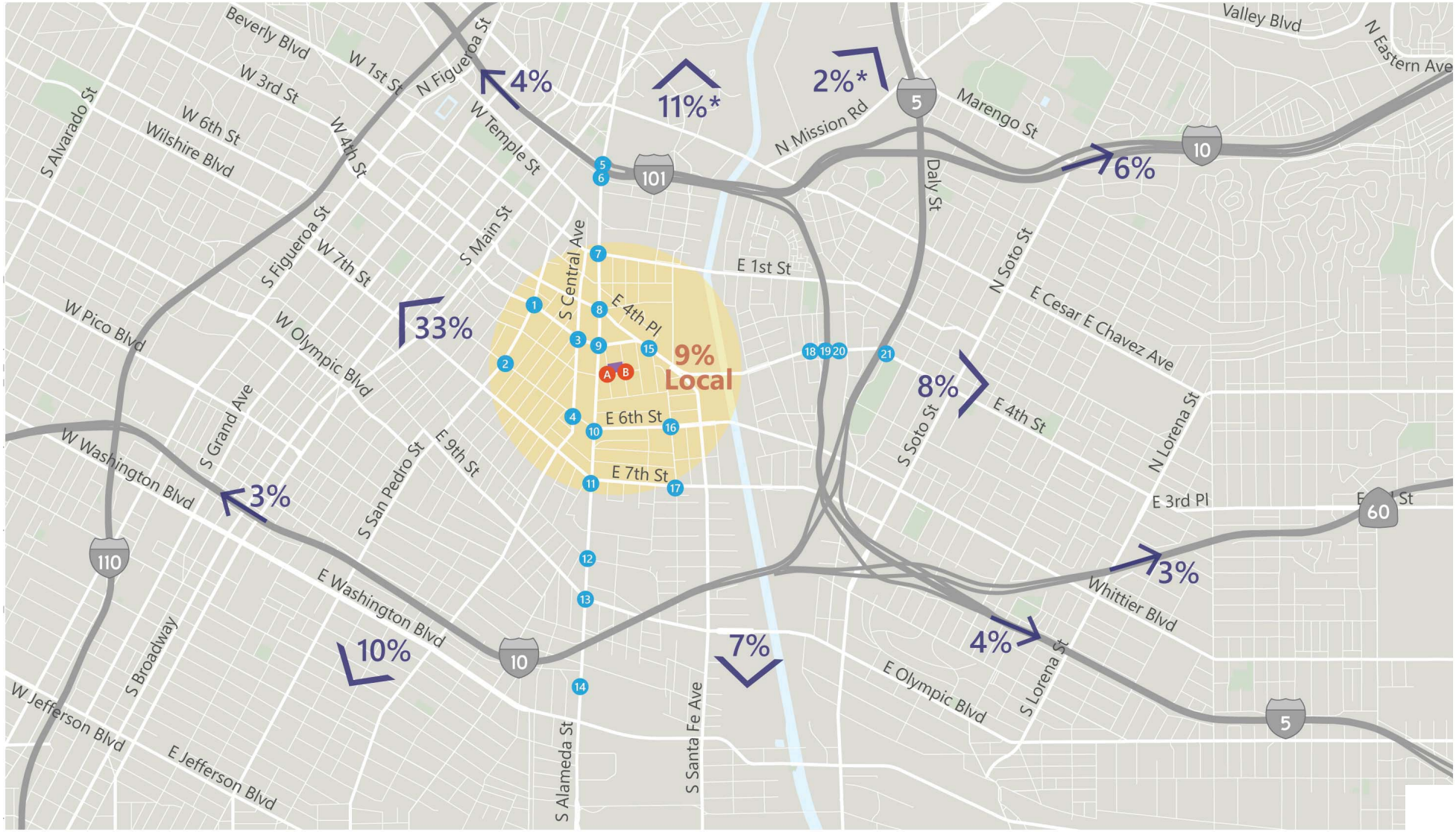


Figure IV.L-5
Project Residential Trip Distribution

Source: Fehr & Peers, 2018.

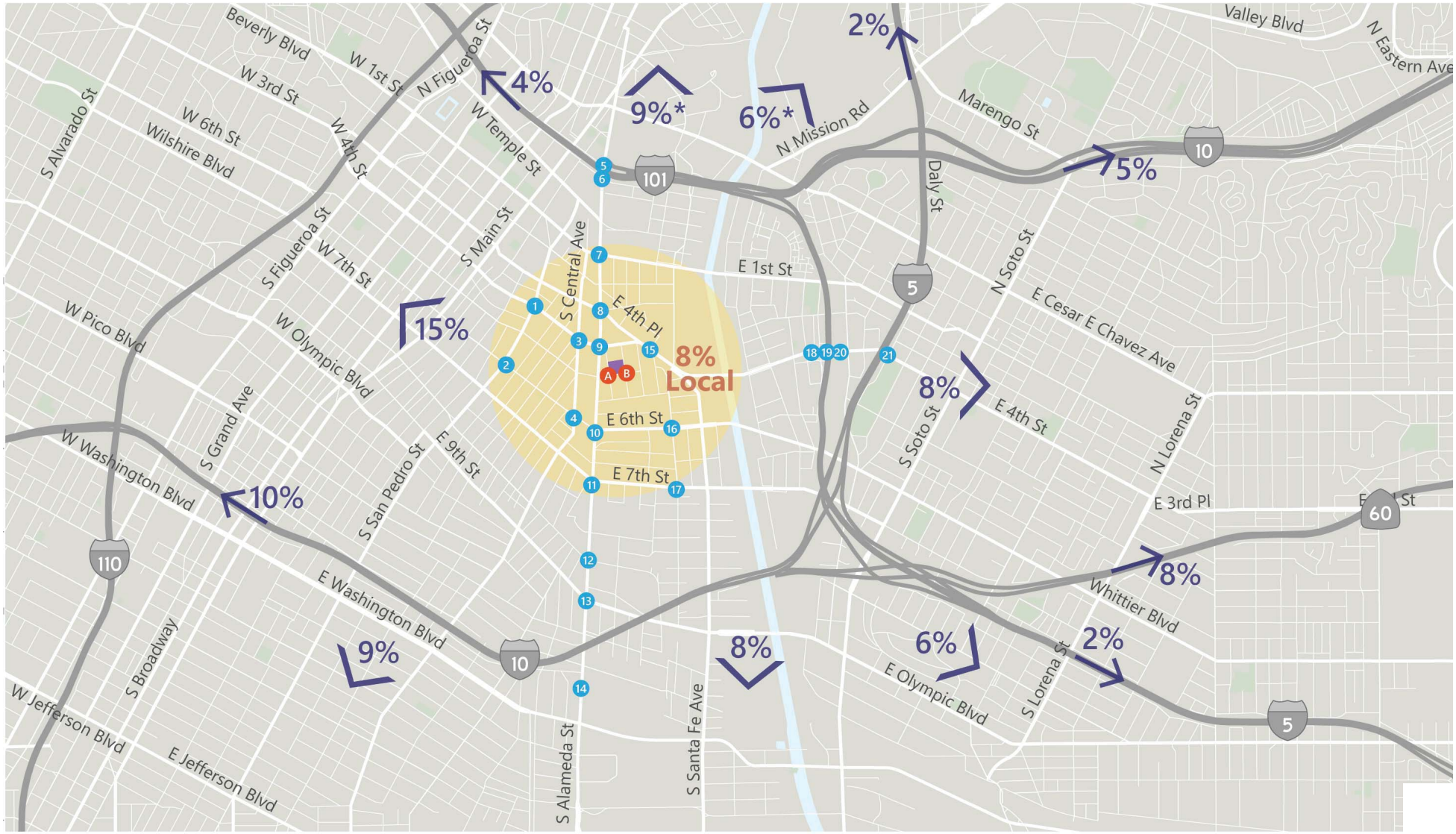


Figure IV.L-6
Project Commercial Trip Distribution

Source: Fehr & Peers, 2018.

(f) Access and Circulation

The analysis of the Project's potential access impacts included a review of the proposed vehicular access points and internal circulation. A determination was made pursuant to the thresholds of significance identified below regarding the potential for these features of the Project to impede traffic flows on adjacent City streets and/or result in potential safety impacts.

(g) Bicycle, Pedestrian, and Vehicular Safety

The methodology for the analysis of pedestrian/bicycle safety impacts includes a review of the Project's access and internal circulation scheme and a determination of whether the Project would substantially increase the potential for pedestrian/vehicle and/or bicycle/vehicle conflicts pursuant to the thresholds of significance identified below.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), a project would have a significant impact related to transportation and traffic if the project would do the following:

(a) Conflict with an applicable plan, ordinance or policy establishing measures 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; or

(b) 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; or

(c) 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; or

(d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or

(e) Result in inadequate emergency access; or

(f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

(2) 2006 L.A. CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) identifies the following criteria to evaluate transportation/traffic:

(a) Construction Impacts

The Thresholds Guide provides four categories to be considered with respect to in-street construction impacts: temporary traffic impacts, temporary loss of access, temporary loss of bus stops or rerouting of bus lines, and temporary loss of on-street parking. The factors to be considered in each of these categories as established in the Thresholds Guide are as follows:

- Temporary Traffic Impacts:
    - The length of time of temporary street closures or closures of two or more traffic lanes;
    - The classification of the street (major arterial, state highway) affected;
    - The existing traffic levels and LOS on the affected street segments and intersections;
    - Whether the affected street directly leads to a freeway on- or off-ramp or other state highway;
    - Potential safety issues involved with street or lane closures;
    - The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.
- Temporary Loss of Access:
    - The length of time of any loss of vehicular or pedestrian access to a parcel fronting the construction area;
    - The availability of alternative vehicular or pedestrian access within 0.25 miles of the lost access;

- The type of land uses affected, and related safety, convenience, and/or economic issues.

- Temporary Loss of Bus Stops or Rerouting of Bus Lines:
  - The length of time that an existing bus stop would be unavailable or that existing service would be interrupted;
  - The availability of a nearby location (within 0.25 miles) to which the bus stop or route can be temporarily relocated;
  - The existence of other bus stops or routes with similar routes/ destinations within a 0.25 mile radius of the affected stops or routes;
  - Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s).

- Temporary Loss of On-Street Parking:
  - The current utilization of existing on-street parking;
  - The availability of alternative parking locations or public transit options (e.g. bus, train) within 0.25 miles of the Project Site;
  - The length of time that existing parking spaces would be unavailable.

However, it should be noted that SB 743 as implemented in California Public Resources Code Section 21099 provides that 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. This supersedes the significance guidance in the Thresholds Guide.

LAMC Section 41.40 provides that construction activities are limited to the hours from 7:00 AM to 9:00 PM on weekdays and from 8:00 AM to 6:00 PM on Saturdays and holidays. No construction is permitted on Sundays.

(b) Intersection Capacity

The City has established threshold criteria to determine significant traffic impact of a proposed project in its jurisdiction. Under the LADOT guidelines, an intersection would be significantly impacted with an increase in V/C ratio equal to or greater than 0.04 for intersections operating at LOS C, equal to or greater than 0.02 for intersections operating at LOS D, and equal to or greater than 0.01 for intersections operating at LOS E or F after the addition of project traffic. Intersections operating at LOS A or B after the

addition of the project traffic are not considered significantly impacted regardless of the increase in V/C ratio. LADOT's criteria for determining the significance of an intersection impact are presented in Table IV.L-8.

Table IV.L-8
LADOT Intersection Level of Service Significance Criteria

With Project Traffic		Project-Related Increase in V/C Ratio
LOS	V/C Ratio	
C	0.701 - 0.800	Equal to or greater than 0.04
D	0.801 - 0.900	Equal to or greater than 0.02
E/F	> 0.900	Equal to or greater than 0.01
Source: LADOT		

c) Project Design Features

The following Project Design Features (PDFs) are proposed as part of the Project.

TR-PDF-1 Site Design – The Project Site perimeter will be designed to encourage walking, biking, and transit usage. Amenities would include:

- New sidewalks and street trees along the perimeter
- Improved street and pedestrian lighting

TR-PDF-2 Construction Traffic Management Plan – A Construction Traffic Management Plan will be developed by the contractor and approved by the City of Los Angeles to alleviate potential construction period impacts. The Plan may include, but is not limited to, the following measures:

- Provide off-site truck staging in a legal area furnished by the construction truck contractor. Anticipated truck access to the Project Site will be off 5th Street.
- Schedule deliveries and pick-ups of construction materials during non-peak travel periods to the extent possible and coordinate to reduce the potential of trucks waiting to load or unload for protracted periods.
- As parking lane and/or travel lane closures are anticipated, worksite traffic control plan(s), approved by the City of Los Angeles, will be implemented to route vehicular traffic, bicyclists, and pedestrians around any such closures.

- Establish requirements for loading/unloading and storage of materials on the Project Site, where parking spaces would be encumbered, length of time traffic travel lanes can be encumbered, sidewalk closings or pedestrian diversions to ensure the safety of the pedestrian and access to local businesses and residences.

- Ensure that access will remain unobstructed for land uses in proximity to the Project Site during Project construction.

- Coordinate with the City and emergency service providers to ensure adequate access is maintained to the Project Site and neighboring businesses and residences.

TR-PDF-3 Construction Worker Parking Plan – A Construction Worker Parking Plan will be developed by the contractor and approved by the City of Los Angeles to ensure that the parking location requirements for construction workers will be strictly enforced. The Plan could include, but is not limited to, the following measures:

- During construction activities when construction worker parking cannot be accommodated on the Project Site, the Plan shall identify alternate parking location(s) for construction workers and the method of transportation to and from the Project Site (if beyond walking distance) for approval by the City 30 days prior to commencement of construction.

- Provide all construction contractors with written information on where their workers and their subcontractors are permitted to park, and provide clear consequences to violators for failure to follow these regulations. This information will clearly state that no parking is permitted on residential streets.

d) Analysis of Project Impacts

Threshold (a) ***Would the project conflict with an applicable plan, ordinance or policy establishing measures 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?***

(1) Impact Analysis

(a) Construction Impacts

Construction of the Project is anticipated to begin in 2018 and expected to take a total of approximately 2.5 years to complete. The construction is anticipated to involve four key phases:

(1) Demolition and Site Preparation –1 month

(2) Grading (Mass Excavation & Shoring) – 2 months

(3) Construction (Building Framing and Construction) – 25 months

(4) Paving and Architectural Coatings – 2 months

(i) Temporary Traffic Impacts

Closures to one travel lane along the Project frontage are anticipated during certain phases of Project construction. There are no emergency services located within the immediate vicinity of the affected streets. Since 5th Street is a neighborhood Collector street with low volumes and other alternative routes are available, the temporary construction impacts on the roadway network would be considered less than significant.

5th Street, Seaton Street, and Colyton Street are classified as Collector streets. The nearest signalized intersection, Alameda Street and 4th Street, operates at LOS A during the AM peak hour and LOS C during the PM peak hour under existing (2017) conditions and at LOS A during the AM peak hour and LOS B during the PM peak hour under baseline (2017) conditions. This intersection would operate at LOS B during the AM peak hour and LOS F during the PM peak hour under Future Base conditions. Worksite traffic control plans would be prepared, per LADOT requirements, for any temporary vehicle lane, bicycle lane, or sidewalk closures in accordance with applicable City guidelines.

Hauling activity is expected to occur over the first three phases of construction: Phase 1 – Demolition & Site Preparation; Phase 2 – Grading; and Phase 3 – Building Framing and Construction. Peak hauling activity is anticipated to occur during Phase 2 when the mass excavation for the parking garage would occur. Up to 30 haul truck loads per day are anticipated on peak hauling days during Phase 1, up to 150 haul truck loads per day are anticipated on peak days during Phase 2, and up to 30 haul truck loads per day are anticipated on peak days during Phase 3.

Hauling hours are anticipated to be 7:00 AM to 3:00 PM, Monday through Friday, and 8:00 AM to 6:00 PM on Saturdays. The haul route for the Project would most likely be Alameda Street and I-10. Per Mitigation Measure MM-NOI-3, the number of construction trucks permitted to access the site via Colyton Street would be restricted. Most trucks would enter and exit from 5th Street from Seaton Street. Trucks would be staged off-site and dispatched to the Project Site as needed.

In addition to haul trucks, the Project is also expected to generate equipment and delivery trucks during each phase of construction. One example would be concrete delivery, which would be required for the subterranean parking garage and the building on-site. Other materials could include plumbing supplies, electrical fixtures, and items used in furnishing the buildings. These materials would be delivered to the Project Site and stored on-site. These deliveries are expected to occur in variously sized vehicles, ranging from small delivery trucks to cement mixer trucks and 18-wheeler trucks. Additionally, construction equipment would be delivered to the Project Site. Pieces of construction equipment could include cranes, bulldozers, excavators, and other large items of machinery. Most of the heavy equipment would be transported to the Project Site on large trucks, such as 18-wheelers or other similar vehicles.

Phase 1 and Phase 2 are anticipated to involve approximately 10 equipment/delivery trucks on peak activity days. Phase 3 is anticipated to involve up to 30 equipment/delivery trucks on peak activity days. Phase 4 is anticipated to involve approximately 20 trucks equipment/delivery trucks per day on peak activity days.

(ii) Temporary Loss of Access

The existing land uses in the vicinity of the construction site would remain open throughout construction. There are currently sidewalks on both sides of Seaton Street but no sidewalks fronting 5th Street or Colyton Street. Pedestrian and vehicular access to properties located near the Project Site would be open and unobstructed during construction. Since Project construction would not block vehicle or pedestrian access to other parcels fronting the construction area, there would be no temporary loss of access, and, as such, impacts would be less than significant.

(iii) Temporary Loss of Bus Stops or Rerouting of Bus Lines

No bus stops are located along the Project Site frontages of 5th Street, Seaton Street, and Colyton Street. Construction is not anticipated to affect bus stops or bus lines in the area. As Project construction would not require relocation of bus stops or bus lines, there would be no temporary loss of bus stops or rerouting of bus lines, and, as such, no construction impacts on transit operations would occur.

(iv) Temporary Loss of On-Street Parking

Construction of the Project would require the removal of approximately 34 on-street parking spaces along the Project frontages for the duration of construction to accommodate the construction area footprint and/or temporary truck staging. All of the on-street parking spaces are unmetered and approximately 21 of these spaces are reserved for the businesses within the existing building.

Per the provisions in California Public Resources Code Section 21099, which implements SB 743, 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. Because the Project and the Project Site both meet these criteria, temporary parking impacts would be less than significant.

(v) Construction Workers and Vehicle Parking

The number of construction workers would vary throughout the construction period with the building construction phase necessitating the highest number of workers on-site. Phase 1 is expected to involve a total of 50 workers on a peak day; Phase 2 is expected to involve approximately 10 workers on a peak day; Phase 3 is expected to involve up to 300 workers on a peak day; and Phase 4 is expected to involve up to 40 workers on a peak day.

During the site preparation and the first portion of the building construction phase while the subterranean parking levels are under construction, it is anticipated that construction workers would be parked off-site in a rented parking lot. Potential off-site parking locations would be identified in the Construction Worker Parking Plan (see Project Design Feature TR-PDF-3 above). If the off-site parking location is beyond walking distance, construction workers would be shuttled to the Project Site. Once the subterranean parking levels of the Project are completed and safe access can be assured, a temporary Certificate of Occupancy may be issued to permit construction workers to park on-site.

(vi) Construction Period Trip Generation

Based on the aforementioned information, a construction period trip generation analysis was conducted under all four phases of construction to estimate daily, AM, and PM peak-hour passenger car equivalent (PCE) trips. Construction workers often travel to and from a worksite outside of the typical peak commute hours. For the purpose of the analysis, it was assumed that up to 40 percent of the construction workers would arrive during the peak AM commute hour and 40 percent would depart during the peak PM commute hour. Haul and delivery/equipment trucks were assumed to occur evenly throughout the 8-hour construction day. A PCE factor of 2.0 was used for vendor, haul, and delivery trucks.

Table IV.L-9 provides a summary of construction period trip generation under each of the phases of construction. As shown, the peak construction activity day would occur during Phase 3. On a peak construction activity day, a total of up to 840 daily PCE trips are estimated to occur under Phase 3, out of which 152 PCE trips would occur during the AM peak hour, and 128 PCE trips would occur in the PM peak hour.

At any given time, the peak construction activity would generate fewer daily and peak-hour trips than are projected for the Project once it is completed and occupied (4,713 daily trips, 273 AM peak hour trips, and 229 PM peak hour trips, as shown in Table IV.L-7).

The influx of construction material and equipment could create temporary impacts on the adjacent roadway network based on the following considerations:

- There may be intermittent periods when large numbers of material deliveries are required, such as when concrete trucks would be needed for the parking garage and the building.
- Some of the materials and equipment could require the use of large trucks (18-wheelers), which could create additional congestion on the adjacent roadways.
- Delivery vehicles may need to park temporarily on adjacent roadways as they deliver their items. Based on past experience, it is not uncommon for these types of deliveries to result in temporary lane closures.

Table IV.L-10 provides a summary of the Project's transportation-related construction impacts. **As shown in the table, the Project would have a less-than-significant impact during the construction period.**

Table IV.L-9
Project Construction Trip Generation: Daily Trips by Phase

Phase	Daily PCE Trips[1]	AM Peak-Hour PCE Trips			PM Peak-Hour PCE Trips		
		In	Out	Total	In	Out	Total
Demolition and Site Preparation							
Construction Worker Trips[2]	100	20	0	20	0	20	20
Haul Truck Trips[3]	120	8	8	16	0	0	0
Delivery/Equipment Truck Trips[3]	40	3	3	6	3	3	6
Phase 1 Total	***260***	***31***	***11***	***42***	***3***	***23***	***26***
Grading							
Construction Worker Trips[2]	20	4	0	4	0	4	4
Haul Truck Trips[3]	600	38	38	76	0	0	0
Delivery/Equipment Truck Trips[3]	40	3	3	6	0	3	3
Phase 2 Total	***660***	***45***	***41***	***86***	***0***	***7***	***7***
Construction							
Construction Worker Trips[2]	600	120	0	120	0	120	120
Haul Truck Trips[3]	120	8	8	16	0	0	0
Delivery/Equipment Truck Trips[3]	120	8	8	16	8	8	16
Phase 3 Total	***840***	***136***	***16***	***152***	***8***	***128***	***136***
Paving and Architectural Coating							
Construction Worker Trips[2]	80	16	0	16	0	16	16
Haul Truck Trips[3]	0	0	0	0	0	0	0
Delivery/Equipment Truck Trips[3]	80	5	5	10	5	5	10
Phase 4 Total	***160***	***21***	***5***	***26***	***5***	***21***	***26***

PCE = Passenger Car Equivalent

[1] *Daily trips were calculated by counting two trips, one inbound and one outbound trip for each vehicle.*

[2] *Up to 40% of the construction workers were assumed to drive during the morning peak hour of adjacent street traffic. A total of up to 40% worker were assumed to depart during the evening peak hour.*

[3] *Daily haul and delivery/equipment truck trips were assumed to occur evenly throughout an 8-hour construction day. Therefore, the daily truck trips were divided by 8 hours to calculate AM peak-hour trips. Haul trucks were assumed to not make trips after 3:00 PM and therefore do not have trips during the PM peak hour.*

Source: Fehr & Peers, 2018.

Table IV.L-10
Construction Period Impact Significance Analysis

Significance Factor	Assessment	Conclusion
Per the Thresholds Guide, the determination of significance shall be made on a case-by-case basis, considering the following factors:		
Temporary Traffic Impacts:		
• The length of time of temporary street closures or closures of two or more traffic lanes;	• Temporary full street closures or closures of two or more traffic lanes are not anticipated.	Less than Significant.
• The classification of the street (major arterial, state highway) affected;	• 5th Street, Colyton Street, and Seaton Street are all classified as Collector streets; therefore, no major arterial streets or state highways are affected.	
• The existing traffic levels and level of service (LOS) on the affected street segments and intersections;	• There are no signalized intersections with streets that connect directly to the Project Site. The closest signalized intersection of Alameda Street and 4th Street operates at LOS A in the AM peak hour and LOS C in the PM peak hour under existing 2017 and at LOS A in the AM peak hour and LOS B in the PM peak hour under baseline 2017 conditions. • The intersection of Alameda Street and 6th Street operates at LOS A in the AM and PM pear hours under existing 2017 conditions and at LOS A in the AM peak hour and LOS B in the PM peak hour under baseline 2017 conditions. • The intersection of Merrick Street/ Molino Street and 4th Street operates at LOS A in the AM and PM peak hours under existing 2017 and baseline 2017 conditions. • The Intersection of Mateo Street and 6th Street operates at LOS A in the AM and PM peak hours under existing 2017 and baseline 2017 conditions.	
• Whether the affected street directly leads to a freeway on- or off-ramp or other state highway;	• None of the affected streets directly lead to a freeway on- or off-ramp or other state highways.	
• Potential safety issues involved with street or lane closures;	• Worksite traffic control plans would be prepared for any temporary lane or sidewalk	

Table IV.L-10
Construction Period Impact Significance Analysis

Significance Factor	Assessment	Conclusion
	closures in accordance with applicable City requirements.	
• The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.	• There are no emergency services located within the immediate vicinity of the affected streets.	
Temporary Loss of Access:		
• The length of time of any loss of vehicular or pedestrian access to a parcel fronting the construction area;	• Access to adjacent buildings and land uses would remain open.	Less than Significant.
• The availability of alternative vehicular or pedestrian access within 0.25 miles of the lost access;		
• The type of land uses affected, and related safety, convenience, and/or economic issues.		
Temporary Loss of Bus Stops or Rerouting of Bus Lines:		
• The length of time that an existing bus stop would be unavailable or that existing service would be interrupted;	• There are no bus stops or transit lines along the Project frontage.	Less than Significant.
• The availability of a nearby location (within 0.25 miles) to which the bus stop or route can be temporarily relocated;		
• The existence of other bus stops or routes with similar routes/ destinations within a 0.25 mile radius of the affected stops or routes;		
• Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s).		
Temporary Loss of On-Street Parking:		
• The current utilization of existing on-street parking;	• Construction would remove approximately 34 on-street parking spaces along the Project frontage throughout construction.	Less than Significant in accordance with SB 743/Public Resources Code Section 21099.
• The availability of alternative parking locations or public transit options (e.g. bus, train) within 0.25 miles of the Project Site;	• Public transit options are available within 0.5 miles of the Project Site, including the Metro Gold Line Little Tokyo/Arts District Station and local and regional bus routes on 3rd Street, 6th Street, and 7th Street.	
• The length of time that existing parking spaces would be unavailable.		

Note: SB 743 as implemented in California Public Resources Code Section 21099 provides that 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. This guidance supersedes the significance guidance in the Thresholds Guide.

Source: Fehr & Peers, 2018.

(b) Operational Impacts

(i) Baseline (2017) Traffic Conditions Analysis

The Project traffic estimated and assigned to the study intersections was added to the baseline traffic volumes to estimate Baseline plus Project traffic volumes. Turning movement traffic volumes for the Baseline Plus Project scenario are provided in Appendix B of the Traffic Study.

The Baseline traffic volumes were analyzed to determine the projected V/C ratios and LOS for each of the analyzed intersections under this scenario. Table IV.L-11 summarizes the Baseline LOS. As indicated in Table IV.L-11, all of the 21 signalized intersections are projected to operate at LOS C or better during both peak hours.

The Baseline plus Project traffic volumes were analyzed to determine the projected V/C ratios and LOS for each of the analyzed intersections under this scenario. Table IV.L-11 summarizes the Baseline plus Project LOS. As indicated in Table IV.L-11, all of the 21 signalized intersections are projected to operate at LOS C or better during both peak hours under the Baseline Plus Project scenario.

As also shown in Table IV.L-11, **all of the study area intersections are projected to operate at LOS C or better during both peak hours. Based on the City's impact criteria for intersection LOS impacts shown in Table IV.L-8, the Project's intersection LOS impacts under the Baseline (2017) Plus Project traffic condition would be less than significant.**

Table IV.L-11
Baseline (2017) Plus Project Intersection LOS Impacts

No.	Intersection	Peak Hour	Baseline (2017)		Baseline + Project		V/C Increase	Significant Impact?
			V/C	LOS	V/C	LOS		
1	San Pedro St &	AM	0.274	A	0.275	A	0.001	No
	E 4th St	PM	0.759	C	0.761	C	0.002	No
2	San Pedro St &	AM	0.235	A	0.236	A	0.001	No
	E 6th St	PM	0.407	A	0.408	A	0.001	No
3	Central Ave &	AM	0.176	A	0.176	A	0.000	No
	E 4th St	PM	0.598	A	0.603	B	0.005	No
4	Central Ave &	AM	0.440	A	0.457	A	0.017	No
	E 6th St	PM	0.701	C	0.712	C	0.011	No
5	N Alameda St &	AM	0.474	A	0.595	A	0.121	No
	Arcadia St	PM	0.659	B	0.661	B	0.002	No
6	N Alameda St &	AM	0.378	A	0.381	A	0.003	No
	E Commercial St	PM	0.648	B	0.649	B	0.001	No
7	N Alameda St &	AM	0.561	A	0.565	A	0.004	No
	E 1st St	PM	0.574	A	0.579	A	0.005	No
8	S Alameda St &	AM	0.703	C	0.719	C	0.016	No
	E 4th Pl/3rd St	PM	0.420	A	0.433	A	0.013	No
9	S Alameda St &	AM	0.308	A	0.321	A	0.013	No
	E 4th St	PM	0.623	B	0.633	B	0.010	No
10	S Alameda St &	AM	0.591	A	0.618	B	0.027	No
	E 6th St	PM	0.624	B	0.633	B	0.009	No
11	S Alameda St &	AM	0.658	B	0.670	B	0.012	No
	E 7th St	PM	0.631	B	0.638	B	0.007	No
12	S Alameda St &	AM	0.458	A	0.464	A	0.006	No
	E 8th St	PM	0.457	A	0.461	A	0.004	No
13	S Alameda St &	AM	0.603	B	0.611	B	0.008	No
	Olympic Blvd	PM	0.747	C	0.749	C	0.002	No
14	S Alameda St &	AM	0.652	B	0.656	B	0.004	No
	I-10 EB On-Ramp	PM	0.694	B	0.699	B	0.005	No
15	Merrick St/Molino St &	AM	0.551	A	0.554	A	0.003	No
	E 4th St	PM	0.562	A	0.565	A	0.003	No
16	Mateo St	AM	0.367	A	0.379	A	0.012	No
	E 6th St	PM	0.368	A	0.384	A	0.016	No
17	Mateo St	AM	0.366	A	0.375	A	0.009	No
	E 7th St	PM	0.357	A	0.368	A	0.011	No
18	Pecan St	AM	0.553	A	0.555	A	0.002	No
	E 4th St	PM	0.490	A	0.490	A	0.000	No
19	US-101 SB Ramp &	AM	0.542	A	0.545	A	0.003	No
	E 4th St	PM	0.345	A	0.349	A	0.004	No
20	US-101 NB Ramp &	AM	0.737	C	0.739	C	0.002	No
	E 4th St	PM	0.323	A	0.325	A	0.002	No

Table IV.L-11
Baseline (2017) Plus Project Intersection LOS Impacts

No.	Intersection	Peak Hour	Baseline (2017)		Baseline + Project		V/C Increase	Significant Impact?
			V/C	LOS	V/C	LOS		
21	I-5 NB Ramp &	AM	0.579	A	0.586	A	0.007	No
	E 4th St	PM	0.633	B	0.638	B	0.005	No
Source: Fehr & Peers, 2018.								

(ii) Future (2021) Traffic Conditions Analysis

The Project traffic volumes were added to the 2021 future base traffic projections, resulting in Future plus Project AM and PM peak-hour traffic volumes. This Future plus Project scenario presents future traffic conditions with the completion of the Project. These resulting Future plus Project peak-hour traffic volumes (provided in Appendix B of the Traffic Study) were analyzed to determine the projected future operating conditions with the addition of Project traffic. The results of the Future plus Project analysis are presented in Table IV.L-12. As shown in the table, seven of the 21 signalized intersections studied for impacts are projected to operate at LOS D or better during the morning and afternoon peak hours. The following 14 intersections are projected to operate at LOS E or worse during one or both of the peak hours:

1. San Pedro Street & 4th Street (PM peak hour)
4. Central Avenue & 6th Street (PM peak hour)
5. Alameda Street & Arcadia Street (both peak hours)
6. Alameda Street & Commercial Street (PM peak hour)
7. Alameda Street & 1st Street (both peak hours)
8. Alameda Street & 4th Place/3rd Street (both peak hours)
9. Alameda Street & 4th Street (PM peak hour)
10. Alameda Street & 6th Street (both peak hours)
11. Alameda Street & 7th Street (both peak hours)
13. Alameda Street & Olympic Boulevard (PM peak hour)
14. Alameda Street & I-10 Eastbound On-Ramp (PM peak hour)
15. Merrick Street/Molino Street & 4th Street (PM peak hour)
16. Mateo Street & 6th Street (both peak hours)
17. Mateo Street & 7th Street (PM peak hour)

Table IV.L-12
Future Base (2021) and Future Base Plus Project Intersection LOS Impacts

No.	Intersection	Peak Hour	Future Base (2021)		Future + Project		V/C Increase	Significant Impact?
			V/C	LOS	V/C	LOS		
1	San Pedro St &	AM	0.485	A	0.486	A	0.001	No
	E 4th St	PM	1.023	F	1.025	F	0.002	No
2	San Pedro St &	AM	0.348	A	0.349	A	0.001	No
	E 6th St	PM	0.537	A	0.537	A	0.000	No
3	Central Ave &	AM	0.299	A	0.303	A	0.004	No
	E 4th St	PM	0.765	C	0.771	C	0.006	No
4	Central Ave &	AM	0.757	C	0.765	C	0.008	No
	E 6th St	PM	1.130	F	1.138	F	0.008	No
5	N Alameda St &	AM	0.907	E	0.911	E	0.004	No
	Arcadia St	PM	1.101	F	1.103	F	0.002	No
6	N Alameda St &	AM	0.647	B	0.650	B	0.003	No
	E Commercial St	PM	1.079	F	1.080	F	0.001	No
7	N Alameda St &	AM	1.171	F	1.175	F	0.004	No
	E 1st St	PM	1.190	F	1.195	F	0.005	No
8	S Alameda St &	AM	1.151	F	1.167	F	0.016	**Yes**
	E 4th Pl/3rd St	PM	0.932	E	0.942	E	0.010	**Yes**
9	S Alameda St &	AM	0.673	B	0.687	B	0.014	No
	E 4th St	PM	1.066	F	1.077	F	0.011	**Yes**
10	S Alameda St &	AM	1.054	F	1.075	F	0.021	**Yes**
	E 6th St	PM	1.215	F	1.224	F	0.009	No
11	S Alameda St &	AM	1.254	F	1.266	F	0.012	**Yes**
	E 7th St	PM	1.344	F	1.355	F	0.011	**Yes**
12	S Alameda St &	AM	0.651	B	0.656	B	0.005	No
	E 8th St	PM	0.655	B	0.657	B	0.002	No
13	S Alameda St &	AM	0.836	D	0.842	D	0.006	No
	Olympic Blvd	PM	1.049	F	1.051	F	0.002	No
14	S Alameda St &	AM	0.885	D	0.889	D	0.004	No
	I-10 EB On-Ramp	PM	0.950	E	0.955	E	0.005	No
15	Merrick St/Molino St &	AM	0.828	D	0.831	D	0.003	No
	E 4th St	PM	1.073	F	1.075	F	0.002	No
16	Mateo St	AM	0.941	E	0.954	E	0.013	**Yes**
	E 6th St	PM	0.985	E	0.990	E	0.005	No
17	Mateo St	AM	0.807	D	0.819	D	0.012	No
	E 7th St	PM	0.897	D	0.909	E	0.012	**Yes**
18	Pecan St	AM	0.641	B	0.644	B	0.003	No
	E 4th St	PM	0.556	A	0.556	A	0.000	No
19	US-101 SB Ramp &	AM	0.633	B	0.635	B	0.002	No
	E 4th St	PM	0.449	A	0.454	A	0.005	No
20	US-101 NB Ramp &	AM	0.861	D	0.863	D	0.002	No

Table IV.L-12
Future Base (2021) and Future Base Plus Project Intersection LOS Impacts

No.	Intersection	Peak Hour	Future Base (2021)		Future + Project		V/C Increase	Significant Impact?
			V/C	LOS	V/C	LOS		
	E 4th St	PM	0.437	A	0.439	A	0.002	No
21	I-5 NB Ramp &	AM	0.711	C	0.718	C	0.007	No
	E 4th St	PM	0.787	C	0.791	C	0.004	No

*Source: Fehr & Peers, 2018. Refer to **Appendix I-1** of the Draft EIR.*

Based on the City's impact criteria for intersection LOS impacts shown in Table IV.L-8, the Project's intersection LOS impacts under the Future Base (2021) Plus Project traffic condition would be significant at the six signalized intersections listed below. Mitigation measures related to these impacts are discussed below.

8. Alameda Street & 4th Place/3rd Street (both peak hours)
9. Alameda Street & 4th Street (PM peak hour)
10. Alameda Street & 6th Street (AM peak hour)
11. Alameda Street & 7th Street (both peak hours)
16. Mateo Street & 6th Street (AM peak hour)
17. Mateo Street & 7th Street (PM peak hour)

(iii) Unsignalized Intersection Signal Warrant Analysis

Two study intersections located in the City are currently unsignalized:

A. Seaton Street & East 5th Street
B. Colyton Street & East 5th Street

Traffic volumes and lane configurations were used to prepare signal warrant analyses at the unsignalized intersections under Baseline, Baseline plus Project, Future Base, and Future plus Project conditions. As shown in Table IV.L-13, neither one of the studied unsignalized intersections warrants a traffic signal during the AM and PM peak hours under any analysis scenario.

Table IV.L-13
Peak-Hour Signal Warrants

No.	Intersection	Peak Hour	Existing Signal Warrant MET	Existing Plus Project Signal Warrant Met	Cumulative Signal Warrant Met	Cumulative Plus Project Signal Warrant Met
A	Seaton St &	AM	NO	NO	NO	NO
	E 5th St	PM	NO	NO	NO	NO
B	Colyton St &	AM	NO	NO	NO	NO
	E 5th St	PM	NO	NO	NO	NO

Source: Fehr & Peers, 2018.

(c) Conclusion

Construction of the Project would not conflict with an applicable plan, ordinance or policy establishing measures 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. Construction impacts would be less than significant.

Prior to mitigation, operation of the Project would conflict with an applicable plan, ordinance or policy establishing measures 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. Operational impacts would be significant.

(2) Mitigation Measures

(a) Construction Traffic

No significant impacts related to construction traffic have been identified. Thus, no mitigation measures are required.

(b) Intersection LOS

As discussed previously, the Project would result in significant impacts at six study intersections under the Future Base (2021) Plus Project condition. As such, the following mitigation measures are required:

TR-MM-1 A preliminary TDM program shall be prepared as part of the Project and provided for LADOT review prior to the issuance of the first building permit for the Project. A final TDM program approved by LADOT shall be required prior to the issuance of the first certificate of occupancy for the Project. The TDM program should include, but not be limited to, the following strategies:

- An on-site Transportation Information Center;
- Preferential rideshare loading/unloading or parking location;
- Convenient parking and facilities for bicycle riders;
- Guaranteed ride home programs for employees;
- Allowance for flexible and alternative work schedules;
- Administrative support for the formation of carpools/vanpools;
- Promotion of transit, walk, or bike to work events;
- Project design elements to ensure a bicycle, transit, and pedestrian-friendly environment;
- Unbundled parking from housing cost;
- Parking cash-out programs for Project and uses as appropriate;
- A Covenant and Agreement to ensure that the TDM program will be maintained;
- Make a one-time financial contribution of $50,000 to the City of Los Angeles Department of Transportation to be used in the implementation of the Mobility Hub in the general area of the Project;

- Make a one-time fixed-fee financial contribution of $50,000 to the City's Bicycle Plan Trust Fund to implement bicycle improvements in the general Downtown Los Angeles area of the Project.

TR-MM-2 The Project shall contribute up to $175,000 toward Transportation Systems Management (TSM) improvements within the Central District that may be considered to better accommodate intersection operations and increase intersection capacity throughout the study area. LADOT's ATSAC Section has identified the need of new system upgrades from Alameda Street & 4th Place/3rd Street to Alameda Street & 7th Street, and from Alameda Street & 7th Street to 7th Street & Mateo Street. The system upgrades would provide and improve the network capacity for additional closed-circuit television (CCTV) cameras to real-time video monitoring of intersection, corridor, transit, and pedestrian operations in Downtown Los Angeles. Collectively, these TSM improvements provide a system wide benefit by reducing delays experienced by motorists at study intersections.

(3) Level of Significance After Mitigation

(a) Construction Traffic

Impacts related to construction traffic would be less than significant.

(b) Intersection LOS

Table IV.L-14 shows the LOS and significant impact analysis results after implementation of Mitigation Measure TR-MM-2 (the signal improvements under Future plus Project conditions). LADOT has determined that the installation of fiber optic data lines along Alameda Street between 4th Street and 7th Street would increase intersection capacity in the transportation system serving the Project and that a 0.01 credit can be taken for the impacted intersections along Alameda Street with implementation of Mitigation Measure TR-MM-2. However, in order to maintain a conservative approach, a credit was not applied to the incremental V/C increase attributable to the Project for the implementation of Mitigation Measure TR-MM-1 (the TDM program). As shown in Table IV.L-14, implementation of Mitigation Measure TR-MM-2 would reduce 5 of the 6 significant Project intersection impacts to a less-than-significant level. With respect to the remaining significant Project intersection impact at Alameda Street & 6th Street, physical traffic mitigation improvement options were evaluated in an attempt to fully mitigate the impact. However, no feasible mitigations were identified due to the constraints of the existing physical conditions and recent adoption of Vision Zero, Mobility Plan 2035, and Complete Streets Design Guide. Due to these new standards

and geometric design constraints, no feasible and effective physical improvements proposed would fully mitigate the Project-related traffic impact to a level below significance at this intersection. **For the remaining significant impact, because physical improvements are not feasible, the AM peak-hour impact at the Alameda Street and 6th Street intersection would remain significant and unavoidable.**

Table IV.L-14
Future Base (2021) Plus Project Intersection LOS Impacts After Mitigation

No.	Intersection	Peak Hour	Future (2021) V/C	Future (2021) LOS	Future (2021) + Project V/C	Future (2021) + Project LOS	V/C Increase	Significant Impact?	Future + Project With Mitigation V/C	Future + Project With Mitigation LOS	V/C Increase	Residual Impact?
8	S Alameda St & E 4th Pl/3rd St	AM	1.151	F	1.167	F	0.016	**Yes**	1.157	F	0.006	No
		PM	0.932	E	0.942	E	0.010	**Yes**	0.932	E	0.000	No
9	S Alameda St & E 4th St	AM	0.673	B	0.687	B	0.014	No	--	--	--	--
		PM	1.066	F	1.077	F	0.011	**Yes**	1.067	F	0.001	No
10	S Alameda St & E 6th St	AM	1.054	F	1.075	F	0.021	**Yes**	1.065	F	0.011	**Yes**
		PM	1.215	F	1.224	F	0.009	No	--	--	--	--
11	S Alameda St & E 7th St	AM	1.254	F	1.266	F	0.012	**Yes**	1.256	F	0.002	No
		PM	1.344	F	1.355	F	0.011	**Yes**	1.345	F	0.001	No
16	Mateo St E 6th St	AM	0.941	E	0.954	E	0.013	**Yes**	0.944	E	0.003	No
		PM	0.985	E	0.990	E	0.005	No	--	--	--	--
17	Mateo St E 7th St	AM	0.807	D	0.819	D	0.012	No	--	--	--	--
		PM	0.897	D	0.909	E	0.012	**Yes**	0.899	E	0.002	No

Source: Fehr & Peers, 2018.

Threshold (b) ***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?***

(1) Impact Analysis

(a) CMP Arterial Analysis

The CMP guidelines require that intersection monitoring locations must be examined if a project will add 50 or more trips during either the weekday AM or PM peak hours. The CMP arterial monitoring station closest to the Project Site is at Alameda Street and Washington Boulevard, located south of both the Project Site and I-10. Based on the Project trip distribution and trip generation, the Project would add approximately 5 trips

in the AM peak hour and 4 trips in the PM peak hour through the CMP arterial monitoring station. **Thus, the 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.**

(b) CMP Freeway Analysis

The CMP guidelines require that freeway monitoring locations must be examined if a project will add 150 or more trips (in either direction) during either the weekday AM or PM peak hours. The CMP freeway monitoring station closest to the Project Site is US-101 north of Vignes Street. Based on the Project distribution patterns shown in Figures IV.L-5 and IV.L-6, approximately 10 percent of Project traffic is expected to travel through the US-101 freeway monitoring station at Vignes Street. According to the trip generation estimates shown in Table IV.L-7 and the trip distribution, the Project is projected to result in an increase of 27 trips in the AM and 23 trips in the PM peak hour on US-101 at Vignes Street.

The CMP freeway monitoring stations closest to the Project Site on I-10 are at Budlong Avenue, west of downtown Los Angeles, and at the Los Angeles city limit, east of downtown Los Angeles. Approximately 5 percent of Project traffic would travel west on the I-10 freeway through Budlong Avenue and approximately 5 percent would travel east on I-10 past the City limit. The Project would result in an increase of 14 trips in the AM and 12 trips in the PM peak hour on westbound and eastbound I-10.

The CMP freeway monitoring stations closest to the Project Site on I-5 are at Stadium Way, north of downtown Los Angeles, and at Ferris Avenue, south of downtown Los Angeles. Approximately 2 percent of Project traffic would travel north on I-5 through Stadium Way, and approximately 3 percent would travel south on I-5 through Ferris Avenue. The Project would result in an increase of 5 trips in the AM and 5 trips in the PM peak hour on northbound I-5 and 8 trips in the AM and 7 trips in the PM peak hour on southbound I-5.

Since fewer than 150 trips would be added during the AM or PM peak hours in either direction at any of the CMP freeway segments in the vicinity of the study area, no further analysis of the freeway segments is required for CMP purposes.

(c) Regional Transit Impact Analysis

Due to its proximity to the transit hubs in downtown Los Angeles, the Project Site is served by several transit lines. The Project is located within a 0.5 miles walking distance to the Metro Gold Line Little Tokyo/Arts District Station and a 0.25 miles walking distance to the Metro Rapid 720 bus stop at Alameda Street and 6th Street. The Project would generate an estimated increase of approximately 270 net vehicle trips during the AM

peak hour and 226 trips during the PM peak hour. Applying the AVR factor of 1.4 to the estimated vehicle trips would result in an estimated increase of approximately 378 and 316 transit person trips during the AM and PM peak hours, respectively. The CMP provides that, of the total net person trips attributed to a project, 7 percent should be assigned as transit riders for projects that are primarily commercial and are located within 0.25 miles of a transit corridor, in this case the Metro Rapid 720 route. Following this approach, the Project would generate an estimated increase of 26 transit trips during the AM peak hour and 22 transit trips during the PM peak hour. Given the frequency of the transit service in close proximity to the Project Site, the incremental number of transit riders resulting from the Project would not result in a significant impact on the transit lines serving the area.

The Project Site is served by many established local and regional transit routes within a 0.5 signmile radius. The headway service for local and express routes is between five and 15 minutes during both peak periods. DASH operates with 10-minute headways during the peak hours. These bus services have an estimated seating capacity of approximately 1,300 persons during the peak hours based on a bus seating capacity of 40 persons for a standard bus and 65 persons for a Rapid articulated bus. The Metro Gold Line, with seven-minute headways in both the AM and PM peak hours, has an estimated capacity of 3,850 persons during the peak hours. **With a total estimated transit seating capacity of approximately 5,150 persons in the peak hours, the Project would utilize approximately 0.5 percent of available transit capacity during the peak hours. Therefore, Project-related impacts on existing transit services would be less than significant.**

(2) Mitigation Measures

No significant impacts to CMP facilities and regional transit have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts to CMP facilities and regional transit would be less than significant.

Threshold (c) Would the project 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?

As discussed in the Initial Study (see **Appendix A** of the Draft EIR), the Project would not result in a change in air traffic patterns that would result in a substantial safety risk. No airports are located within a five-mile radius of the Project Site. **Therefore, the Project would have no impact with respect to Threshold (c), and no further analysis is required.**

Threshold (d) ***Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

(1) Impact Analysis

The Project would have two driveways, a full-access driveway from Colyton Street on the east side of the Project Site, and a full-access driveway from 5th Street on the south side of the Project Site. The loading entrance for truck deliveries would be located on Seaton Street. The driveway from Colyton Street would lead directly to the parking ramp and would serve self-parkers. The entrance and exit serving the residential, hotel, and commercial valet pick-up and drop-off would be located at the 5th Street driveway. The design of the porte cochere of the valet area provides sufficient space for five inbound vehicles and five outbound vehicles to be served curbside without obstructing the through vehicles from accessing the garage. In addition, there would be sufficient space for an additional three vehicles entering the porte cochere to be stacked prior to the valet zone before queuing would reach the street. The Project would provide sufficient valet staff to effectively manage the valet curbside space, to ensure that the flow of vehicles to the garage is streamlined, and to minimize spillback queues onto 5th Street.

The underground parking structure is designed as an automated parking structure. Vehicles would interface with the automated system through lifts, or vehicle elevators, accessible on the B2 underground parking level. The system would utilize automatic sensors to ensure that vehicles are correctly positioned for parking. Drivers would exit and lock their vehicle, walk up to the automated parking ticket kiosk, remove a parking card from the kiosk, and walk away. From this point, the automated system would take over and the computer-controlled lifts would pick up the vehicle and safely place it inside the garage on a shelving system. Five vehicle lifts would be provided, and each lift would take approximately one minute to process a vehicle to subsequent parking levels. Together, the five vehicle lifts could process up to 300 vehicles per hour which would sufficiently accommodate the estimated peak hour Project trips. In the event of an influx of vehicles arriving at the same time, the valet parking area provided on B2 can be used as a temporary staging area for vehicles before they are processed through the automated system.

All ingress/egress points associated with the Project would be designed and constructed in accordance with the requirements of the City's Department of Building and Safety, the City's Department of Public Works, and LADOT. **No sharp curves, dangerous intersections, or incompatible uses are being proposed in the Project's access and circulation system. Therefore, the Project would not substantially increase hazards due to a design feature or incompatible uses.**

(2) Mitigation Measures

No significant impacts related to hazards due to a design feature or incompatible uses have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to hazards due to a design feature or incompatible uses would be less than significant.

Threshold (e) Would the project result in inadequate emergency access?

(1) Impact Analysis

Emergency vehicle access to the Project Site is provided via local roadways. Prominent roadways in the vicinity of the Project Site include Santa Fe Avenue, 4th Street, and 6th Street. All development in the City must comply with access requirements of the City's Building and Safety Department and the LAFD. The Project Applicant would be required to comply with applicable Fire Code, California Fire Code, City Building Code, and National Fire Protection Association standards. Additionally, the Project Applicant is required to submit an emergency response plan to the LAFD for review and approval prior to occupancy of the Project. The emergency response plan would include, but not be limited to, the following: mapping of emergency exits, evacuation routes for vehicles and pedestrians, location of nearest hospitals, and fire stations. Any required modifications must be identified and implemented prior to occupancy of the Project.

Emergency access is also addressed **in Section IV.K.1, Public Services - Fire Protection**, and **Section IV.K.2, Public Services - Police Protection**, of the Draft EIR. **The Project Applicant would be required to submit a plot plan for approval by the LAFD, to help ensure that Project construction and operations would not impede fire access to and from the Project Site. Pursuant to Fire Code requirements, emergency access shall be maintained to the Project Site during construction through marked emergency access points approved by the LAPD. For these reasons, the Project would not result in inadequate emergency access, and impacts would be less than significant.**

(2) Mitigation Measures

No significant impacts related to inadequate emergency access have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to inadequate emergency access would be less than significant without.

Threshold (f) ***Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?***

(1) Impact Analysis

No existing or planned bicycle lanes or routes are located adjacent to the Project Site. No transit stops or routes are located adjacent to the Project Site. No sidewalks exist adjacent to the Project Site at the present time, with the exception of the sidewalks along the Seaton Street frontage. However, the Project would include the placement of sidewalks adjacent to the development, along with improved pedestrian-oriented amenities and features. **Therefore, Project impacts with respect to pedestrian facilities would be less than significant.**

No public transit or bicycle facilities currently exist on or adjacent to the Project Site. **Therefore, the Project would have no impact with respect to public transit or bicycle facilities.**

As discussed previously under Threshold (b), Project impacts with respect to transit utilization and the CMP would be less than significant.

Table IV.L-15 provides an analysis of the Project's consistency with applicable policies set forth in the City's Mobility Plan 2035. **As shown in the table, the Project would be consistent with the majority of these policies and would, thus, would result in a less-than-significant impact.**

Table IV.L-15
Project Consistency with the Mobility Plan 2035

Objective/Policy	Project Consistency
Policy 2.3: Recognize walking as a component of every trip, and ensure high-quality pedestrian access in all site-planning and public right-of-way modifications to provide a safe and comfortable walking environment.	**Consistent.** The Project would include pedestrian access, connectivity, and activity along 5th Street, Seaton Street, and Colyton Street. Project shops and restaurants would front along these pedestrian streets. Sidewalks would be constructed along the frontage of these commercial, retail, and restaurant uses. At the street level, the Project is designed to be pedestrian-friendly, maintaining a strong street wall, with distinct entrances, commercial glass storefront windows, and an art plaza (1,500 square feet) on the southwest corner (corner of 5th and Seaton Streets) that creates a flexible open space for pedestrians. Sidewalks would surround the Project on three sides. The Project would further enhance pedestrian activity by offering retail and restaurant opportunities at the ground level, as well as movable and fixed

Table IV.L-15
Project Consistency with the Mobility Plan 2035

Objective/Policy	Project Consistency
	outdoor furniture and an outdoor dining area along the sidewalk, at the southeast corner (corner of 5th and Colyton Streets). In addition, the Project Site has a Walk Score of 94, underscoring that the Project Site exists as a pedestrian-friendly environment, which will be strengthened by the Project. The Project would also provide street trees that would serve as a physical barrier between street traffic and the sidewalk and increase pedestrian safety and comfort. The trees would offer a continuous canopy of shade that would add to pedestrian comfort and physical well-being, especially in a neighborhood, such as the Arts District, that lacks shade trees, greenery and wide, well-maintained sidewalks. Street trees would also give the Project's sidewalk a sense of security and enclosure, add natural color and beauty, mitigate stormwater runoff, and improve air quality. Sidewalk planters and the installation of sidewalk benches would enhance the attractiveness and utility of the sidewalk, by providing a buffer between the sidewalk and street that would make the pedestrians feel less exposed to the traffic.
Policy 2.10: Facilitate the provision of adequate on- and off-street loading areas.	**Consistent.** The Project includes a separated off-street loading area for the transfer of shipments to and from the proposed development. This loading area is located on the side of the Project closest to Alameda Street, a major transportation corridor, thus limiting the penetration of delivery vehicles into the neighborhood.
Policy 3.3: Promote equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs, destinations, and other neighborhood services.	**Consistent.** The Project is located on an infill site, is a mixed-use development, and is located in a Transit Priority Area. It is anticipated that the Project would reduce VMT by providing a balanced mix of uses that enhance walkability and connectivity in close proximity to transit (DASH Line A; Metro Local Route 18, Metro Gold Line, Metro Rapid 720).
Policy 3.8: Provide bicyclists with convenient, secure, and well-maintained bicycle parking facilities.	**Consistent.** The Project would provide short- and long-term bicycle parking consistent with LAMC requirements, totaling 220 spaces.
Policy 4.8: Encourage greater utilization of Transportation Demand Management (TDM) strategies to reduce dependence on single-occupancy vehicles.	**Consistent.** Under Mitigation Measure TR-MM-1, the Project would adopt and implement a TDM program.
Policy 4.9: Partner with the private sector to foster the success of Transportation Management Organizations (TMOs) in the City's	**Consistent.** Although the Project is not proposing a TMO, it would not obstruct the implementation of a TMO within the Arts District.

Table IV.L-15
Project Consistency with the Mobility Plan 2035

Objective/Policy	Project Consistency
commercial districts.	
Policy 5.2: Support ways to reduce vehicle miles traveled (VMT) per capita.	**Consistent.** By virtue of the Project's mix of uses and location, it would reduce overall VMT as compared to a similar development in a less central, transit-rich area of the City or the region. Implementation of Mitigation Measure TR-MM-1, establishing a Project TDM Program, would also assist in reducing VMT generated by the Project itself.
Source: City of Los Angeles, Mobility Plan 2035, approved June 2016.	

As shown in this analysis, the Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities and as such, impacts would be less than significant.

(2) Mitigation Measures

No significant impacts related to policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

An adequate discussion of a project's significant cumulative impact, in combination with other closely related projects, can be based on either: (1) a list of past, present, and probable future producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence.

(a) Construction

A total of 117 cumulative development projects were identified in the study area; these projects are listed in Table III-2 in **Section III, Environmental Setting**, of the Draft EIR, and their locations are illustrated in Figure IV.L-4. Of these, the closest to the Project Site are Projects No. 18 (400 S. Alameda Street), No. 84 (926 E. 4th Street), No. 99 (527 Colyton Street), and No. 101 (1100 E. 5th Street). If construction of one or more of these projects were to occur in concert with construction of the Project, a cumulative effect on local area traffic could result.

However, as is the case with the Project, each of the cumulative projects would be required to implement LADOT-approved Construction Traffic Management and Construction Worker Parking Plans (described above under Project Design Features TR-PDF-2 and TR-PDF-3), which would have the combined effect of reducing temporary disruption to and congestion of the local street network. In addition, each cumulative project would be required to mitigate any significant impacts resulting from its construction work.

Because the Project would have a less-than-significant impact with respect to construction-related transportation disruption, it would not result in a cumulatively considerable contribution to a cumulative construction impact on transportation and traffic.

(b) Operation

(i) Intersection LOS

As discussed previously under **Threshold (a)**, the traffic volumes projected for the Future (2021) Base and Future Base Plus Project scenarios take into account the expected changes in traffic over existing conditions from the two following primary sources:

- Based on historic trends and at the direction of LADOT, it was established that an ambient growth factor of 1 percent per year should be applied to adjust the existing base year traffic volumes to reflect the effects of regional growth and development by year 2021.
- A total of 117 cumulative development projects were identified in the study area; these projects are listed in Table III-2 in **Section III, Environmental Setting**, of the Draft EIR, and their locations are illustrated in Figure IV.L-4.

The City is currently preparing the DTLA 2040 plan, which is an update to two community plans: Central City and Central City North. The DTLA 2040 plan, once adopted, will be a long-range plan designed to guide and accommodate growth in the

downtown area through 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be completed in 2021. It is assumed that the projected growth reflected by the 117 specific cumulative projects accounts for any overlapping growth that may be assumed in the DTLA 2040 plan upon its adoption.

The analysis of all future year conditions (2021) includes the cumulative impacts (future baseline [cumulative projects + ambient growth] + the Project) of both the Project and other anticipated development. **The analysis shows that the Project would create a significant traffic impact at six of the analyzed study intersections under the Future plus Project conditions. Therefore, the Project's contribution to impacts under cumulative conditions would be considerable, and cumulative impacts would be significant at those intersections impacted by the Project.**

(ii) Transit

The Project and the other cumulative projects would add new ridership to the transit system. However, as noted previously, the Project Site is well-served by transit, including the Metro Gold Line light rail and numerous Rapid and local bus routes, and a local DASH service. City policies encourage intensification of land use and transit ridership in transit priority areas, such as the Project Site and much of the Arts District. **Therefore, cumulative transit impacts are considered to be less than significant.**

The Project would not make a cumulatively considerable contribution to cumulative impacts with respect to **Thresholds (b), (c), (d), (e),** or **(f)**.

(2) Mitigation Measures

See Mitigation Measures TR-MM-1 and TR-MM-2 related to this impact are discussed above under **Threshold (a)**.

(3) Level of Significance After Mitigation

While Mitigation Measures TR-MM-1 and TR-MM-2 would partially mitigate the traffic impacts of the Project, a Project impact would remain at the intersection of Alameda Street and 6th Street. Therefore, cumulative impacts at this intersection would be considered significant and unavoidable.

IV. Environmental Impact Analysis

M.1 Utilities and Service Systems – Wastewater

1. Introduction

This section evaluates the Project's potential impacts on wastewater infrastructure and facilities. The City of Los Angeles Bureau of Sanitation (LASAN), manages the City of Los Angeles' (City) wastewater facilities, including those that service the Project Site. The analysis in this section evaluates the Project's wastewater flow during construction and operation, and the capacity of existing wastewater facilities. A summary of applicable regulations and wastewater regulations is also provided in this section. In addition, the potential cumulative impacts to wastewater infrastructure and facilities associated with the Project, in combination with all known cumulative projects are evaluated.

The demand on wastewater infrastructure and facilities is assessed by considering the amount of wastewater flow generated by the Project during construction and operation periods and whether the existing wastewater facilities have capacity to serve the Project. Based on this analysis, a determination is made as to whether the existing wastewater infrastructure and facilities can accommodate the Project's wastewater flow.

The section includes information from the following document, included in **Appendix K** of the Draft EIR:

K-1. *Correspondence from Ali Poosti, Division Manager, Wastewater Engineering Services Division, Los Angeles Bureau of Sanitation, June 13, 2017.*

K-2. *Correspondence from Albert Lew, Wastewater Engineering Services Division, Los Angeles Bureau of Sanitation, November 27, 2018.*

2. Environmental Setting

a) Regulatory Setting

(1) State

The California Green Building Standards Code, commonly referred to as the CALGreen Code (CALGreen Code), is set forth in California Code of Regulations (CCR) Title 24, Part 11, and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development and water conservation, among other issues. Under the CALGreen Code, all water closets (i.e., flush toilets) are limited to 1.28 gallons per flush, and urinals are limited to 0.5 gallon per flush. In addition, maximum flow rates for faucets are established at 2.0 gallons per minute (gpm) at 80 pounds per square inch (psi) for showerheads, 1.2 gpm at 60 psi for residential lavatory faucets, and 1.8 gpm at 60 psi for kitchen faucets.

(2) Local

(a) City of Los Angeles General Plan Framework Element

The City of Los Angeles General Plan Framework Element (Framework Element) guides the update of the community plan and Citywide elements, thereby providing a Citywide strategy for long-term growth. As such, the Framework Element addresses federal and state mandates to plan for the future. Chapter 9, Infrastructure and Public Services, of the City's General Plan Framework identifies goals, objectives, and policies for utilities in the City. Goal 9A of Chapter 9 provides for adequate wastewater collection and treatment capacity for the City and in basins tributary to City-owned wastewater treatment facilities.

(b) City of Los Angeles Integrated Resources Plan

The City's Integrated Resources Plan (IRP) was developed by multiple departments in order to address the facility needs of the City's wastewater program, recycled water, and urban runoff/stormwater management through the year 2020. The Final IRP 5-Year Review was released in June 2012, and included 12 projects that were separated into two categories: (1) "Go Projects" for immediate implementation, and (2) "Go-If Triggered Projects" for implementation in the future once a trigger is reached.[1] Triggers for these projects include wastewater flow, population, regulations, or operational efficiency. Based on the Final IRP 5-Year Review, the Go Projects consisted of six capital improvement projects for which triggers were considered to have been met at the time

[1] *City of Los Angeles Department of Public Works Bureau of Sanitation and Department of Water and Power, Water Integrated Resources Plan 5-Year Review FINAL Documents, June 2012.*

the IRP EIR was certified. The Go-If Triggered Projects consisted of six capital improvement projects for which triggers were not considered to have been met at the time the IRP EIR was certified.

The following is a description of the six Go Projects:

1. Construct wastewater storage facilities at Donald C. Tillman Water Reclamation Plant that will provide the needed wet weather wastewater storage and operational storage.

2. Construct wastewater storage at the Los Angeles Glendale Water Reclamation Plant that will allow operations to be more efficient while increasing its ability to provide consistent recycled water flows to customers.

3. Construct recycled water storage at Los Angeles Glendale Water Reclamation Plant that will allow the Los Angeles Glendale Water Reclamation Plant to deliver recycled water to customers at times when wastewater flows are low (i.e., during the night.)

4. Construct solids handling and truck loading facility at the Hyperion Water Reclamation Plant (HWRP) that will provide more efficient operations and will also meet future solids handling production.

5. Construct Glendale-Burbank Interceptor Sewer that will provide relief and additional capacity in the near future to prevent overflows and spills.

6. Construct North East Interceptor Sewer Phase II that will relieve the section of the North Outfall Sewer south of the Los Angeles Glendale Water Reclamation Plant and convey additional wastewater from the Glendale-Burbank Interceptor Sewer to provide additional capacity in the near future to prevent overflows and spills.

The following is a description of the six Go-If Triggered Projects:

1. Upgrades at the Donald C. Tillman Water Reclamation Plant to advanced treatment (current capacity) may be triggered by regulations and/or a decision to reuse recycled water for groundwater replenishment (advanced treatment may be necessary in order to meet all applicable requirements).

2. Expansion of the Donald C. Tillman Water Reclamation Plant to 100 million gallons per day (mgd) with advanced treatment may be triggered if an increase in population, regulations, and/or a decision to replenish

groundwater basins takes place. At that time, the Donald C. Tillman Water Reclamation Plant could be expanded to 100 mgd with advanced treatment.

3. Upgrades of the Los Angeles Glendale Water Reclamation Plant to advanced treatment (current capacity) may be triggered by regulations, downstream sewer capacity, and/or management's decision to reuse. At that time, advanced treatment at current capacity could be required.

4. Design/construction of secondary clarifiers at the HWRP to provide operational performance at 450 mgd may be triggered if the optimization of existing secondary clarifiers is unsuccessful.

5. Design/construction of up to 12 digesters at HWRP may be triggered if an increased biosolids production in the service area takes place. At that time, additional digesters will be required at the HWRP.

6. Design/construction of Valley Spring Lane Interceptor Sewer may be required to provide additional sewer conveyance capacity between the Donald C. Tillman Water Reclamation Plant and the Valley Spring Lane/Forman Avenue Diversion structure if flow triggers are met.

Since the implementation of the IRP, new programs and projects have resulted in a substantial decrease in wastewater flows and have affected the Go Projects and Go-If Triggered Projects. Based on the Final IRP 5-Year Review, two of the Go Projects have been moved to the Go-If Triggered category (Go Project 2 and Go Project 3) and two have been deferred beyond the 2020 planning window of the IRP (Go Project 4 and Go Project 5). Construction of wastewater storage facilities at the Donald C. Tillman Water Reclamation Plant (Go Project 1) has been completed. In addition, Go Project 6, involving the design of the North East Interceptor Sewer Phase II, is no longer being pursued.[2]

As discussed above, the IRP addressed the anticipated water, wastewater, and stormwater needs of the City through the year 2020. As 2020 approaches, the City has developed the One Water Los Angeles 2040 Plan, which builds on the premise of the IRP to maximize water resources and to develop a framework for managing the City's watersheds, water resources, and water facilities.[3] As with the IRP, such efforts would

[2] *City of Los Angeles Department of Public Works, Bureau of Engineering, Project Information Report, North East Interceptor Sewer (NEIS) Phase 2A.*

[3] *City of Los Angeles, One Water LA Plan, https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-owla?_afrLoop=2295674781350746&_afrWindowMode=0&_afrWindowId=euo1vuq7p&_adf.ctrl-*

be organized in phases. Phase I of the One Water Los Angeles 2040 Plan includes developing initial planning baselines and guiding principles for water management and citywide facilities planning in coordination with City departments, other agencies, and stakeholders. Phase II includes development of technical studies and an updated facilities plan for stormwater and wastewater and is anticipated to be completed in 2018.[4]

(c) Sewer System Management Plan

On May 2, 2006, the State Water Resources Control Board (SWRCB) adopted the Statewide General Waste Discharge Requirements for publicly owned sanitary sewer systems that are greater than 1.0 miles in length and 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 plan referred to as a Sewer System Management Plan to control and mitigate sanitary sewer overflows and make it available to any member of the public upon request in writing.

In accordance with the Statewide General Waste Discharge Requirements, the City acquired online accounts from the SWRCB and began reporting sanitary sewer overflows by the due date of January 2, 2007. The City's original Sewer System Management Plan was adopted by the City's Board of Public Works and certified with the SWRCB on February 18, 2009.[5] The City's Sewer System Management Plans were last updated in February 2017, which confirmed the City's Sewer System Management Plans are in full compliance with the Statewide General Waste Discharge Requirements and are effective.[6]

The goal of the Sewer System Management Plan for the Hyperion Sanitary Sewer System, in which the Project Site is located (as discussed below), is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer

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[4] *City of Los Angeles, One Water LA Plan, https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-es-owla-au-aowla-pd?_adf.ctrl-state=iedj0fh8v_428&_afrLoop=2295881712863377#!, accessed May 3, 2018.*

[5] *City of Los Angeles, LA Sanitation, Sewer System Management Plan: City of LA Regional Sanitary Sewer System, February 2015.*

[6] *City of Los Angeles, LA Sanitation, Sewer System Management Plan, https://www.lacitysan.org/cs/groups/public/documents/document/y250/mdey/~edisp/cnt012544.pdf, accessed May 3, 2018.*

system.[7] In addition, the Sewer System Management Plan will help to reduce and prevent sanitary sewer overflows as well as mitigate any sanitary sewer overflows that do occur.

(d) City of Los Angeles Municipal Code

The Los Angeles Municipal Code (LAMC) Sections 64.11 and 64.12 require approval of a sewer permit prior to connection to the sewer system. New connections to the sewer system are assessed a Sewerage Facilities Charge. The rate structure for the Sewerage Facilities Charge is based upon wastewater flow strength as well as volume. The determination of wastewater strength for each applicable project is based on City guidelines for the average wastewater concentrations of two parameters, biological oxygen demand and suspended solids, for each type of land use. Fees paid to the Sewerage Facilities Charge are deposited in the City's Sewer Construction and Maintenance Fund for sewer and sewage-related purposes, including, but not limited to, industrial waste control and water reclamation purposes.

Section 64.15 of the LAMC requires that the City perform a Sewer Capacity Availability Review when: (1) a sewer permit is required to connect to the City's sewer collection system; (2) proposes additional discharge into an existing public sewer connection; or (3) a future sewer connection or future development that would generate 10,000 gallons or more of sewage per day. A Sewer Capacity Availability Review determines if there is adequate capacity existing in the sewer collection system to safely convey the newly generated sewage to the appropriate sewage treatment plant.

In addition, the City's Bureau of Engineering Special Order No. SO06-0691 sets forth design criteria for sewer systems requiring hat trunk, interceptor, outfall, and relief sewers (i.e. sewers that are 18 inches or greater in diameter) be designed for a planning period of 60 to 100 years, and lateral sewers (sewers that are less than 18 inches in diameter) be designed for a planning period of 100 years. The order also requires that sewers be designed so that the peak dry weather flow depth, during their planning period, shall not exceed 50 percent of the pipe diameter.

(e) Central City North Community Plan

The Central City North Community Plan (Community Plan) is one of 35 community plans that make up the City's General Plan Land Use Element. The Community Plan contains no City policies related to wastewater.[8]

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[7] *City of Los Angeles, LA Sanitation, Sewer System Management Plan: City of LA Regional Sanitary Sewer System, February 2015.*

[8] *Central City North Community Plan, https://planning.lacity.org/complan/pdf/ccncptxt.pdf*

b) Existing Conditions

(1) Existing Wastewater Treatment Facilities

LASAN is responsible for operating and maintaining four treatment and water reclamation plants: the HWRP, the Donald C. Tillman Water Reclamation Plant, the Terminal Island Water Reclamation Plant, and the Los Angeles–Glendale Water Reclamation Plant. The treatment facilities remove potential pollutants from sewage in order to protect river and marine environments and public health.

LASAN divides the wastewater treatment system of the City into two major service areas: the Hyperion Service Area and the Terminal Island Service Area.[9] The Hyperion Service Area is served by the Hyperion Sanitary Sewer System, which comprises the HWRP, the Donald C. Tillman Water Reclamation Plant, and the Los Angeles–Glendale Water Reclamation Plant. The Terminal Island Service Area is served by the Terminal Island Treatment Plant. The Project Site is located within the Hyperion Service Area.

(a) Hyperion Service Area

As shown in Table IV.M.1-1, the existing design capacity of the Hyperion Service Area is approximately 550 mgd (consisting of 450 mgd at the HWRP, 80 mgd at the Donald C. Tillman Water Reclamation Plant, and 20 mgd at the Los Angeles–Glendale Water Reclamation Plant).[10] Current flows to the treatment plants that comprise the Hyperion Service Area total approximately 338.2 mgd (consisting of 275 mgd to HWRP Plant, 46 mgd to the Donald C. Tillman Water Reclamation Plant, and 17.2 mgd to the Los Angeles–Glendale Water Reclamation Plant). Current flows are below the design capacity of approximately 550 mgd for the Hyperion Service Area.

On average, 275 million gallons of wastewater enters the HWRP on a dry weather day. Because the amount of wastewater entering HWRP can double on rainy days, the HWRP was designed to accommodate both dry and wet weather days with a maximum daily flow of 450 mgd and peak wet weather flow of 800 mgd.[11]

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9 *LASAN,*https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw?_afrLoop=2297756530845842&_afrWindowMode=0&_afrWindowId=null&_adf.ctrl-state=iedj0fh8v_610#!%40%40%3F_afrWindowId%3Dnull%26_afrLoop%3D2297756530845842%26_afrWindowMode%3D0%26_adf.ctrl-state%3Diedj0fh8v_614*, accessed May 3, 2018.*

10 *City of Los Angeles, One Water LA, Wastewater System Fact Sheet.*

11 *LASAN, https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p/s-lsh-wwd-cw-p-hwrp;jsessionid=iuPJCx7BRi9F84LRdeO5tG5ByvCabZVm-Mg_EbZo8D3p1i7KUQ7E!601979922!-248671844?_afrLoop=2747246056493520&_afrWindowMode=0&_afrWindowId=null&_adf.ctrl-state=55dc3s3ke_1#!%40%40%3F_afrWindowId%3Dnull%26_afrLoop%3D2747246056493520%26_afrWindowMode%3D0%26_adf.ctrl-state%3D55dc3s3ke_5, accessed on July 23, 2018.*

Table IV.M.1-1
Capacity of the Hyperion Service Area

Treatment Facility	Design Capacity (mgd)
Hyperion Treatment Plant	450[1]
Donald C. Tillman Water Reclamation Plant	80
Los Angeles – Glendale Water Reclamation Plant	20
Total	**550**

mgd = million gallons per day

[1] *Represents dry weather flow.*

Source: City of Los Angeles, One Water LA, Wastewater System Fact Sheet.

(b) Hyperion Treatment Plant

Wastewater generated from the Project Site is conveyed via the local collector sanitary sewer system directly to the HWRP for treatment. As shown in Table IV.M.1-1, the HWRP has the capacity to treat approximately 450 mgd of wastewater for full secondary treatment. The HWRP currently treats a daily average of approximately 275 mgd.[12] As such, the HWRP is currently operating at approximately 61 percent of its capacity, with a remaining available capacity of approximately 175 mgd. Based on the above, current flows to the HWRP is well below its design capacity of approximately 450 mgd.

Incoming wastewater to the treatment plant initially passes through screens and basins to remove coarse debris and grit. This is followed by primary treatment, which is a physical separation process where solids are allowed to either settle to the bottom of tanks or float on the surface. These solids, called sludge, are collected, treated, and recycled. The portion of water that remains, called primary effluent, is treated through secondary treatment using a natural, biological approach. Living micro-organisms are added to the primary effluent to consume organic pollutants. These micro-organisms are later harvested and removed as sludge.[13] The treated water from the HWRP is discharged through an outfall pipe 5 miles into the Santa Monica Bay and Pacific Ocean.[14] The discharge of effluent from the HWRP into Santa Monica Bay is regulated

[12] *LASAN,* https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p/s-lsh-wwd-cw-p-hwrp?_afrLoop=2298768054338108&_afrWindowMode=0&_afrWindowId=t8a4e7c9c&_adf.ctrl-state=iedj0fh8v_792#!%40%40%3F_afrWindowId%3Dt8a4e7c9c%26_afrLoop%3D2298768054338108%26_afrWindowMode%3D0%26_adf.ctrl-state%3Diedj0fh8v_796*, accessed May 3, 2018.*

[13] *Ibid.*

[14] *California Regional Water Quality Control Board, Los Angeles Region, Order No. R4-2010-0200, NPDES No. CA0109991, Waste Discharge Requirements and National Pollutant Discharge*

by the HWRP's National Pollutant Discharge Elimination System (NPDES) Permit issued under the Clean Water Act and is required to meet the Regional Water Quality Control Board's requirements for a recreational beneficial use.[15] Accordingly, the HWRP's effluent that is released is continually monitored to ensure that it meets or exceeds prescribed standards. The City's Environmental Monitoring Division also monitors flows into the Santa Monica Bay.[16]

(c) Existing Wastewater Infrastructure

The Project Site is served by an existing 8-inch line on Colyton Street. The sewage from this line feeds into a 22-inch line along Alameda Street before discharging into a 40-inch line on Alameda Street. According to LASAN, the current flow level (depth/diameter or d/D) in the 8-inch line could not be determined without additional gauging information.[17]

The current approximate flow level at 50 percent design capacity is shown in Table IV.M.1-2, below.

Table IV.M.1-2
Sewer Infrastructure

Pipe Diameter	Pipe Location	Current Gauging d/D (%)	50 % Design Capacity
8	Colyton Street	*	296,794 gpd
12	Palmetto Street	37	740,652 gpd
15	Palmetto Street	24	969,149 gpd
22	Alameda Street	39	3.09 mgd
40	Alameda Street	22	13.52 mgd

*gpd = gallons per day mgd = million gallons per day * = No gauging available*

d/D + sewer floor depth to sewer diameter. The percentage shown illustrates the total existing gauging of the pipe at a 50% design capacity.

Source: Bureau of Sanitation, June 12, 2017.

Elimination System Permit for the City of Los Angeles, Hyperion Treatment Plant Discharge to the Pacific Ocean.

15 *Ibid.*

16 *LASAN,* https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-cw/s-lsh-wwd-cw-p/s-lsh-wwd-cw-p-em?_afrLoop=2299050830657105&_afrWindowMode=0&_afrWindowId=null&_adf.ctrl-state=iedj0fh8v_861#!%40%40%3F_afrWindowId%3Dnull%26_afrLoop%3D2299050830657105%26_afrWindowMode%3D0%26_adf.ctrl-state%3Diedj0fh8v_865*, accessed on May 3, 2018.*

17 *Correspondence from Ali Poosti, Division Manager, Wastewater Engineering Services Division, Los Angeles Bureau of Sanitation, June 13, 2017.*

(d) Existing Wastewater Generation at the Project Site

As shown in Table IV.M.1-3, 4,560 gpd of wastewater is currently generated at the Project Site. The Project Site is currently developed with a 91,200-square-foot building with creative office/light industrial uses and live/work residential units.

Table IV.M.1-3
Existing Wastewater Flow

Land Use	Size	Wastewater Generation Rates[a]	Total (gpd)
Commercial Use	91,200 sf	50 gallons / 1,000 sf	4,560

sf = square feet *gpd = gallons per day*

[a] *Source: LASAN, Albert Lew, Correspondence, November 27, 2018. See Appendix K-2.*

3. Project Impacts

a) Methodology

To evaluate wastewater impacts associated with construction and operation of the Project, the analysis below compares the wastewater flow (for both construction and operation) of the Project with the capacity of the existing wastewater treatment facilities that would serve the Project Site area. For the assessment of cumulative impacts on wastewater treatment, the projected cumulative wastewater generation is compared to the estimated available capacity of the Hyperion Service Area.

b) Thresholds of Significance

(1) Appendix G of the State CEQA Guidelines

In accordance with Appendix G of the CEQA Guidelines (Appendix G), a project could have a significant impact on wastewater services and facilities if the project would do the following:

(a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

(b) Require or result in the construction of a new wastewater treatment facility or expansion of existing facilities, the construction of which could cause significant environmental effects; or

(c) Result in a determination by the wastewater treatment provider which serves or may serve the project that is has adequate capacity

to serve the project's projected demand in addition to the provider's existing commitments.

(2) City of Los Angeles CEQA Thresholds Guide

In accordance with the L.A. CEQA Thresholds Guide (Thresholds Guide), the determination of significance for project impacts related to wastewater infrastructure and services shall be made on a case-by-case basis, considering the following factors:

(a) The project would cause a measurable increase in wastewater flows at a point where, and a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained; or

(b) The project's additional wastewater flows would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the Wastewater Facilities Plan or General Plan and its amendments.[18]

In assessing impacts related to wastewater services in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

c) Project Design Features

No Project Design Features (PDFs) related to wastewater services are proposed as part of the Project.

d) Analysis of Project Impacts

Threshold (a) Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

(1) Impact Analysis

As stated previously, the Project Site is located within the service area of the HWRP, which treats sewage from the Los Angeles area. The Project would generate wastewater that is typically associated with residential/commercial land uses; thus, no industrial discharge into the wastewater system would occur. As the HWRP is in compliance with the state's wastewater treatment requirements, the Project would not

[18] *The Wastewater Facilities Plan has been superseded by the IRP.*

exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board.[19] Therefore, impacts would be less than significant.

(2) Mitigation Measures

No significant impacts related to wastewater treatment have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to wastewater treatment would be less than significant.

Threshold (b) Would the Project require or result in the construction of a new wastewater treatment facility or expansion of existing facilities, the construction of which could cause significant environmental effects?

(1) Impact Analysis

(a) Construction

During construction, a negligible amount of wastewater would be generated by construction employees. Temporary on-site sanitation facilities (e.g., portable toilets and hand wash areas) would be provided by a private company, and the waste would be properly disposed of off-site. No new connections to the public sewer system would be required during construction of the Project. As such, wastewater generated during Project construction activities would not enter the local conveyance system and, thus, would not affect sewer line capacities in the area. Given the temporary and limited level of wastewater generation during construction, the Project would not exceed the capacity of any wastewater treatment plant. Further, wastewater flow generated on the Project Site during construction of the Project would be serviced at approved disposal facilities and/or treatment plants and would be treated according to the treatment requirements of the LARWQCB. **Thus, the Project's construction activities would not require the need for new or expanded wastewater treatment facilities, the construction of which could cause significant environmental effects. Therefore, construction-related impacts to wastewater services would be less than significant.**

[19] *California Regional Water Quality Control Board, Los Angeles Region, Order No. R4-2010-0200, NPDES No. CA0109991, Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for the City of Los Angeles, Hyperion Treatment Plant Discharge to the Pacific Ocean.*

(b) Operation

As shown in Table IV.M.1-4, the Project would generate a total net increase of approximately 35,429 gallons per day (gpd) (or 0.035 mgd) of wastewater over existing site uses.[20] This total represents a conservative result since it does not take any credit for the proposed sustainable and water conservation features of the Project.

Table IV.M.1-4
Project Estimated Wastewater Generation

Land Use	Size	Daily Wastewater Generation Rates[a]	Total (gpd)
Residential Live/Work (1 Bedroom)	95 Units	110 gallons / unit	10,450
Residential Live/Work (2 Bedroom)	34 Units	150 gallons / unit	5,100
Hotel	113 Rooms	120 gallons / room	13,560
Retail	26,979 sf	25 gallons /1,000 sf	674
Restaurant	31,719 sf	300 gallons /1,000 sf	9,516
Artist CoLab	3,430 sf	50 gallons /1,000 sf	172
Art Gallery	10,341 sf	50 gallons /1,000 sf	517
		Gross Proposed	**39,989**
		Less Existing	**4,560**
		Net Proposed	**35,429**

gpd = gallons per day *sf = square feet*

[a] *Source/Rates: City of Los Angeles Department of Sanitation, November 27, 2018. See **Appendix K-2** of the Draft EIR.*

As discussed previously, the HWRP is designed to process up to 450 mgd of wastewater. The HWRP is currently processing 275 mgd of wastewater. With a dry weather capacity of approximately 450 mgd, the HWRP has an additional treatment capacity of approximately 175 mgd.

The 0.035 mgd net increase in wastewater generation over the existing Project Site conditions represents approximately 0.02 percent of the remaining capacity at the HWRP. Thus, the HWRP would have adequate capacity to accommodate the Project's wastewater treatment demands. Further, LASAN would be required to confirm that the

[20] *The net generation of wastewater from the Project is determined by subtracting the volume of wastewater generated by existing uses, which would be removed as part of the Project.*

HWRP and local trunk lines have sufficient capacity to accommodate the Project's projected wastewater flows.

Based upon an analysis conducted in 2015, the maximum allowable wastewater capacity in the E. 5th Street and Colyton Street sewer lines is 56,842 gpd, while the Project is estimated to generate a total of 40,904 gpd (and a net increase of 35,429 gpd over existing uses on-site).[21] Thus, adequate capacity would appear to be available to convey Project wastewater within the existing sewer lines in the streets adjacent to the Project Site. However, a Sewer Capacity Analysis Report (SCAR) would be required for the Project by LASAN prior to the finalization and approval of Project plans by the City. Based upon the SCAR, if the surrounding sewer lines' capacity is determined to be insufficient by LASAN, the Project Applicant would be required to construct and finance the necessary improvements to convey the wastewater to a point with sufficient capacity prior to issuance of a building permit for the Project. In addition, the Project Applicant would also be responsible for any necessary sewer connection fees.[22] After completion of the required improvements, a final approval of the sewer capacity would be provided, as well as a connection permit. In concert with these requirements, the Project Applicant would be required to comply with LAMC Sections 64.11, 64.12, and 64.15, which require approval of a sewer permit prior to connection to the sewer system, payment of a fee, and preparation of a SCAR. **Thus, the Project's operational activities would not require the need for new or expanded wastewater treatment facilities, the construction of which could cause significant environmental effects. Therefore, Project impacts related to wastewater treatment services would be less than significant.**

(2) Mitigation Measures

No significant impacts related to wastewater treatment facilities have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to wastewater treatment facilities would be less than significant.

[21] *Psomas, Arts District Center Infrastructure Report, page 5.*

[22] *Los Angeles Department of Public Works: http://eng.lacity.org/StdFeeList/StdFeeList.pdf*

Threshold (c) ***Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?***

(1) Impact Analysis

As discussed under Threshold (a), the Project's demand for wastewater treatment services could be accommodated by existing treatment capacity. **As such, the Project would result in a determination by LASAN that it has adequate capacity to serve the Project's projected demand in addition to its existing commitments. Therefore, impacts related to wastewater treatment services would be less than significant.**

(2) Mitigation Measures

No significant impacts related to wastewater treatment have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to wastewater treatment would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

Implementation of the Project in conjunction with the 117 cumulative projects identified in **Section III, Environmental Setting**, of the Draft EIR, would increase demand for wastewater services provided by the City's sewer system. In addition to the 117 cumulative projects, the Community Plan Update discussed in **Section III, Environmental Setting**, of the Draft EIR, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many cumulative projects. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects, which itself is a conservative assumption would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

As shown on Table IV.M.1-5, cumulative wastewater generation would be approximately 7.4 mgd. With a remaining daily capacity of treatment capacity of 175

mgd (as discussed previously), the HWRP would have adequate capacity to accommodate cumulative development, which would represent approximately 4.2 percent of remaining daily HWRP treatment capacity.

Table IV.M.1-5
Estimated Cumulative Wastewater Generation

Land Use	Size	Daily Wastewater Generation Rates[1]	Total (gpd)
Residential	30,590 du[2]	150 gpd/du	4,588,500
School	553 students	12 gpd/student	6,636
Retail	3,480,467 sf	25 gpd/1,000 sf	87,012
Restaurant	545,710 sf	300 gpd/sf	163,713
Hotel	3,631 rooms	120 gpd/room	435,720
Office	15,865,460 sf	120 gpd/1,000 sf	1,903,855
Gym	112,148 sf	0.25 gpd/sf	28,037
Cinema	744 seats	4 gpd/seat	2,976
Commercial	1,305,587 sf	50 gpd/1,000 sf	65,279
Storage	63,585	120 gpd/1,000 sf	7,630
Event Space	122,079 sf	120 gpd/1,000 sf	14,649
Grocery	109,912 sf	80 gpd/1,000 sf	8,793
Sports Complex	43,000 sf	80 gpd/1,000 sf	3,440
Museum	70,000 sf	50 gpd/1,000 sf	3,500
Industrial Park	94,800 sf	80 gpd/1,000 sf	7,584
		Related Projects Total	**7,327,324**
		Project Total	**35,429**
		Cumulative Total	**7,362,753**

sf = square feet *gpd = gallons per day* *du = dwelling unit*

[1] *Source: City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, March 20, 2002.*
[2] *Conservatively assumes all units are 2-bedroom units.*

For each cumulative project, the City, as part of the building permit process, would confirm and ensure that there is sufficient capacity in the local and trunk lines to accommodate the cumulative project's wastewater flows. Further detailed gauging and evaluation would be needed as part of the permit process to identify a specific sewer connection point. If the public sewer has insufficient capacity, then the developer would be required to build sewer lines to a point in the sewer system with sufficient capacity. A final approval for sewer capacity and connection permit would be made at that time.

Each cumulative project would also pay any required sewer connection fees. **Thus, cumulative development would not require the need for new or expanded wastewater treatment facilities, the construction of which could cause significant environmental effects. Therefore, cumulative impacts on wastewater services would be less than significant.**

(2) Mitigation Measures

No significant cumulative impacts related to wastewater have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to wastewater would be less than significant.

IV. Environmental Impact Analysis

M.2 Utilities and Service Systems – Water Supply and Infrastructure

1. Introduction

This section evaluates the Project's potential impacts on water supply and infrastructure. The City of Los Angeles Department of Water and Power (LADWP) manages the City's water supply and infrastructure. The analysis in this section evaluates the Project's water consumption during construction and operation of the Project, and the capacity of LADWP's existing water supply and infrastructure. A summary of applicable water regulations is also provided in this section. In addition, the potential cumulative impacts to water supply and infrastructure associated with the Project, in combination with all known cumulative projects are evaluated.

The demand on water supply and infrastructure is assessed by considering the estimated amount of water that would be consumed by the Project during construction and operation and whether the existing water supply has capacity to serve the Project. Based on this analysis, a determination is made as to whether the existing water supply and infrastructure can accommodate the Project's estimated water consumption.

The information and analysis in this section is primarily based on the following items, included in **Appendix K** of this Draft EIR:

K-1. *Correspondence from Ali Poosti, Division Manager, City of Los Angeles Wastewater Engineering Division, June 13, 2017.*

K-2. *Correspondence from Albert Lew, City of Los Angeles Wastewater Engineering Division, November 27, 2018.*

K-3. *Correspondence from Charles Holloway, Manager of Environmental Planning and Assessment, Los Angeles Department of Water and Power, October 3, 2017.*

2. Environmental Setting

a) Regulatory Setting

(1) Federal

(b) Clean Water Act

The Federal Clean Water Act (CWA) establishes regulatory requirements for potable water supplies, including raw and treated water quality criteria. The United States Environmental Protection Agency (USEPA) established primary drinking water standards in Section 304 of the CWA. States are required to ensure that potable water sold by retail providers to the public meets these standards. LADWP is required to monitor water quality and conform to the regulatory requirements of the CWA.

(c) Safe Drinking Water Act

Enacted in 1974 and implemented by the USEPA, the federal Safe Water Drinking Act imposes water quality and infrastructure standards for potable water delivery systems nationwide. The primary standards are health-based thresholds established for numerous toxic substances. Secondary standards are recommended thresholds for taste and mineral content.

(2) State

(b) Safe Drinking Water Act

California enacted its own Safe Drinking Water Act in 1976. The California Department of Public Health (CDPH) is responsible for the Safe Water Drinking Act. Title 22 of the California Code of Regulations establishes CDPH authority and stipulates drinking water quality and monitoring standards. These standards are equal to or more stringent than the federal standards.

(c) Senate Bill 610 and Senate Bill 221

Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221) became effective January 1, 2002, amended Sections 10910-10915 of the State Water Code, and require that counties and cities consider the availability of adequate water supplies for certain new large developments projects as part of the CEQA process and obtain written verification of sufficient water supply from the local water supplier to serve proposed large development projects in their jurisdiction. Pursuant to SB 610, projects that are required to obtain Water Supply Assessments include the following:

- a proposed residential development of more than 500 dwelling units;

- a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- a proposed hotel or motel, or both, having more than 500 rooms;
- a proposed industrial, manufacturing, or processing plant or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- a mixed-use project that includes one or more of the above-identified projects; or
- a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

The requirements of SB 221 and SB 610 have also been incorporated into the Subdivision Map Act, which provides that "[t]he legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove the tentative map, shall include as a condition in any tentative map that includes a subdivision a requirement that a sufficient water supply shall be available."[1] The public water system's written verification of either its ability or inability to provide sufficient water supplies to meet the projected demand must be supported by "substantial evidence." The "substantial evidence" may include, but is not limited to, any of the following: (1) the public water system's most recently adopted urban water management plan; (2) a water supply assessment completed pursuant to Water Code Section 10910; or (3) other information relating to the sufficiency of the water supply that contains analytical information that is substantially similar to the assessment required by Section 10635 of the Water Code, which requires every urban water supplier to include an assessment of the reliability of its water service during normal, dry, and multiple dry water years. *See* California Government Code Section 66473.7(c). The Project does not meet the thresholds set forth in SB 610 listed above; therefore, no Water Supply Assessment is required for the Project.

(d) Urban Water Management Planning Act

The California Urban Water Management Planning Act of 1984 requires every municipal water supplier who serves more than 3,000 customers or provides more than 3,000 acre-feet per year (AFY) of water to prepare an Urban Water Management Plan

[1] *The definition of "subdivision" includes "a proposed residential development of more than 500 dwelling units….". See Cal. Gov't Code § 66473.7(a)(1). Therefore, the proposed project does not meet the definition of a "subdivision" as defined in Government Code Section 66473.7.*

(UWMP) every five years to identify short-term and long-term water resources management measures to meet growing water demands during normal, single-dry, and multiple-dry years. In the UWMP, the water supplier must describe the water supply projects and programs that may be undertaken to meet the total water use of the service area.

A number of new requirements have been added to the Urban Water Management Planning Act, including a narrative description of water demand measures implemented over the past five years and future measures planned to meet 20 percent demand reduction targets by 2020; implementation of a standard methodology for calculating system water loss; a mandatory electronic filing of UWMPs, and a voluntary reporting of passive conservation savings, energy intensity, and climate change; and a requirement to analyze and define water features that are artificially supplied with water.[2]

(e) Executive Order B-29-15

On April 1, 2015, Governor Brown signed Executive Order B-29-15, providing actions that will save water, increase enforcement to prevent wasteful water use, streamline the state's drought response, and invest in new technologies to make California more drought resilient. The Executive Order provides water savings by directing the State Water Resources Control Board (SWRCB) to implement mandatory water reductions in cities and towns to reduce water usage by 25 percent or approximately 1.5 million acre-feet. The Executive Order calls for local water agencies to implement conservation pricing to discourage water waste.[3]

(f) Executive Order B-36-15

In November 2015, Governor Brown issued Executive Order B-36-15, which called for additional actions to build on the State's response to record dry conditions and to assist recovery efforts from Devastating wildfires. These included extension of previous executive orders, prioritization of projects that enhance water conservation, support for the extension of water restrictions, and support for projects that remediate wildfire damage and restore power plant operation.

(g) Executive Order B-37-16

On May 9, 2016, Governor Brown signed Executive Order B-37-16 establishing a new water use efficiency framework for California. The order bolstered the state's drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets,

[2] *LADWP, Water Supply Assessment, Weingart Projects, May 31, 2018.*

[3] *California Governor: http://gov.ca.gov/news.php?id=18910*

reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans and improving agricultural water management and drought plans.

(h) Executive Order B-40-17

On April 7, 2017, Governor Brown signed Executive Order B-40-17, which ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect.[4]

(i) Water Plan

As required by the California Water Code Section 10005(a), the California Water Plan is the state's strategic plan for managing and developing water resources statewide for current and future generations. It provides a collaborative planning framework for elected officials, agencies, tribes, water and resource managers, businesses, academia, stakeholders, and the public to develop findings and recommendations and make informed decisions for California's water future.

The California Water Plan is updated every five years and presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban and environmental water demands for a range of plausible future scenarios. The California Water Plan also evaluates different combinations of regional and statewide resource management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. The evaluations and assessments performed for the California Water Plan help identify effective actions and policies for meeting California's resource management objectives in the near term and for several decades to come. The California Water Plan was last updated in 2013, and a 2018 update is underway.

(j) Governor's California Water Action Plan

While the California Water Plan is required by the Water Code, the California Water Action Plan (Action Plan) was released by Governor Jerry Brown's administration. The first Action Plan was published in January 2014 and describes a set of essential actions intended to lay the foundation for sustainable water management in the state.[5] The

[4] *Governor Drought Declaration: http://www.water.ca.gov/waterconditions/declaration.cfm*

[5] *California Natural Resources Agency, California Department of Food and Agriculture, California Environmental Project Agency, California Water Action Plan, 2014,*

Action Plan discusses the challenges for managing the state's water resources supply, scarcity, and quality, and also considers the effects of ecosystems, flooding, population growth, and climate change and floods.[6] Ten actions were presented: (1) make conservation a California way of life; (2) increase regional self-reliance and integrated water management across all levels of government; (3) achieve the co-equal goals for the Delta; (4) protect and restore important ecosystems; (5) manage and prepare for dry periods; (6) expand water storage capacity and improve groundwater management; (7) provide safe water for all communities; (8) increase flood protection; (9) increase operational and regulatory efficiency; and (10) identify sustainable and integrated financing opportunities. In complementing local efforts, the Action Plan emphasizes collaboration between different levels of government, water agencies, conservationists, tribes, farmers, and other stakeholders. Since the Action Plan Update for 2016 has been released, its implementation progress has also been documented with focuses on policy, funding, and coordinated projects. The Action Plan will continue to be implemented simultaneously with the California Water Plan Update 2018 as it is completed.[7]

(3) Regional

As discussed in detail below, the Metropolitan Water District of Southern California (MWD) is a primary source of water supply within Southern California. Based on the water supply planning requirements imposed on its member agencies and ultimate customers, MWD has adopted a series of official reports on the state of its water supplies. As described in further detail below, in response to recent developments in the Sacramento Delta, the MWD has developed plans intended to provide solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies.

(b) MWD's Integrated Water Resources Plan

MWD first adopted its Integrated Water Resources Plan (IRP) in 1996. The IRP is updated every five years. The goal of the IRP is for Southern California to have a reliable water system that extends to the future. The 2015 IRP Update, adopted in January 2016, provides MWD's strategy for water resource reliability through the year 2040. The 2015 IRP Update calls for stabilizing and maintaining imported water supplies; meeting future growth through increased water conservation and sustaining

http://resources.ca.gov/docs/california_water_action_plan/2014_California_Water_Action_Plan.pdf, accessed July 27, 2018.

[6] *California Department of Water Resources, Draft California Water Plan Update 2018, https://water.ca.gov/LegacyFiles/waterplan/docs/cwpu2018/sc/dec2017/01_Update2018_Working-Draft_Dec2017.pdf, accessed July 27, 2018.*

[7] *Ibid.*

and developing new local supplies; pursuing a comprehensive transfers and exchanges strategy; building storage in wet and normal years to manage risks and drought; and preparing for uncertainty with Future Supply Actions. Overall, the strategies presented in the 2015 IRP Update include investments to maintain the reliability of imported water supplies, expansion of local water supplies and reduction in water demand through a variety of conservation and water use efficiency initiatives.[8]

(c) MWD's 2015 UWMP

MWD's 2015 UWMP addresses the future of MWD's water supplies and demand through the year 2040.[9] Based on its 2015 UWMP, MWD has supply capabilities that would be sufficient to meet expected demands from 2020 through 2040 under single dry-year and multiple dry-year hydrologic conditions. MWD has comprehensive plans for stages of actions it would undertake to address up to a 50-percent reduction in its water supplies and a catastrophic interruption in water supplies through its Water Surplus and Drought Management and Water Supply Allocation Plans. MWD has also developed an Emergency Storage Requirement to mitigate against potential interruption in water supplies resulting from catastrophic occurrences within the Southern California region and is working with the State to implement a comprehensive improvement plan to address catastrophic occurrences that could occur outside of the Southern California region. MWD is also working with the State on the Delta Risk Management Strategy to reduce the impacts of a seismic event in the Delta that would cause levee failure and disruption of State Water Project (SWP) deliveries. In addition, MWD has plans for supply implementation and continued development of a diversified resource mix, including programs in the Colorado River Aqueduct, SWP, Central Valley transfers, local resource projects, and in-region storage that enables the region to meet its water supply needs. As set forth in its 2015 UWMP, MWD will also continue investments in water use efficiency measures to help the region achieve the 20 percent per person potable water use reduction by 2020.

(d) MWD's Water Surplus and Drought Management Plan

In 1999, MWD incorporated the water shortage contingency analysis that is required as part of any urban water management plan into a separate, more detailed plan, called the Water Surplus and Drought Management Plan. The overall objective of the Water Surplus and Drought Management Plan is to ensure that shortage allocation of MWD's imported water supplies is not required.[10] The Water Surplus and Drought Management

[8] *Metropolitan Water District of Southern California, Integrated Water Resources Plan 2015 Update, January 2016.*

[9] *Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.*

[10] *Metropolitan Water District of Southern California, Water Surplus and Drought Management Plan: Report No. 1150, August 1999.*

Plan provides policy guidance to manage MWD's supplies and achieve the goals laid out in the agency's IRP. The Water Surplus and Drought Management Plan separates resource actions into two major categories: Surplus Actions and Shortage Actions. The Water Surplus and Drought Management Plan considers the region to be in surplus only after MWD has met all demands for water, including replenishment deliveries. The Surplus Actions store surplus water, first inside and then outside of the region. The Shortage Actions of the Water Surplus and Drought Management Plan are separated into three subcategories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as a part of the response to prevailing shortage conditions. Conservation and water efficiency programs are part of MWD's resource management strategy through all categories.

(e) MWD's Water Supply Allocation Plan

While the Water Surplus and Drought Management Plan included a set of general actions and considerations for MWD staff to address during shortage conditions, it did not include a detailed water supply allocation plan or implementation approach. Therefore, MWD adopted a water supply plan called the *Water Supply Allocation Plan* in February 2008, and has since been implemented three times, most recently in April 2015. The Water Supply Allocation Plan includes a formula for determining reductions of water deliveries to member agencies during extreme water shortages in MWD's service area conditions (i.e., drought conditions or unforeseen cuts in water supplies). The formula allocates shortages of MWD supplies and seeks to balance the impacts of a shortage at the retail level, while maintaining equity on the wholesale level and taking into account growth, local investments, changes in supply conditions and the demand hardening aspects of non-potable recycled water use and the implementation of conservation savings programs. The allocation period covers 12 months from July of a given year through the following June.

(4) Local

(b) LADWP's 2015 UWMP

LADWP's 2015 UWMP, adopted in June 2016, serves two purposes: (i) achieve full compliance with the requirements of California's Urban Water Management Planning Act (described above) and (ii) serve as a master plan for water supply and resource management consistent with the City's goals and objectives.[11]

The LADWP UWMP includes estimates of past, current, and projected potable and recycled water use, identifies conservation and reclamation measures currently in

[11] *Los Angeles Department of Water and Power, 2015 Urban Water Management Plan, April 2016, at ES-2.*

practice, describes alternative conservation measures, and provides an urban water shortage contingency plan. The factors forecasting the LADWP's future water demand include population projections from the Southern California Association of Governments' (SCAG) 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (2012-2035 RTP/SCS), LADWP water billing date from each major customer class, weather, and water conservation. The LADWP 2015 UWMP uses a service area-wide method to develop its water demand projections. This methodology does not rely on individual development demands to determine area-wide growth. Rather, the growth in water use for the entire service area was considered in developing long-term water projections for the City through the year 2040.

A number of important changes have occurred since the LADWP prepared its 2010 UWMP. The year 2012 marked the start of the current multi-year drought in California, to which Governor Brown responded by proclaiming a drought state of emergency in January 2014. In addition, as discussed above, in 2014, the SWRCB implemented its Drought Emergency Water Conservation Regulation, which mandates 25-percent reductions in water use statewide. In October 2014, City of Los Angeles Mayor Eric Garcetti issued Executive Directive No. 5 (ED 5), which set goals to reduce per capita water use by 20 percent by 2017, reduce purchases of imported potable water by 50 percent, and create an integrated water strategy to increase local supplies and improve water security considering climate change and seismic vulnerability. In addition, in April 2015, Mayor Garcetti's Sustainable City pLAn (discussed below) was released, establishing targets for the City over the next 20 years to strengthen and promote sustainability. LADWP's 2015 UWMP incorporates the objectives of these recent initiatives. Overall, LADWP's 2015 UWMP projects a 7-percent lower water demand trend than what was projected in the previous 2010 UWMP.[12] On February 2, 2017, the Mayor announced that the City's 20 percent water reduction target had been met.[13]

(c) Sustainable City pLAn

In April 2015, the City's first Sustainable City pLAn was released (pLAn). The pLAn includes a multi-faceted approach to developing a locally sustainable water supply to reduce reliance on imported water, reducing water use through conservation, and increasing local water supply and availability. The pLAn enhances ED 5's goals and incorporates water savings goals of reduction in per capita potable water by 20 percent by 2017, by 22.5 percent by 2025, and by 25 percent by 2035, using a 2014 baseline of

[12] *Los Angeles Department of Water and Power, Water Supply Assessment—Weingart Projects, May 31, 2018.*

[13] *City of Los Angeles, Mayor Eric Garcetti, Press Release, Los Angeles Achieves Mayor Garcetti's Goal of 20 Percent Water Savings, released February 2, 2017 https://www.lamayor.org/los-angeles-achieves-mayor-garcetti%E2%80%99s-goal-20-percent-water-savings, accessed May 5, 2018.*

131 gallons per capita per day. The pLAn also includes a reduction in imported water purchases from MWD by 50 percent of the total supply by 2025 and a 50-percent increase in water supply from local sources by 2035.[14] Specific strategies and desired outcomes for conservation, recycled water, and stormwater capture are included in the pLAn. These include investments in state-of-the art technology, rebates and incentives promoting water-efficient appliances, tiered water pricing, a technical assistance program for business and industry, and large landscaped irrigation and efficiency programs.[15]

In April 2016, the Sustainable City pLAn's First Annual Report for 2015–2016 was released. It was reported that the City had reduced water use by 19 percent to nearly achieve the 20 percent water reduction goal, and that rebates for water efficient appliances have contributed to conservation.[16] As discussed above, as of February 2017, the City has met its 20 percent water reduction target, which also meets the Sustainable City pLAn's goal. As the Sustainable City pLAn's Second Annual Report for 2016–2017 was released in March 2017, the City began working toward its next goal of reducing municipal water use by 22.5 percent by 2025.[17][18]

The pLAn's Third Annual Report was released in April 2018, noting that on January 17, 2018, Mayor Garcetti broke ground on the North Hollywood West Wellhead Remediation Project (NHWWRP), a project to clean up and restore the use of groundwater for safe, high-quality drinking water in the San Fernando Valley and in the City at large. LADWP was awarded a $44.5 million Proposition 1 grant from the SWRCB in January 2018 to help fund the NHWWRP, which is slated to be complete by 2020. The NHWWRP, in combination with three other planned remediation projects in the San Fernando Valley, advances two key pLAn goals – reducing the purchase of imported water by 50 percent by 2025 and producing 50 percent of City's water locally by 2035. By facilitating the use of additional groundwater from the San Fernando Basin, this project also furthers the goals of increasing recycled water use and stormwater capture.[19]

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[14] *pLAn, http://plan.lamayor.org/wp-content/uploads/2017/03/the-plan.pdf, accessed July 27, 2018.*

[15] *Mayor's Office of Sustainability, Sustainable City pLAn, April 2015.*

[16] *Mayor's Office of Sustainability, Sustainable City pLAn, First Annual Report for 2015–2016, April 2016.*

[17] *Ibid.*

[18] *City of Los Angeles, Mayor Eric Garcetti, Press Release, Mayor Garcetti Releases Progress Report on Sustainable City Plan; Two-Thirds of All 2017 Goals Accomplished Early, released March 2, 2017, www.lamayor.org/mayor-garcetti-releases-progress-report-sustainable-city-plan-two-thirds-all-2017-goals-accomplished, accessed December 8, 2017.*

[19] *3rd Annual Report, http://plan.lamayor.org/wp-content/uploads/2018/04/2018-pLAn-3rd-annual-report.pdf, accessed July 27, 2018.*

(d) Los Angeles Municipal Code

The City has adopted several ordinances, later codified in the Los Angeles Municipal Code (LAMC), in an effort to reduce water consumption. A summary of the City's key regulations regarding water conservation is provided below.

- City Ordinance No. 180,822 – amended Chapter XII, Article 5, of the LAMC to establish water efficiency requirements for new development and renovation of existing buildings, and mandate installation of high efficiency plumbing fixtures in residential and commercial buildings.

- City Ordinance No. 181,480 (Los Angeles Green Building Code (LAGBC) – amended Chapter IX, Article 9, of the LAMC to require newly constructed residential and non-residential buildings to reduce indoor water use by at least 20 percent by: (1) using water saving fixtures or flow restrictions; and/or (2) demonstrating a 20-percent reduction in baseline water use.

- Ordinance No. 182,849 – amended Chapter IX, Article 9, of the LAMC to mandate that for new water service or for additions or alterations requiring upgraded water service for landscaped areas of at least 1,000 square feet, separate sub-meters or metering devices shall be installed for outdoor potable water use. This ordinance also required that for new non-residential construction with at least 1,000 square feet of cumulative landscaped area, weather- or soil moisture-based irrigation controllers and sensors be installed.

- Ordinance No. 184,248 – amended Chapter IX, Articles 4 and 9, of the LAMC to establish citywide water efficiency standards and require water-saving systems and technologies in buildings and landscapes.

- City Ordinance Nos. 181,899 and 183,833 – amended Section 64.72 of the LAMC regarding stormwater and urban runoff to include new requirements, including Low Impact Development (LID) requirements that promote water conservation.

- City Ordinance Nos. 184,691 and 184,692 – amended Chapter IX of the LAMC to incorporate by reference certain portions of the 2015 International Building Code and the 2016 California Building Standards Code as required by law, and to make local administrative, climatic, geologic or topographical changes to the California Building Standards Code pursuant to California Health and Safety Code Sections 17958.5 and 17958.7.

- Ordinance Nos. 166,080, 183,608, and 184,250 – amending Chapter XII, Article 1, of the LAMC to clarify prohibited uses of water and modify certain water

conservation requirements of the City's Emergency Water Conservation Plan. The City's Emergency Water Conservation Plan sets forth six different phases of water conservation, which shall be implemented based on water conditions. As part of these requirements, watering is limited to specific days and hours. In determining which phase of water conservation shall be implemented, LADWP monitors and evaluates the projected water supply and demand. In addition, the Emergency Water Conservation Plan includes penalties for those that violate its requirements.

(e) Angeles Water Rate Ordinance

Pursuant to Ordinance No. 184,130, the City Water Rate Ordinance was approved in March 15, 2016 to establish tiered water rate schedules for single-dwelling unit customers; multi-dwelling unit customers; commercial, industrial, and governmental customers and temporary construction; recycled water service; private water service; publicly sponsored irrigation, recreational, agricultural, horticultural, and floricultural uses, community gardens and youth sports. This Water Rate Ordinance is the most recent change by the City's Board of Water and Power Commissioners since the last water base rate action in 2009. The new water rate structure increases the number of tiers from two to four for single-dwelling unit customers. In addition, this ordinance intends to maintain cost-of-service principles, incremental tier pricing based on the cost of water supply, and added pumping and storage costs. The goal of the ordinance is to incentivize water conservation while recovering the higher costs of providing water to high volume users and accelerating development of sustainable local water supply.[20]

b) Existing Conditions

(1) Water Supply

LADWP provides water service to the Project Site. Over four million people reside in LADWP's service area, which encompasses 473 square miles.[21] LADWP's water supply sources include the Los Angeles Aqueduct (LAA), local groundwater, the SWP (supplied by MWD), the Colorado River Aqueduct (also supplied by MWD), and recycled water. Each of the five water sources is briefly discussed below.

[20] *Los Angeles Department of Water and Power, Water Supply Assessment—Weingart Projects, May 31, 2018.*

[21] *LADWP Facts and Figures: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-water/a-w-factandfigures;jsessionid=WJmsZTyYJznLnCzWs9h6LqDcqZ8tKgQnjPrJNTLQ9CgbP5RhCxdv!-1500106901?_afrLoop=497825102140591&_afrWindowMode=0&_afrWindowId=null, accessed August 2017.*

(b) Los Angeles Aqueducts

The LAA collects and conveys snowpack runoff from the Eastern Sierra Nevada Mountain Range to the City of Los Angeles.[22] Recently, the LAA water supply has been historically low due to the State being in its 6th year of drought and the Sierra Nevada Mountain range snowpack being historically low. While the LAA water supplies are supplemented by groundwater pumping in the Eastern Sierra Nevada and upper Owens River watershed (which can fluctuate year-to-year due to varying hydrological conditions), the amount of water available to LADWP (via the LAA) is directly linked to the Eastern Sierra Nevada snowpack.

Prior to being distributed throughout LADWP's service area, water from the LAA undergoes treatment and disinfection at the Los Angeles Aqueduct Filtration Plant (LAAFP). The LAAFP's maximum treatment capacity is 600 million gallons per day (mgd), or approximately 672,000 AFY. The LAAFP typically treats water from LAA and purchases from MWD, maintaining a current average annual flow of approximately 450 mgd during the non-summer months and 550 mgd during the summer months. Therefore, the LAAFP has the ability to treat an additional 50 to 150 mgd of water, depending on the season.

As discussed in LADWP's 2015 UWMP, water supply from the LAA can vary substantially from year to year due to hydrology. In very wet years, LAA supply can exceed 500,000 AFY. The LAA historical average is based on the 50-year average hydrology from FY 1961/62 to 2010/11. During average year weather conditions, the LAA supply is projected to increase from 275,700 AFY in 2020 to 293,400 AFY in 2025, in response to water savings from Owens Lake Dust Mitigation after the implementation of the Master Project in 2024.[23] However, over time the overall supply source is expected to decline as a result of climate change, resulting in a reduction of more than 10,000 AFY in the next 25 years. Critical dry year (defined as a repeat of FY 2014/15 drought) supplies can be as low as 32,000 AFY.[24]

(c) Local Groundwater

LADWP has access to several sources of local groundwater. The Upper Los Angeles River Area (ULARA) watershed, made up of four groundwater basins, is the principal groundwater resource where the City produces local groundwater from the San

[22] *The City's water rights in the Eastern Sierra Nevada are comprised of riparian rights, pre-1914 appropriations, and post-1914 appropriations held on various streams in the Mono Basin and Owens Valley.*

[23] *The new Owens Lake Master Project, once fully implemented will save more than 50,000 acre feet of water each year and provide new habitats for Owens Lake wildlife.*

[24] *LADWP 2015 UWMP p. 11-3.*

Fernando and Sylmar Basins. The San Fernando Groundwater Basin is the largest of these resources, accounting for nearly 80 percent of all local groundwater pumped by LADWP.

The City also produces local groundwater from Central Basin and is entitled to produce water from the neighboring West Coast Basin. The Hollywood and Santa Monica Basins are local resources where the City may potentially develop future drinking water supplies in partnership with neighboring municipalities. Combined, these basins can potentially supply the City with more than 110,000 AFY of groundwater. However, various challenges have restricted the City's use of these local resources, primarily industrial contamination issues. Expanded basin remediation systems are under development to remove contamination from the local groundwater basin for the betterment of the environment and to restore the beneficial uses of this important basin. The expanded remediation facilities are anticipated to be operational by 2021, which will allow LADWP to pump its full groundwater entitlement.[25]

The City owns water rights in the San Fernando, Sylmar, Eagle Rock, Central, and West Coast Basins. The City's combined water rights in these basins are approximately 109,809 AFY, of which approximately 87,000 AFY are located in the San Fernando Basin, 500 AFY in the Eagle Rock Basin, and 3,570 AFY in Sylmar Basin. Central Basin water rights were recently increased from 15,000 AFY to 17,236 AFY as a result of three purchase transactions completed during 2014 and 2016. Water rights in the West Coast Basin are 1,503 AFY, which the City may produce from the Central Basin per the Third Amended Central Basin Judgment.[26]

Historically, LADWP has operated its groundwater resources conjunctively with surface water supplies by reducing pumping during wet periods when more surface water can be used for municipal supply and increasing pumping during dry periods to compensate for reduced availability of surface water supplies. Taking into account all weather conditions and in response to water savings from the Master Project in 2024, LADWP's projected groundwater supply is expected to increase from a total of 87,045 AFY in 2014-2015, to 112,670 AFY in 2019-2020, and 114,070 AFY in 2039-2040.[27]

(d) Metropolitan Water District

As a member agency of the MWD, the City of Los Angeles through LADWP purchases water to supplement its supplies from local groundwater, the LAA, and recycled water. As a percentage of the City's total water supply, MWD purchased water varies from four

[25] *LADWP, 2015 UWMP, p 6-1.*

[26] *LADWP, 2015 UWMP, p. 6-2.*

[27] *LADWP, 2015 UWMP, p. 6-24.*

percent in Fiscal Year Ending (FYE) 1984 to 71 percent in FYE 2015, with the five-year average of 57 percent between FYE 2011 and FYE 2015. LADWP has relied on MWD water supplies during dry years, and increasingly in recent years, as LAA supply has been cut back for environmental enhancement projects. Although the City plans to reduce its reliance on the MWD's water supplies through local supply development and conservation, it will continue to rely on the wholesaler to meet current and future supplemental water needs.[28]

MWD is the largest water wholesaler for domestic and municipal uses in California, providing nearly 19 million people with on average 1.7 billion gallons of water per day to a service area of approximately 5,200 square miles. LADWP's 2015 UWMP projects, through additional local supply development and conservation savings over the next 25 years, that LADWP's reliance on MWD water supplies will be reduced significantly from the current five-year average of 57 percent of total demand to 11 percent under average weather conditions and to 44 percent under single-dry year conditions by FYE 2040.[29]

(e) The Colorado River

MWD owns and operates the Colorado River Aqueduct, which has delivered water from the Colorado River to Southern California since 1941.[30] The Colorado River currently supplies approximately 17 percent of Southern California's water needs, and on average, makes up about 15 percent of LADWP's purchases from MWD.[31] MWD has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. California is apportioned the use of 4.4 million AFY of water from the Colorado River plus one-half of any surplus that may be available for use collectively in Arizona, California, and Nevada.[32] In addition, California has historically been allowed to use Colorado River water apportioned to, but not used by, Arizona or Nevada. Since 2003, due to increased consumption, no such unused apportioned water has been available to California. Historically, MWD has been able to claim most of its legal entitlement of Colorado River water and could divert over 1.2 million acre-feet in any year, but persistent drought conditions have contributed to a

[28] *LADWP, 2015 UWMP, p. 6-24.*

[29] *LADWP, 2015 UWMP, p. 8-1.*

[30] *LADWP, 2015 URWMP, P 8-2.*

[31] *Los Angeles Department of Water and Power, Water Supply Assessment—Weingart Projects, May 31, 2018.*

[32] *Ibid.*

decrease in these claims.[33] MWD's supplies from the Colorado River totaled approximately 985,000 acre-feet in 2016.[34]

(f) State Water Project

MWD imports water from the SWP, owned by the State of California and operated by the Department of Water Resources (DWR). The SWP is a water storage and delivery system of pump stations, reservoirs, aqueducts, tunnels, and power plants. The main purpose of the SWP is to divert and store surplus water during wet periods and distribute it to areas throughout the State. Other purposes of the SWP include flood control, power generation, recreation, fish and wildlife protection, and water quality management in the Sacramento–San Joaquin River Delta (Delta). The SWP transports Feather River water stored in and released from Oroville Dam and conveyed through the Delta, as well as unregulated flows diverted directly from the Delta south via the California Aqueduct to four delivery points near the northern and eastern boundaries of MWD's service area.

The SWP, under the original contract, provides MWD with 1,911,500 acre-feet of water.[35] However due to water quality and supply reliability challenges, and conflicts due to variable hydrology and environmental standards that limit pumping operations, SWP deliveries in the most recent critically dry years were 5 percent of contractual amounts in 2014 and 20 percent of contractual amounts in 2015.[36] For calendar year 2016, the DWR's initial allocation estimate was announced on December 1, 2015 as 10 percent of contracted amounts for all SWP contractors.[37] The DWR announced several additional increases to the contracted amounts, primarily due to storms. On April 21, 2016, the DWR announced an increase in the initial 2016 SWP allocation to 60 percent of the contracted amounts.[38] In November 2016, the DWR had estimated an initial allocation of 20 percent for 2017.[39] Due to observed changes in hydrologic conditions, the DWR subsequently increased 2017 allocation levels to 45 percent, 60 percent in

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[33] *Ibid.*

[34] *Los Angeles Department of Water and Power, Water Supply Assessment – Weingart Projects, May 2018.*

[35] *Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.*

[36] *Ibid.*

[37] *California Department of Water Resources, Notice to State Water Project Contractors Number 15-07, 2016 State Water Project Initial Allocation—10 Percent.*

[38] *California Department of Water Resources, Notice to State Water Project Contractors, Number 16-06, 2016 State Water Project Allocation—60 Percent.*

[39] *California Department of Water Resources, Notice to State Water Project Contractors, Number 16-09, 2017 State Water Project Initial Allocation—20 Percent.*

January 2017, and to 85 percent on April 14, 2017.[40,41,42] In December 2017, the DWR increased allocations by 15 percent, increased the allocation again in January 2018 to 20 percent, from 20 percent to 30 percent in April 2018, and from 30 percent to 25 percent in May 2018.[43]

(g) Additional MWD Actions to Address Supply

To improve water supply reliability for the entire Southern California region, MWD has also been pursuing voluntary water transfer and exchange programs with state, federal, public and private water districts and individuals. The MWD is currently operating several SWP storage programs to increase the reliability of supplies from the California Aqueduct. Programs include the Arvin-Edison Storage Program; the Semitropic Storage Program; the San Bernardino Storage Program; the San Gabriel Valley MWD Exchange Program; the Antelope Valley-East Kern Water Agency Exchange and Storage Program; the Kern-Delta Water District Storage Program; the Mojave Storage Program; and the Central Valley Transfer Programs.[44]

In addition, MWD continues to develop plans and make efforts to provide additional water supply reliability for the entire Southern California region. LADWP coordinates closely with MWD to ensure implementation of these water resource development plans.[45] As discussed above, MWD's long-term plans to meet its member agencies' reliability needs include improvements to the SWP as outlined in the California WaterFix and EcoRestore Plans, conjunctive management efforts on the Colorado River, water transfer programs and outdoor conservation measures, and development of additional local resources, such as recycling brackish water desalination and seawater desalination.[46]

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[40] *California Department of Water Resources. Notice to State Water Project Contractors, Number 16-10, 2017 State Water Project Allocation—45 Percent.*

[41] *California Department of Water Resources, Notice to State Water Project Contractors, Number 17-01, 2017 State Water Project Allocation—60 Percent.*

[42] *California Department of Water Resources, Notice to State Water Project Contractors, Number 17-05, 2017 State Water Project Allocation—85 Percent.*

[43] *California Department of Water Resources, Water Supply Allocation Increases Slightly for State Water Contractors, May 21, 2018, https://water.ca.gov/News/News-Releases/All-News-Articles/Water-Supply-Allocation-Increases-Slightly-for-State-Water-Contractors, accessed July 27, 2018.*

[44] *Metropolitan Water District of Southern California, 2015 Urban Water Management Plan, June 2016.*

[45] *Los Angeles Department of Water and Power, Water Supply Assessment – Weingart Projects, May 2018.*

[46] *Ibid.*

Additionally, MWD has more than 5 million acre-feet of storage capacity of available reservoirs and banking/transfer programs, with approximately 1.25 million acre-feet, inclusive of Intentionally Created Surplus, in that storage, and 626,000 acre-feet in emergency storage as of January 1, 2017.[47] MWD's dry-year Water Surplus Drought Management storage balance at the beginning of 2017 was estimated to be 1.29 million acre-feet. Continued efficiency in the region kept demands low in 2017, resulting in available water supplies that far exceeded demands. With implementation of new and modified existing storage programs to manage the available surplus supplies, MWD stored approximately 1.2 million acre-feet, such that MWD's dry-year storage was 2.46 million acre-feet at the end of 2017.[48] As described in the MWD's 2015 UWMP, MWD has supply capabilities that would be sufficient to meet expected demands from 2020 through 2040 under average-year, single dry-year, and multiple dry-year hydrologic conditions.

(h) Precipitation Conditions

On February 7, 2017, the main flood control spillway at Oroville Dam, a primary reservoir on the SWP, experienced significant damage as DWR increased releases to manage higher inflows driven by continued precipitation in the Feather River basin.[49] DWR halted releases on this spillway and diverted water over the emergency spillway for the first time ever. However, the emergency spillway quickly eroded, causing officials to order the temporary evacuation of downstream residents while ramping up water releases over the main spillway to control lake levels. The evacuation order was lifted on February 14, 2017. A multi-agency investigation and recovery design followed and demolition of Oroville Dam's flood-control spillways began in May 2017. Repairs are expected to take two years, with the first phase completed on November 1, 2017 for the start of the rainy season. Work to be completed prior to that time will include reinforcing the structurally sound upper portion of the main spillway, demolition and replacement of the badly damaged lower portion of the main spillway, and construction of a cut-off wall downhill of the emergency spillway. The upper section of the main spillway will be replaced in 2018. Despite the damage to the main spillway, water supplies are not expected to be adversely affected. This would result in an allocation that is higher than average, and higher than any allocation since 2011. Future water supplies are expected to be primarily dependent on hydrology.

[47] *Ibid.*

[48] *Ibid.*

[49] *Ibid.*

(i) Water Conservation and Recycling

LADWP's 2015 UWMP details the City's efforts to promote the efficient use and management of its water resources and provides the basic policy principles that guide LADWP's decision-making process to secure a sustainable water supply for the City of Los Angeles in the next 25 years. To meet multiple water conservation goals established in ED 5, the Sustainable City pLAn, and the Water Conservation Act of 2009, LADWP's 2015 UWMP aims to reduce per capita potable water use by 20 percent by 2017, by 22.5 percent by 2025, and by 25 percent by 2035, based on Fiscal Year 2013/2014 levels.[50] Further, based on LADWP's 2015 UWMP, recycled water use is projected to reach 59,000 AFY by 2025 and further increase to 75,400 AFY by 2040.[51] In addition, based on programs and improvements contemplated in LADWP's 2015 UWMP, locally developed water supplies would increase from the current 14 percent to 49 percent in dry years, or to 47 percent in average years by 2040.[52]

(2) Water Demand

(b) Regional Water Demand

LADWP's 2015 UWMP based its water demand forecast on several major categories including:

- Demographics – population, number of single-family homes, and number of employees
- Socioeconomics – price of water, personal income, family size, economy, drought conservation effect, and passive water conservation
- Conservation – passive conservation from plumbing codes and landscape ordinances, passive conservation from behavioral changes, and active conservation from the City's various active conservation programs
- Weather – historical weather patterns including daily maximum temperature and precipitation
- Non-Revenue Water – the difference between total water consumption and billed water use

Table IV.M.2-1 provides LADWP's projected water demand from 2020 to 2040 for average year, single dry year, and multi dry year hydrological conditions.

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[50] *LADWP, 2015 UWMP, June 2016, p. ES-14.*

[51] *LADWP, 2015 UWMP, June 2016, p. ES-18.*

[52] *LADWP, 2015 UWMP, June 2016, p. 11-9.*

Demographic projections were provided for the LADWP service area by MWD, who received the data from SCAG. SCAG applied its 2012-2035 RTP/SCS demographic data to water service areas for MWD's member agencies. These data were used for water demand projections in LADWP's 2015 UWMP. Service area population is expected to continue to grow over the next 25 years at a rate of 0.5 percent annually. While this is substantially less than the historical 1.0 percent annual growth rate from 1980 to 2010, it will still lead to approximately 493,200 new residents over the next 25 years.[53] Exhibit 4.1 in SCAG's 2012-2035 RTP/SCS shows population growth in the region from 2008-2035. It shows very high growth in the Downtown Los Angeles area, where the Project Site is located.[54]

Table IV.M.2-1
LADWP Water Demand Projections Based on Hydrological Conditions
(thousand AFY)

Hydrological Conditions[1]	Years				
	2020	2025	2030	2035	2040
Average Year	611.8	644.7	652.9	661.8	675.7
Single Dry Year	642.4	676.9	685.5	694.9	709.5
Multi-Dry Year	642.4	676.9	685.5	694.9	709.5

AFY = acre-feet per year

[1] LADPW defines three hydrological conditions: 1) average year (50-year average hydrology from fiscal year 1961-1962 through fiscal year 2010-2011; 2) single dry year, such as a repeat of the fiscal year 2014-2015 drought; and 3) and multi-dry year, such as a repeat of fiscal year 2012-2013 through fiscal year 2014-2015.

Source: LADWP, 2015 UWMP, Exhibits 11F, 11G, and 11H.

(c) Existing Water Usage at the Project Site

As shown in Table IV.M.2-2, based on standard water consumption rates it is estimated that 4,560 gpd of water is currently demanded by existing uses at the Project Site. The site is currently occupied by a 91,200-square-foot building with creative office uses and live/work units.

[53] *LADWP 2015 UWMP, p. ES-6.*

[54] *http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf*

Table IV.M.2-2
Existing Water Demand

Land Use	Size	Water Demand Rate[1]	Total (gpd)
Commercial with Live/Work Units	91,200 sf	50 gallons / 1,000 sf	4,560

sf = square feet *gpd = gallons per day*

[1] *These rates assume water consumption is equal to wastewater generation.*

*Source: City of Los Angeles Wastewater Engineering Services Division, Albert Lew, correspondence, June November 27, 2018. See **Appendix K-2** of the Draft EIR*

(3) Water Conveyance Infrastructure

Water infrastructure in the vicinity of the Project Site is maintained and operated by LADWP. LADWP ensures the reliability and quality of its water supply through an extensive distribution system that includes 7,337 miles of pipeline, 96 pump stations, 119 storage tanks and reservoirs within the City, and a total storage capacity of 315,245 acre-feet.[55]

Domestic water service is available to the Project Site through LADWP water lines within the adjacent streets. More specifically, the Project Site is served by a 6-inch water main in Seaton Street, a 6-inch main in 5th Street, and an 8-inch line along Colyton Street. The static water pressure in the Project area ranges between 66 and 90 pounds per square inch (PSI). Based on these pressures, there are no existing water service problems or deficiencies.[56]

3. Project Impacts

a) Methodology

To evaluate water impacts associated with construction and operation of the Project, the analysis below compares the Project's estimated water demand for both construction and operation of the Project to the existing and projected water supply that would be available to the Project Site. Consistent with LADWP's methodology, the estimated net

[55] *Los Angeles Department of Water and Power, Water, Facts & Figures, https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-water/a-w-factandfigures?_adf.ctrl-state=w7huvtqhy_4&_afrLoop=1116899405913223, accessed July 11, 2018.*

[56] *Correspondence from Charles Holloway, Los Angeles Department of Water and Power, October 3, 2017.*

water demand for the Project is calculated by applying LASAN's sewer generation factors to the Project's proposed uses; the existing water demand is then subtracted from the Project's total water demand to determine the Project's net water demand. This estimated net water demand is compared to the LADWP's existing and planned future water supplies during average, single-dry, and multiple-dry years hydrologic conditions to determine if LADWP would be able to accommodate the Project's water demands.

b) Thresholds of Significance

(1) Appendix G of the State CEQA Guidelines

In accordance with Appendix G to the CEQA Guidelines (Appendix G), a project could have a significant impact on water supply services and facilities if the project would do the following:

(a) Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

(b) Have insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements.

(2) City of Los Angeles CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) identifies the following criteria to evaluate water supply services and facilities:

(a) The total estimated water demand for the project;

(b) Whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project buildout;

(c) The amount by which the project would cause the projected growth in population, housing or employment for the Community Plan area to be exceeded in the year of the project completion; and

(d) The degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.

In assessing impacts related to water supply services and facilities in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above

from the *Thresholds Guide* will be used, where applicable and relevant, to assist in analyzing the Appendix G thresholds.

c) Project Design Features

No Project Design Features (PDFs) related to water services are proposed as part of the Project.

d) Analysis of Project Impacts

Threshold (a) ***Would the Project require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

(1) Impact Analysis

As shown in Table IV.M.2-3, the Project would result in a net increase in water consumption at the Project Site of approximately 35,429 gallons per day (or 0.035 mgd/39.6 AFY). (This estimated water consumption does not take into consideration the effectiveness of current water conservation measures that are required by the City.) As discussed previously, LADWP's 2015 UWMP forecasts adequate water supplies to meet all projected water demands in the City for normal, single-dry, and multi-dry years from 2020 to 2040. Furthermore, as outlined in the 2015 UWMP, LADWP is committed to providing a reliable water supply for the City. The 2015 UWMP takes into account climate change and the concerns of drought and dry weather and notes that the LADWP will meet all new demand for water supply associated with projected population growth through the combination of water conservation and recycling. The 2015 UWMP also addresses the current and future SWP supply shortages and concludes that MWD's actions in response to the threats to the SWP would ensure continued reliability of its water deliveries. By focusing on demand reductions and alternative sources of water supplies, LADWP would further ensure that long-term dependence on MWD supplies would not be exacerbated by potential future shortages. Additionally, as described previously in this section, water conservation and recycling will play an increasing role in meeting future water demands in the City.

As discussed previously, demographic projections were provided for the LADWP service area by MWD, who received the data from SCAG. SCAG applied its 2012-2035 RTP/SCS demographic data to water service areas for MWD's member agencies. These data were used for water demand projections in LADWP's 2015 UWMP. Service area population is expected to continue to grow over the next 25 years at a rate of 0.5 percent annually. While this is substantially less than the historical 1.0 percent annual

growth rate from 1980 to 2010, it will still lead to approximately 493,200 new residents over the next 25 years.[57] Exhibit 4.1 in SCAG's 2012-2035 RTP/SCS shows population growth in the region from 2008-2035. It shows very high growth in the Downtown Los Angeles area, where the Project Site is located.[58] As discussed in detail in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, the Project's population growth is consistent with SCAG's projected population growth for the City.

In addition, as discussed in more detail below under Threshold (b), as concluded in LADWP's 2015 UWMP, projected water demand for the City would be met by the available supplies during an average year, single-dry year, and multiple-dry year in each year from 2020 through 2040 as shown in Table IV.M.2-1.

Additionally, prior to the issuance of grading/building permits, the City would determine if the existing water supply infrastructure maintains sufficient capacity to accommodate the Project's demand for water. If a deficiency or service problem is discovered during the permitting process, the Project Applicant would be required to fund any necessary upgrades to adequately serve the Project. Water main and related infrastructure upgrades would not be expected to create a significant impact to the physical environment because: (1) any disruption of service would be of a short-term nature; (2) replacement of the water mains would be within public and private rights-of-way; and (3) the existing infrastructure would be replaced with new infrastructure in areas that have already been significantly disturbed.

Thus, the Project would not require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effect. Therefore, Project impacts related to water treatment would be less than significant.

[57] *LADWP 2015 UWMP, p. ES-6.*

[58] *http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf*

Table IV.M.2-3
Project Estimated Water Consumption

Land Use	Size	Daily Water Demand Rates[1]	Total (gpd)
Live/Work 1 Bedroom	95 du	110 gpd / du	10,450
Live/Work 2 Bedroom	34 du	150 gpd / du	5,100
Hotel	113 rooms	120 gallons / room	13,560
Retail	26,979 sf	25gpd/1,000 sf	674
Restaurant	31,719 sf	300 gpd /1,000 sf	9,516
Artist CoLab	3,430 sf	50 gpd / 1,000 sf	172
Art Gallery	10,341 sf	50 gpd / 1,000 sf	517
		Gross Project	**39,898**
		Less Existing	**4,560**
		Net Project	**35,429**

gpd = gallons per day du = dwelling unit sf = square feet

[1] *These rates assume water consumption is equal to wastewater generation.*

*Source: City of Los Angeles Wastewater Engineering Services Division, Albert Lew, correspondence, November 27, 2018. See **Appendix K-2** of the Draft EIR.*

(2) Mitigation Measures

No significant impacts related to water infrastructure have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to water infrastructure would be less than significant.

Threshold (b) Would the Project have insufficient water supplies available to serve the Project from existing entitlements and resources, or new or expanded entitlements?

(1) Impact Analysis

(b) Construction

Water consumption would be required to accommodate construction activities, such as soil watering (i.e. for fugitive dust control), clean up, masonry, painting, and other

related activities. As construction of the Project would occur in various stages over an approximately 30-month period, construction activities requiring water would occur intermittently and would be temporary in nature. Further, the activities requiring water would not create substantial water demand. Typically, fugitive dust watering is provided by private purveyors and not provided by on-site water sources. Reclaimed water can be used for dust control. Overall, construction activities would require minimal water consumption and would not be expected to have an adverse impact on available water supplies or existing water distribution systems**.** In addition, as concluded in LADWP's 2015 UWMP, projected water demand for the City would be met by the available supplies during an average year, single-dry year, and multiple-dry year in each year from 2020 through 2040 as shown in Table IV.M.2-1. Project construction is anticipated to be completed in 2021, with Project occupancy also in the same year. As such, the Project's temporary and minimal demand for water during construction could be met by the City's available supplies during each year of Project construction. **As such, the Project would not have insufficient water supplies available to serve the Project from existing entitlements and resources or new or expanded entitlements. Therefore, the Project's construction-related water supply impacts would be less than significant.**

(c) Operation

As shown in Table IV.M.2-3, the Project would result in a net increase in water consumption at the Project Site of approximately 35,429 gallons per day (or 0.035 mgd). (This estimated water consumption does not take into consideration the effectiveness of current water conservation measures that are required by the City.) The 2015 UWMP projects an average year water supply of 642,000 AFY in 2020 and rising to 675,700 AFY in 2025. According to LADWP, any shortfall in LADWP controlled supplies (i.e., groundwater, recycled, conservation, LAA) will be offset with MWD purchases to rise to the level of demand. In general, any project that conforms to SCAG's RTP/SCS demographic projections and is within the City's service area is considered to have been included in LADWP's water supply planning efforts in the UWMP. As discussed in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, the Project growth would be consistent with SCAG's RTP/SCS growth projections for the City. Thus, the Project's water demand has been accounted for in the 2015 UWMP. In addition, as concluded in LADWP's 2015 UWMP, projected water demand for the City would be met by the available supplies during an average year, single-dry year, and multiple-dry year in each year from 2020 through 2040 as shown on Table IV.M.2-1.

Further, the Project would be required to comply with the LAGBC (Chapter IX, Article 9, of the LAMC), which requires newly constructed buildings to reduce indoor water use by at least 20 percent by: (1) using water saving fixtures or flow restrictions; and/or (2) demonstrating a 20-percent reduction in baseline water use. Accordingly, the Project

would incorporate sustainability features, such as efficient plumbing features, updated landscaping, modern irrigation, and efficient appliances that would reduce the Project's net increase in water demand by at least 20 percent pursuant to the requirements of the LAGBC. For these reasons, the Project would not require new or expanded water entitlements. **As such, the Project would not have insufficient water supplies available to serve the Project from existing entitlements and resources or new or expanded entitlements. Therefore, Project impacts related to water supply would be less than significant.**

(2) Mitigation Measures

No significant impacts related to water supply have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to water supply would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

(a) Water Treatment

Implementation of the Project in conjunction with the 117 cumulative projects identified in **Section III, Environmental Setting,** of the Draft EIR, would increase demand for water treatment services and water supply. In addition to the 117 cumulative projects, the Community Plan Update discussed in **Section III, Environmental Setting,** of the Draft EIR, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many cumulative projects. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects, which itself is a conservative assumption would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

As shown in Table IV.M.2-4, cumulative water demand would be approximately 7.4 million gpd of water. This estimation of cumulative water demand does not take into consideration the removal of any existing land uses at the sites of the cumulative projects that are currently consuming water and does not take into consideration the

effectiveness of any water conservation measures that would be required of the new development by the City.

Table IV.M.2-4
Estimated Cumulative Water Consumption

Land Use	Size	Daily Water Consumption Rates[1]	Total (gpd)
Residential	30,590 du[2]	150 gpd/du	4,588,500
School	553 students	12 gpd/student	6,636
Retail	3,480,467 sf	25 gpd/1,000 sf	87,012
Restaurant	545,710 sf	300 gpd/1,000 sf	163,713
Hotel	3,631 rooms	120 gpd/room	435,720
Office	15,865,460 sf	120 gpd/1,000 sf	1,903,855
Gym	112,148 sf	0.25 gpd/sf	28,037
Cinema	744 seats	4 gpd/seat	2,976
Commercial	1,305,587 sf	50 gpd/1,000 sf	65,279
Storage	63,585	120 gpd/1,000 sf	7,630
Event Space	122,079 sf	120 gpd/1,000 sf	14,649
Grocery	109,912 sf	80 gpd/1,000 sf	8,793
Sports Complex	43,000 sf	80 gpd/1,000 sf	3,440
Museum	70,000 sf	50 gpd/1,000 sf	3,500
Industrial Park	94,800 sf	80 gpd/1,000 sf	7,584
		Related Projects Total	**7,327,324**
		Project Total	**35,429**
		Cumulative Total	**7,362,753**

gpd = gallons per day du = dwelling unit sf = square feet

[1] *Source: City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, March 20, 2002. Assumes that water consumption is equal to wastewater generation.*
[2] *Conservatively assumes all units are 2-bedroom units.*

As discussed previously, LADWP's 2015 UWMP forecasts adequate water supplies to meet all projected water demands in the City for normal, single-dry, and multi-dry years from 2020 to 2040. Furthermore, as outlined in the 2015 UWMP, LADWP is committed to providing a reliable water supply for the City. The 2015 UWMP takes into account climate change and the concerns of drought and dry weather and notes that the LADWP will meet all new demand for water supply associated with projected population growth through the combination of water conservation and recycling. The 2015 UWMP also addresses the current and future SWP supply shortages and concludes that

MWD's actions in response to the threats to the SWP would ensure continued reliability of its water deliveries. By focusing on demand reductions and alternative sources of water supplies, LADWP would further ensure that long-term dependence on MWD supplies would not be exacerbated by potential future shortages. Additionally, as described previously in this section, water conservation and recycling will play an increasing role in meeting future water demands in the City.

As discussed previously, demographic projections were provided for the LADWP service area by MWD, who received the data from SCAG. SCAG applied its 2012-2035 RTP/SCS demographic data to water service areas for MWD's member agencies. These data were used for water demand projections in LADWP's 2015 UWMP. Service area population is expected to continue to grow over the next 25 years at a rate of 0.5 percent annually. While this is substantially less than the historical 1.0 percent annual growth rate from 1980 to 2010, it will still lead to approximately 493,200 new residents over the next 25 years.[59] Exhibit 4.1 in SCAG's 2012-2035 RTP/SCS shows population growth in the region from 2008-2035. It shows very high growth in the Downtown Los Angeles area, where the Project Site and most of the related projects are located.[60] As discussed in detail in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, cumulative population growth is consistent with SCAG's projected population growth for the City.

In addition, as discussed in more detail above under Threshold (b), as concluded in LADWP's 2015 UWMP, projected water demand for the City would be met by the available supplies during an average year, single-dry year, and multiple-dry year in each year from 2020 through 2040 as shown in Table IV.M.2-1. **Therefore, cumulative impacts related to water treatment would be less than significant.**

(b) Water Infrastructure

Implementation of the Project in conjunction with cumulative projects located in the vicinity of the Project Site would result in an increased cumulative demand for water conveyance infrastructure. However, as with the Project, the cumulative projects would be subject to review by LADWP to ensure that existing infrastructure would be adequate to meet the water demand requirements for each project. All development in the City is subject to LADWP and City requirements regarding potential infrastructure improvements need to meet respective water infrastructure needs. Additionally, all development in the City is required to comply with Fire Code requirement for fire flow and other fire protection requirements and are subject to ongoing evaluations by LADWP, the City's Department of Public Works, and the Los Angeles Fire Department

[59] *LADWP 2015 UWMP, p. ES-6.*

[60] *http://rtpscs.scag.ca.gov/Documents/2012/final/f2012RTPSCS.pdf*

to ensure water conveyance infrastructure is adequate. **Compliance with existing regulations would ensure that cumulative impacts related to water infrastructure would be less than significant.**

(c) Water Supply

The LADWP (through its UWMP) anticipates that its projected water supplies will meet demand through the year 2040. In terms of the City's overall water supply condition, any cumulative project that is consistent with the City's General Plan has been taken into account in the planned growth of the water system. In addition, any cumulative project that conforms to the demographic projections from SCAG's RTP and is located in the service area is considered to have been included in LADWP's water supply planning efforts so that projected water supplies would meet projected demands. Similar to the Project, each cumulative project would be required to comply with City and State water code and conservation programs for both water supply and infrastructure.

Cumulative projects that propose changing the zoning or other characteristics beyond what is within the General Plan would be required to evaluate the change under CEQA review process. The CEQA analysis would compare the existing to the proposed uses and the ability of LADWP supplies and infrastructure to provide a sufficient level of water service. Future development projects within the service area of the LADWP would be subject to the locally mandated water conservation programs, and citywide water conservation efforts would also be expected to partially offset the cumulative demand for water. LADWP undertakes expansion or modification of water service infrastructure to serve future growth in the City as required in the normal process of providing water service. **For these reasons, cumulative impacts related to water would be less than significant.**

(2) Mitigation Measures

No significant cumulative impacts related to water infrastructure and water supply service have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to water infrastructure and water supply service would be less than significant.

IV. Environmental Impact Analysis

M.3 Utilities and Service Systems – Solid Waste

1. Introduction

This section evaluates the Project's potential impacts on solid waste facilities. The City of Los Angeles Bureau of Sanitation (LASAN) provides solid waste services to the City of Los Angeles (City) and would serve the Project Site. The analysis in this section evaluates the Project's generation of solid waste during construction and operation and the capacity of existing solid waste facilities. A summary of applicable regulations and solid waste standards is also provided in this section. In addition, the potential cumulative impacts to solid waste facilities associated with the Project, in combination with all known cumulative projects, are evaluated.

The demand on solid waste services and facilities is assessed by considering the amount of solid waste generated by the Project during construction and operation periods and whether an existing landfill(s) has capacity to serve the Project's solid waste needs. Based on this analysis, a determination is made as to whether the existing solid waste facilities could accommodate the Project's solid waste disposal needs.

2. Environmental Setting

a) Regulatory Setting

(1) State

(a) Assembly Bill 939

Assembly Bill (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible. Specifically, AB 939 requires city and county jurisdictions to construct an implementation schedule to divert at least 50 percent of the total waste stream from landfill disposal by 2000, and to maintain that 50 percent diversion rate beyond 2000. AB 939 also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. The City surpassed the state-mandated 50 percent diversion rate for the year 2000 and achieved

a 58.8 percent diversion rate.[1] As of June 2015, the City has diverted 76.4 percent of waste from landfills.[2]

AB 939 further requires each city and county to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach the required diversion goals. The SRRE contains diversion programs and policies and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to the California Integrated Waste Management Board (CIWMB), now known as CalRecycle, to update their progress toward the AB 939 goals (i.e., source reduction, recycling and composting, and environmentally safe land disposal).[3]

(b) Assembly Bill 1327 – California Solid Waste Reuse and the Recycling Access Act of 1991

The California Solid Waste Reuse and the Recycling Access Act of 1991 (Public Resources Code Sections 42900 – 42911, AB 1327), as amended, requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional building, marina, 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. Pursuant to AB 1327, the City adopted the Space Allocation Ordinance (Ordinance No. 171687), discussed below.

(c) Senate Bill 1374 – Construction and Demolition Waste Materials Diversion Requirements

Passed in 2002, the Construction and Demolition Waste Materials Diversion Requirements require jurisdictions to include a synopsis of the amount of construction and demolition (C&D) waste diverted in their annual AB 939 report. The legislation also required that the CIWMB (e.g., CalRecycle) to adopt a model ordinance for diverting 50 to 75 percent of all C&D waste from landfills.

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1 *City of Los Angeles, AB 939 2000 Report, August 2001, page ES-1.*

2 *LA City, Performance, Environment: https://performance.lacity.org/en/stat/goals/yn4r-yz4i/jeid-b9sx/tiy3-7r3s*

3 *California Public Resources Code, §40050 et seq.*

(d) Assembly Bill 1826 – Mandatory Commercial Organics Recycling

Assembly Bill (AB) 1826 (Chapter 727, Statutes of 2014 [Chesbro, AB 1826]) requires businesses that generate a specified amount of organic waste per week to arrange for recycling services for that waste, and for jurisdictions to implement a recycling program to divert organic waste from businesses subject to the law, as well as report to CalRecycle on their progress in implementing an organic waste recycling program.

(e) Zero Waste California

Zero Waste California is a state-launched program that promotes a new vision of waste. The concept is premised on maximizing existing recycling and reuses 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.

(f) California Green Building Standards

The 2016 California Green Building Standards Code (CALGreen Code) sets standards for new structures to minimize the state's carbon output. California requires that new buildings reduce water consumption, increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. Each local jurisdiction still retains the administrative authority to exceed the new CALGreen standards. The 2016 CALGreen Code went into effect January 1, 2017.

(g) Assembly Bill 341

Assembly Bill 341 (AB 341), signed on February 10, 2011, directed that no less than 75 percent of solid waste generated in California be source reduced, recycled, or composted by 2020, and required CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. AB 341 also mandated local jurisdictions to implement commercial recycling by July 1, 2012

(2) Regional

(a) Los Angeles County Integrated Waste Management Plan

The California Integrated Waste Management Plan (CIWMP), approved on June 23, 1999, is a set of planning documents that provides a regional approach for the management of solid waste through source reduction, recycling and composting, and environmentally safe transformation and disposal. The CIWMP recognizes that landfills will remain an integral part of the County's solid waste management system in the

foreseeable future and assures that the waste management practices of cities and other jurisdictions in the County are consistent with the solid waste diversion goals of AB 939. The CIWMP is updated annually, and the annual reports analyze solid waste disposal and estimated future remaining capacity at County landfills. The 2016 Annual Report, which was completed by the Los Angeles County Department of Public Works (LACDPW) in September 2017, assessed future landfill disposal needs over a 15-year planning horizon based in part on forecasted waste generation and available landfill capacity. Several factors were used in the 2016 Annual Report to determine landfill capacity, including (1) the expiration of various landfill permits (e.g., land use permits, waste discharge requirement permits, solid waste facilities permits, and air quality permits); (2) restrictions on the processing of waste generated outside given landfills' jurisdictions and/or watershed boundaries; and (3) operational constraints.

As discussed in the 2016 Annual Report, reliance on existing permitted in-County landfill capacity alone would be insufficient in meeting the County's long-term disposal needs (i.e., through 2031). Similar to previous years, the 2016 Annual Report also considered six scenarios (e.g., maximization of waste reduction and recycling; expansion of existing landfills; development of alternative technologies; expansion of transfer and processing infrastructure, and the use of out-of-County disposal options) to assess the County's ability to meet the solid waste daily disposal demand. The analyses of the scenarios demonstrated that the County would be able to meet the disposal needs of all jurisdictions through 2031. However, the County acknowledged in the 2016 Annual Report that there will be significant challenges in developing the processing capacity needed by the 2020 deadline of meeting the 75-percent statewide recycling goal as set forth by AB 341 (see discussion above). Accordingly, they concluded that maintaining adequate reserve (excess) capacity will be essential to ensuring that the disposal needs of the County are met through 2031.[4]

(3) Local

(a) City of Los Angeles Solid Waste Management Policy Plan and Source Reduction and Recycling Element

In 1993, the City adopted the City of Los Angeles Solid Waste Management Policy Plan that provides long-range policy direction for solid waste management and served as an umbrella document for the City's SRRE. The SRRE describes the Source Reduction

[4] *County of Los Angeles Department of Public Works, Countywide Integrated Waste Management Plan 2016 Annual Report, September 2017.*

and Recycling Program for waste collected by LASAN in conformance with the requirements of AB 939.[5]

Specifically, Volume IV of the SRRE presents strategies for targeted waste generators such as hotels, restaurants, and hospitals; targeted materials such as construction and demolition debris, green waste, and direct mail; and government departments. Pursuant to AB 939, the objective of the City Solid Waste Management Policy Plan and the SRRE is to promote source reduction or recycling to achieve a minimum diversion of 50 percent of the City's waste by 2000 through the disposal of the remaining waste in local and possibly remote landfills. The City surpassed the state-mandated 50-percent diversion rate for the year 2000.[6] In addition, in 1999, Mayor Richard Riordan directed City departments to develop strategies to achieve the citywide recycling goal of 70 percent by 2020. This goal has also been surpassed by the City, which achieved a diversion rate of 76.4 percent in 2012.[7] The responsibility for documenting waste diversion efforts for the City lies with LASAN. As set forth below, more recent plans have been adopted by the City to further its waste reduction and recycling goals.

(b) City of Los Angeles Solid Waste Integrated Resources Plan

LASAN is in the process of developing the Solid Waste Integrated Resources Plan (SWIRP) also known as the "Zero Waste Plan," a master plan to reduce solid waste, increase recycling, and manage trash in the City through the year 2030.[8] The SWIRP would supersede the existing CiSWMPP. The SWIRP is intended to provide an outline of the policies, programs, infrastructure, regulations, incentives, new green jobs, technology, and financial strategies necessary to achieve the City's goal of becoming a "zero waste" city by the year 2030.[9]

The term "zero waste" refers to maximizing recycling, minimizing waste, reducing consumption, and encouraging the use of products with recycle/reused materials. As noted by the City, "zero waste" is a goal and not a categorical imperative; the City is

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5 *City of Los Angeles, Department of Public Works, Bureau of Sanitation, City of Los Angeles Solid Waste Planning Background Studies Summary Report, January 2006.*

6 *CalRecycle, Jurisdiction Diversion/Disposal Rate Detail, Reporting Year 2000, http://www.calrecycle.ca.gov/lgcentral/Reports/DiversionProgram/JurisdictionDiversionDetail.aspx?JurisdictionID=272&Year=2000, accessed on July 23, 2018.*

7 *Ibid.*

8 *Zero Waste Plan, Solid Waste Integrated Resources Plan, City of Los Angeles, Department of Public Works, Bureau of Sanitation.*

9 *City of Los Angeles, SWIRP,* https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-zwswirp?_afrLoop=22821325698532168&_afrWindowMode=0&_afrWindowId=null#!%40%40%3F_afrWindowId%3Dnull%26_afrLoop%3D22821325698532168%26_afrWindowMode%3D0%26_adf.ctrl-state%3Dlf7n5t3gl_136*, accessed on May 5, 2018.*

seeking to come as close to "zero waste" as possible. The SWIRP is a programmatic plan to develop a series of policies, programs, and facilities required to reach the City's goals of 75 percent diversion by 2013 and 90 percent diversion by 2025 in the City. SWIRP has six components for full implementation of the project objectives. These six components will be expanded to improve solid waste management, increase landfill diversion, and accommodate growth. They include the following: (1) Expansion of Existing Residential and Commercial Programs; (2) Implementation of New Downstream Policies and Programs; (3) Implementation of Mandatory Participation Programs; (4) Adoption of Upstream Policies; (5) Development of Processing Facilities; and (6) Disposal of Remaining Residual Waste at Local or Remote Landfills.[10]

(c) City of Los Angeles Solid Resources Infrastructure Strategy Facilities Plan

The City's Solid Resources Infrastructure Strategy Facilities Plan (Facilities Plan) was prepared in 2000 by LASAN in efforts to address the goals of AB 939 and the policies of the General Plan Framework Element. The following objectives are included in the Facilities Plan:

- Develop a transfer facility and/or recycling center in the Central Los Angeles Area;
- Continue to research and develop the use of Material Recovery Facilities to preprocess all residual waste prior to delivery to a disposal site; and
- Develop a comprehensive and continual public education and community outreach program designed to educate and inform the public about the City's solid resources programs and strategies.

Additionally, LASAN operates bulky item pick-ups, E-waste collection events, and curbside recycling. The Curbside Recycling Program offers recycling collection for all single-family homes in the City, but currently excludes service to multi-family buildings of four units or more.

(d) RENEW LA PLAN

RENEW LA was adopted by the City Council in February 2006 for the purpose of facilitating a shift from solid waste disposal to resource recovery. This shift is predicted to result in "zero waste" and an overall diversion level of 90 percent by 2025 and becoming a zero-waste city by 2030. The plan focuses on combining key elements of

[10] *City of Los Angeles SWIRP, Final EIR: http://www.zerowaste.lacity.org/pdf/SWIRP%20Final%20PEIR%20Dec2014.pdf, accessed on May 5, 2018.*

existing reduction and recycling programs and infrastructure with new systems and conversion technologies to achieve resource recovery (without combustion) in the form of traditional recyclables; soil amendments; and renewable fuels, chemicals, and energy. Furthermore, the plan calls for reductions in the quantity of and environmental impacts associated with residual materials disposed in landfills.

(e) City of Los Angeles Space Allocation Ordinance

Pursuant to AB 1327, the City enacted the Space Allocation Ordinance (Ordinance No. 171687) on August 13, 1997, which is incorporated in various sections of the Los Angeles Municipal Code (LAMC). The Space Allocation Ordinance requires the provision of an adequate recycling area or room for collecting and loading recyclable materials for all new construction projects, multi-family residential projects of four or more units where the addition of floor area is 25 percent or more, and other development projects where the addition of floor area is 30 percent or more.

(f) Green LA Plan

Released in May 2007, the *Green LA Plan* is an action plan to lead the nation in addressing global warming. The overall goal of the *Green LA Plan* is to reduce greenhouse gas emissions to 35 percent below 1990 levels by 2030. To achieve this target, a number of goals and objectives have been established in various focus areas. One such focus area is solid waste, as landfills are a major source of methane, a greenhouse gas produced by decomposing trash. The goals of the *Green LA Plan* are to shift from solid waste disposal to resource recovery and to recycle 70 percent of solid waste generated within the City by 2015. In 2008, the Mayor accelerated that goal to 75 percent diversion by 2013.[11] To meet this target by 2013, LASAN initiated several new programs, including multi-family recycling available to all buildings, construction and demolition recycling requirements, and a pilot residential food scrap program. The City's solid waste diversion rate for the 2013 fiscal year was 76.4 percent.

(g) Citywide Construction and Demolition Debris Recycling Ordinance

On March 5, 2010, the City Council approved a Citywide Construction and Demolition Debris Recycling Ordinance (Ordinance No. 181,519) that requires LASAN to ensure that all mixed construction and demolition waste generated within City limits be taken to

[11] *City Solid Waste Programs and Policies, City of Los Angeles, available online at http://www.zerowaste.lacity.org/files/info/fact_sheet/SWIRPPolicyNprogramsFactSheet_032009.pdf, accessed on July 25, 2018.*

a City certified construction and demolition waste processor. The ordinance became effective in January 2011.[12]

(h) Citywide Exclusive Franchise System for Municipal Solid Waste Collection and Handling

Solid waste collection, management, and disposal in the City are handled both by LASAN crews and by various permitted private solid waste haulers. The City provides solid waste collection, recycling, and green waste collection services primarily to single-family uses and multi-family uses with four units or less. Private solid waste haulers collect from most multi-family residential uses with more than four units and commercial uses based on an open permit system. Permitted waste haulers must obtain an annual permit, submit an annual report, and pay quarterly fees. However, unlike LASAN, private waste haulers are not required to provide recycling services, operate clean fuel vehicles, offer similar costs for similar services, or reduce vehicle miles traveled. Thus, the existing open permit system limits the ability of the City to address compliance with state environmental mandates and the City's waste diversion goals. Although the City has obtained a 76 percent solid waste diversion rate as identified in the 2013 Zero Waste Progress Report, nearly 3 million tons of solid waste from the City are still disposed in landfills annually, nearly 70 percent of which is comprised of waste collected by private waste haulers from multi-family residential and commercial customers.[13]

In response to City Council directive, LASAN developed Zero Waste LA, a new public private partnership that establishes a new waste and recycling franchise systems for all businesses, commercial, industrial, and large multi-family customers in the City.[14] In April 2014, the Mayor and City Council approved Ordinance 182,986 that allows the City to establish an exclusive franchise system with 11 zones. With a single-trash hauler responsible for each zone, the franchise system allows for the efficient collection and sustainable management of solid waste resources and recyclables. Among other requirements, the City mandates maximum annual disposal levels and specific diversion requirements for each franchise zone to promote solid waste diversion from landfills in

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[12] *City of Los Angeles, Sanitation, Construction and Demolition Recycling,* https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-r/s-lsh-wwd-s-r-cdr?_afrLoop=2386948483953796&_afrWindowMode=0&_afrWindowId=p463hihff&_adf.ctrl-state=d7px3i0z_80#!%40%40%3F_afrWindowId%3Dp463hihff%26_afrLoop%3D2386948483953796%26_afrWindowMode%3D0%26_adf.ctrl-state%3Dd7px3i0z_84*, accessed on May 5, 2018.*

[13] *City of Los Angeles, Final Implementation Plan for Exclusive Commercial and Multifamily Franchise Hauling System, April 2013.*

[14] *LASAN, https://www.lacitysan.org/cs/groups/public/documents/document/y250/mde0/~edisp/cnt014133.pdf, accessed on July 25, 2018.*

an effort to meet the City's zero waste goals. This program began rolling out on July 1, 2017.

(i) City of Los Angeles Green Building Ordinance

On December 20, 2016, the City Council approved Ordinance No. 184,692, which amended Chapter IX (Green Building Code) of the LAMC, by modifying certain provisions of Article 9 to reflect local administrative changes and incorporating by reference portions of the 2016 CALGreen Code. Projects filed on or after January 1, 2017 must comply with the provisions of the Los Angeles Green Building Code (LAGBC). Specific mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2) nonresidential and high-rise residential buildings; and (3) additions and alterations to nonresidential and high-rise residential buildings. Article 9, Division 5 includes mandatory measures for newly constructed nonresidential and high-rise residential buildings.

(j) City of Los Angeles General Plan Framework Element

The City's General Plan Framework Element, adopted in December 1996 and readopted in August 2001, contains goals, policies, and objectives that address solid waste services. The Framework Element of the City of Los Angeles General Plan provides a City-wide strategy for long-term growth planning. The Framework includes an Infrastructure and Public Services Chapter, which to address State and Federal mandates to plan for adequate infrastructure in the future. The Framework Element supports AB 939 and its goals by encouraging "an integrated solid waste management system that maximizes source reduction and materials recovery and minimizes the amount of waste requiring disposal."[15] The Framework Element addresses many of the programs the City has implemented to divert waste from disposal facilities such as source reduction programs and recycling programs (e.g., Curbside Recycling Program and composting). Furthermore, the Framework Element states that for these programs to succeed, the City should site businesses at appropriate locations where recyclables can be handled, processed, and/or manufactured to allow a full circle recycling system to develop. The continuing need for solid waste transfer and disposal facilities, as well as the limited disposal capacity of the landfills in Los Angeles, is further addressed by the General Plan Framework, which indicates that more transfer facilities will be needed in order to dispose of waste at remote landfill facilities. Several landfill disposal facilities that may be accessed by truck are identified in addition to waste-by-rail landfill disposal facilities that can be utilized by the City to meet its disposal needs.[16]

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[15] *City of Los Angeles Department of City Planning, Citywide General Plan Framework, August 2001, page 9-11.*

[16] *City of Los Angeles Department of City Planning, Citywide General Plan Framework, Chapter 9, available online at http://cityplanning.lacity.org/cwd/framwk/chapters/09/09.htm#solidwaste, accessed on May 18, 2016.*

b) Existing Conditions

Los Angeles County continually evaluates demand for landfill capacity through the preparation of the County Integrated Waste Management Plan Annual Reports. The information presented in this section is based in part on the County of Los Angeles Countywide Integrated Waste Management Plan 2016 Annual Report, which was completed by the County of Los Angeles Department of Public Works in September 2017.

(1) Landfills

Landfills that serve the Los Angeles area are shown on Table IV.M.3-1. As shown, the landfills serving Los Angeles have a remaining daily intake capacity of approximately 14,920 tons per day. In July 2016, the Chiquita Canyon Landfill reached its capacity. However, the landfill continues to operate under a temporary waiver. The landfill owner has applied for an expansion permit, which would allow the landfill to continue to operate for another 21 to 38 years.[17] Due to the landfill's uncertain future, the analysis below does not consider the Chiquita Canyon Landfill's potential future capacity, but it is included for informational purposes.

Table IV.M.3-1
Regional Landfill Capacity

Landfill Facility	Estimated Remaining Life (years)	Estimated Remaining Disposal Capacity (million tons)[2]	Permitted Intake (tpd)	Daily Disposal (tpd)	Available Daily Intake (tpd)
Sunshine Canyon	21	62.1	12,100	7,496	4,604
Chiquita Canyon Proposed Expansion	-	-	12,000	-	-
Azusa Land	30	56.33	6,500	1,183	5,317
Lancaster	25	10,44	3,000	550	2,450
Calabasas	20	5.95	3,500	951	2,549
				Total	**14,920**

tpd = tons per day

Source: County of Los Angeles, Countywide Integrated Waste Management Plan, 2016 Annual Report, December 2017.

[17] *County of Los Angeles, Chiquita Canyon Landfill Master Plan Revisions, Draft EIR, Section 2.0 Project Description.*

(2) Transformation Facilities and Conversion Technologies

There are two solid waste transformation facilities located in the County, the Commerce Refuse-to Energy Facility and the Southeast Resource Recovery Facility. The Commerce Refuse-to-Energy Facility has a permitted intake of 1,000 tons per day (tpd) and accepted an average of 398 tpd. It has a daily intake availability of 602 tpd.[18] The Southeast Resource Recovery Facility, located in the City of Long Beach, has a permitted intake of 2,240 tpd and accepts an average of 1,427 tpd. It has a daily intake availability of 813 tpd.[19] It is expected that these two facilities will continue to operate at their current permitted capacities through the planning period of 2022.

The County is exploring the use of conversion technologies to reduce future disposal needs, as well as address global climate change. These technologies encompass a variety of processes that convert normal household trash into renewable energy, biofuels, and other useful products. The County has launched the Southern California Conversion Technology Demonstration Project, which seeks to promote, evaluate, and establish a demonstration facility for the conversion of solid waste into clean energy. Additionally, the County completed its final Phase II Conversion Technology Evaluation Report, which provides a comprehensive study of existing technology suppliers and materials recovery facilities throughout southern California.[20]

(3) Recycling Facilities

As stated previously, as of 2015, approximately 76 percent of waste generated in the City was diverted from landfills and recycled.[21] LASAN's Solid Resources Citywide Recycling Division (SRCRD) develops and implements source reduction, recycling, and composting programs in the City.[22] The SRCRD provides technical assistance to public and private recycling operations, oversees the City's recycling program, manages the Household Hazardous Waste program, and helps create markets for recyclable materials.[23] In order to provide more information to the public and private sectors regarding construction waste diversion, the SRCRD publishes the *Construction and*

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[18] *County of Los Angeles, Countywide Integrated Waste Management Plan, 2015 Annual Report, December 2016.*

[19] *Ibid.*

[20] *Los Angeles County Phase II Conversion Technology Evaluation Report - October 2007,* http://dpw.lacounty.gov/epd/socalconversion/pdfs/LACo_Conversion_PII_Report.pdf*, accessed May 5, 2018.*

[21] *City of Los Angeles, Sustainable City pLAn, April 2015, page 43.*

[22] *City of Los Angeles Department of Public Works Bureau of Sanitation, Construction and Demolition Recycling Guide, August 8, 2007.*

[23] *Ibid.*

Demolition Recycling Guide (Guide) (updated August 2007), which is a directory of recyclers and certified mixed-debris processors that serve the Greater Los Angeles area. Recycling facilities that could accommodate the Project's demolition and construction waste include, but are not limited to, American Waste Transfer Station, Compton Recycling and Transfer Station, Carson Transfer Station and Materials Recovery Facility, Waste Resources Recovery, Falcon Refuse Center Inc., and the Southeast Resource Recovery Facility. Other prominent recycling facilities in the Los Angeles region include: American Waste Transfer Station, Compton Recycling and Transfer Station, Carson Transfer Station and Materials Recovery Facility, Waste Resources Recovery, Falcon Refuse Center, Inc., and the Southeast Resource Recovery Facility.

(4) Household Hazardous Waste

The City operates a Household Hazardous Waste (HHW) Collection Program in cooperation with the Los Angeles County Department of Public Works (LACDPW). The program is a way for private residents to safely dispose of household chemicals, such as household cleaning products, paint substances, automotive products, pool chemicals, fertilizers, pesticides, batteries, and fluorescent light bulbs.[24] City and County residents can bring their HHW to "Hazmobile" collection sites. These mobile collection sites are held at various locations throughout the City and County, each remaining in the same location for one to two days.[25] The sites are staffed with employees trained in hazardous waste handling who safely unload residents' waste into trucks and trailers on-site. LASAN has also established seven permanent hazardous waste collection sites throughout the City, known as S.A.F.E. (Solvents/Automotive/Flammables/Electronics) Centers, which are open every weekend to allow residents to conveniently dispose of their HHW (commercial "drop-offs" are not accepted). Additionally, the CIWMB has certified used-oil collection locations throughout the state. These locations accept uncontaminated oil throughout the year. A list of the locations can be obtained from LASAN or directly from the CIWMB.

(5) Construction and Demolition Debris

The USEPA report, *Characterization of Building-Related Construction and Demolition Debris in the United States*, characterizes the quantity and composition of building-related C&D debris generated in the United States, and summarizes the waste

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[24] *Los Angeles City Bureau of Sanitation, "Household Hazardous Waste Collection Program," website: https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-c/s-lsh-wwd-s-c-hw?_afrLoop=2388632347363249&_afrWindowMode=0&_afrWindowId=q0iuk2ff7&_adf.ctrl-state=d7px3i0z_218#!%40%40%3F_afrWindowId%3Dq0iuk2ff7%26_afrLoop%3D2388632347363249%26_afrWindowMode%3D0%26_adf.ctrl-state%3Dd7px3i0z_222, accessed May 5, 2018.*

[25] *Ibid.*

management practices for this waste stream.[26] The state defines C&D debris as concrete, asphalt, wood, drywall, metals, and many miscellaneous and composite materials generated by the demolition and/or new construction of structures such as residential and commercial buildings and roadways. Construction debris from building sites typically consists of trim scraps of construction materials, such as wood, sheetrock, masonry, and roofing materials. There is typically much less concrete in construction debris than demolition debris, although some construction projects produce considerable quantities of concrete, often depending on the technology used to build concrete structures such as walls. Trim scraps from residential construction sites typically represent between six and eight percent of the total weight of the building materials delivered to the site, excluding the foundation, concrete floors, driveways, patios, etc. There is typically very little concrete waste to dispose of from residential construction projects.

When buildings are demolished, large quantities of waste may be produced in a relatively short period of time, depending on the size of the building(s) and the demolition technique used. On a per building basis, demolition waste quantities may be 20 to 30 times as much as construction debris.

Prior to closing on October 31, 2013, a majority of the City's construction and demolition waste went to the Puente Hills Landfill.[27] However, there are other County Sanitation Districts' facilities available for disposal and recycling, including the nearby Puente Hills Materials Recovery Facility (MRF) that shares the same entrance as the Puente Hills Landfill. The Puente Hills MRF accepts a range of waste for recycling and disposal, including commercial, construction/demolition, and residential wastes.[28] The Puente Hills MRF is permitted to accept 4,400 tpd and 24,000 tons per week of municipal solid waste.[29] In 2014, the Puente Hills Intermodal Facility was completed[30] and provides a Materials Recovery Facility/Transfer Station for the Waste to Rails system to the

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[26] *U.S. EPA Report No EPA530-98-010, Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, website: https://www.epa.gov/sites/production/files/2016-03/documents/charact_bulding_related_cd.pdf, accessed on July 23, 2018.*

[27] *City of Los Angeles, Fact Sheet: Solid Waste Facilities: http://www.zerowaste.lacity.org/files/info/fact_sheet/SWIRPfacilitySystemInfrastructureFactSheet_032009.pdf, accessed on July 25, 2018*

[28] *County Sanitation Districts, Puente Hills Landfill Closing on October 31, 2013: http://www.lacsd.org/news/displaynews.asp?NewsID=214&TargetID=1, accessed on May 18, 2016.*

[29] *County Sanitation Districts, Puente Hills MRF Fact Sheet: http://www.lacsd.org/news/displaynews.asp?NewsID=214&TargetID=1, accessed on May 11, 2017.*

[30] *County Sanitation Districts, Waste-By-Rail: http://www.lacsd.org/solidwaste/wbr/default.asp, accessed on May 11, 2017.*

Mesquite Regional Landfill in Imperial County.[31] The Mesquite Landfill can accept 20,000 tpd, with an overall capacity of 600 million tons and a lifespan of 100 years.[32]

(6) Existing Solid Waste Generation at the Project Site

As shown in Table IV.M.3-2, existing uses at the Project Site generate approximately 0.23 tons of solid waste per day.

Table IV.M.3-2
Existing Solid Waste Generation

Land Use	Size	Daily Solid Waste Generation Rates	Total (lbs per day)	Total (tpd)
Light Industrial/ Arts Production with Live/Work Units	91,200 sf	0.005 lbs/sf	456	0.23

lbs = pounds *tpd = tons per day* *sf = square feet*

Rates: CalRecycle Estimated Solid Waste Generation Rates: http://www.calrecycle.ca.gov/LGcentral/GoalMeasure/DisposalRate/MostRecent/default.htm

3. Project Impacts

a) Methodology

To evaluate solid waste impacts associated with construction and operation of the Project, the analysis below compares the solid waste generation (for both construction and operation) of the Project with the capacity of existing landfills that accept waste from the City, including the Project Site. This is considered a conservative scenario in that it assumes there would be no development of new landfills, no expansion of existing facilities, no implementation of other disposal options, including recycling, and no disposal at landfills located outside of the County.

The demand on solid waste services and facilities is assessed by considering the amount of solid waste generated by the Project during construction and operation periods and whether an existing landfill(s) has capacity to serve the Project's solid waste needs. Based on this analysis, a determination is made as to whether the existing

[31] *Puente Hills Landfill: http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=3708, accessed on May 11, 2017.*

[32] *Mesquite Regional Landfill: http://www.mrlf.org/index.php?pid=5, accessed on May 11, 2017.*

solid waste facilities can accommodate the Project's solid waste disposal needs. Similarly, cumulative impacts are assessed by comparing the amount of solid waste that would be generated by cumulative projects with the remaining capacity at Class III landfills open to the City of Los Angeles.

b) Thresholds of Significance

(1) Appendix G of the State CEQA Guidelines

In accordance with Appendix G of the *CEQA Guidelines* (Appendix G), a project could have a significant impact on solid waste services and facilities if the project would result in the following:

(a) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or

(b) Not comply with federal, state, and local statutes and regulations related to solid waste.

(2) City of Los Angeles CEQA Thresholds Guide

The L.A. CEQA Thresholds Guide (Thresholds Guide) identifies the following criteria to evaluate solid waste services:

(a) Amount of projected waste generation, diversion, and disposal during demolition, construction, and operation of the project, considering proposed design and operational features that could reduce typical waste generation rates;

(b) Need for an additional solid waste collection route, or recycling or disposal facility to adequately handle project-generated waste; and

(c) Whether the project conflicts with solid waste policies and objectives in the SRRE or its updates, CiSWMPP, Framework Element or Curbside Recycling Program, including consideration of the land use-specific waste diversion goals contained in Volume 4 of the SRRE.

In assessing impacts related to solid waste services and facilities in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds.

c) Project Design Features

No Project Design Features (PDFs) related to solid waste are proposed as part of the Project.

d) Analysis of Project Impacts

Threshold (a) ***Would the Project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?***

(1) Impact Analysis

(a) Construction

(i) Solid Waste Collection Route

Construction of the Project would involve demolition and building construction activities. These activities would generate construction and demolition waste (e.g., wood, concrete, asphalt, cardboard, brick, glass, plastic, metal, etc.). In accordance with City requirements, a haul permit would be obtained by the contractor or hauler to dispose of the materials at a City-certified waste processing facility. Since construction and demotion waste would be hauled by a private construction contractor permitted by the City, the Project would not result in the need for an additional solid waste collection route. **Therefore, Project impacts related to solid waste collection routes as a result of construction would be less than significant.**

(ii) Solid Waste Disposal

Demolition of the existing building located on the Project Site, as well as excavation, grading, and construction of the Project, would result in an incremental and intermittent increase in construction solid waste disposal at local landfills. Project construction is expected to take approximately 30 months and would include the export of approximately 60,000 cubic yards of soil from the Project Site.

Construction waste materials are expected to be typical construction debris, including wood, paper, glass, plastic, metals, cardboard, and green wastes. Based on demolition and construction waste generation rates estimated by the USEPA's *Characterization of Building-Related Construction and Demolition Debris in the United States* (see "Environmental Setting" discussion, above), the Project would generate a total of approximately 7,889 tons of solid waste during the approximately 22-day demolition phase (approximately 358 tons per day) and 780 tons of solid waste over the

approximately 220-day construction phase (approximately 3.5 tons per day), for a total of 8,669 tons (see Table IV.M.3-3).

Table IV.M.3-3
Estimated Project Solid Waste Generation – Demolition and Construction

Land Use	Size (sf)	Generation Rate (lbs/sf)	Total (lbs)	Total (tons)
Demolition				
Building	91,200	173	15,777,600	7,889
Construction				
Residential	200,021	4.38	876,092	***438***
Non-residential	170,319	4.02	683,959	***342***
Total Construction Waste			1,560,051	**780**
Total Demolition and Construction Waste			**17,337,651**	**8,669**

sf = square feet *lbs = pounds*

Based on 173 pounds of demolition per square foot. (Source: United States. Environmental Protection Agency (USEPA) Report No. EPA530-98-010. Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, Table A-3 and Table A-4, pages A-2 to A-3: https://www.epa.gov/sites/production/files/2016-03/documents/charact_bulding_related_cd.pdf.

U.S. EPA Report No EPA530-98-010, Characterization of Building Related Construction and Demolition Debris in the United States, June 1998. Applied generation rates are averages of empirical waste assessments of residential demolition, non-residential demolition, residential construction, and non-residential construction waste streams in the United States.

Based on 4.02 pounds of nonresidential construction and 4.38 lbs for residential construction per square foot. (Source: United States Environmental Protection Agency Report No. EPA530-98-010. Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, Tables A-1 and A-2, page A-1: https://www.epa.gov/sites/production/files/2016-03/documents/charact_bulding_related_cd.pdf.

The Project's demolition and construction debris would primarily be classified as inert waste and would be recycled in accordance with the Citywide C&D Waste Recycling Ordinance, which requires all mixed C&D waste generated within City limits to be taken to a City-certified C&D waste processor for recycling, and with LAMC Section 66.32, which requires 70 percent of solid waste (including C&D debris) generated in the City to be recycled. Solid waste diversion would be accomplished though the on-site separation of materials and/or by contracting with a solid waste disposal facility that would guarantee a minimum diversion rate of 70 percent. In compliance with the LAMC, the General Contractor would utilize solid waste haulers, contractors, and recyclers who have obtained an AB 939 Compliance Permit (i.e., Waste Hauler Permit) from LASAN.

As shown on Table IV.M.3-1, landfills that serve the Los Angeles region have an existing daily available capacity of 14,920 tpd, which would be adequate to accommodate the Project's C&D waste.

Furthermore, recycling facilities (such as American Waste Transfer Station, Compton Recycling and Transfer Station, Carson Transfer Station and Materials Recovery Facility, Waste Resources Recovery, Falcon Refuse Center Inc., and the Southeast Resource Recovery Facility) would receive recyclable construction waste. Additional recycling facilities and inert waste landfills (which are able to accept fill dirt, concrete, glass, etc.) are listed in LASAN's *Construction and Demolition Recycling Guide* and would be utilized as needed. For these reasons, the Project's construction and demolition activities would not require new or expanded landfill capacity. **Thus, Project construction would not be served by a landfill with insufficient permitted capacity to accommodate the Project's solid waste disposal needs. Therefore, the Project's construction-related impacts on solid waste would be less than significant.**

(b) Operation

(i) Solid Waste Collection Routes

Operation of the Project would generate municipal solid waste typical of residential and commercial developments. Solid waste generated by the Project would be recycled and/or collected by private waste haulers contracted by the operators of the Project and permitted by the City and taken for disposal at one of the landfills identified on IV.M.3-1. The Project Site is located in an urban area with established solid waste collection routes. Transport of the Project's solid waste would occur along one of the established routes. Thus, the Project would not result in the need for additional solid waste collection routes. **Therefore, Project impacts related to solid waste collection routes as a result of operation would be less than significant.**

(ii) Solid Waste Disposal

As shown in Table IV.M.3-4, it is estimated that the Project would generate a net total of approximately 0.88 tpd of solid waste. This total represents a conservative estimate and does not account for any recycling efforts, which the Project would be required to implement. Assuming a 76-percent recycling rate (consistent with the amount of waste diverted in the City in 2015), the Project would generate a total of 0.21 tpd of solid waste. The total daily amount of solid waste (not including the approximate 76-percent diversion rate) generated by the Project would represent less than one percent of the combined remaining capacity of 14,920 tpd at the landfills serving the Los Angeles region. The Project would be required to comply with LASAN's continued recycling

efforts, including the Citywide Curbside Recycling Program and the Zero Waste Plan. For these reasons, the Project would not require new or expanded landfill capacity. **Thus, the Project would not be served by a landfill with insufficient permitted capacity to accommodate the Project's solid waste disposal needs. Therefore, Project impacts related to solid waste would be less than significant.**

Table IV.M.3-4
Estimated Project Solid Waste Generation

Land Use	Size	Daily Solid Waste Generation Rates[1]	Total (lbs per day)[2]	Total (tpd)[2]
Live/Work Units	129 units	12.23 lbs / unit	1,578	0.79
Hotel	133 rooms	2 lbs / room	266	0.13
Retail	26,979 sf	5 lbs / 1,000 sf	135	0.07
Restaurant	31,719 sf	5 lbs / 1,000 sf	159	0.08
Artist CoLab	3,430 sf	5 lbs / 1,000 sf	17	0.01
Art Gallery	10,341 sf	5 lbs / 1,000 sf	52	0.03
		Project Subtotal	**2,207**	**1.11**
		Less Existing	***456***	***0.23***
		Project Net	**1,751**	**0.88**

lbs = pounds *tpd = tons per day* *sf = square feet* *1 ton = 2,000 pounds*

[1] *Rates: CalRecycle Estimated Solid Waste Generation Rates: http://www.calrecycle.ca.gov/LGcentral/GoalMeasure/DisposalRate/MostRecent/default.htm.*

[2] *Numbers may not add up due to rounding.*

(2) Mitigation Measures

No significant impacts related to solid waste disposal have been identified. Thus, no mitigation measures are required..

(3) Level of Significance After Mitigation

Impacts related to solid waste disposal would be less than significant.

Threshold (b) Would the Project comply with federal, state, and local statutes and regulations related to solid waste?

As discussed in the Initial Study, solid waste management is guided by CIWMB Act of 1989, which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. The CIWMB Act requires that localities conduct a Solid Waste Generation Study (SWGS) and develop an SRRE. The City prepared a Solid Waste

Management Policy Plan that was adopted by the City Council in 1994. Solid waste generated on-site by the Project would be disposed of in accordance with all applicable federal, state, and local regulations and policies related to solid waste, including (but not limited to) AB 939, CiSWMPP, SRRE, Ordinance No. 171687, LACDPW's HHW Collection Program, and the City's Household Hazardous Waste program. The Project would provide clearly marked, durable, source sorted recycling bins throughout the Project Site to facilitate recycling in accordance with Ordinance No. 171687. **Thus, the Project would comply with federal, state, and local statutes and regulations related to solid waste. As such, impacts would be less than significant, and no further analysis of the issue is required**.

e) Cumulative Impacts

(1) Impact Analysis

Generally, a "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects (CEQA Guidelines Section 15355). An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered "cumulatively considerable" when the incremental impacts of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider that effect significant but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. An adequate discussion of a project's significant cumulative impact, in combination with other closely cumulative projects, can be based on either: (1) a list of past, present, and probable future projects producing related impacts; or (2) a summary of projections contained in an adopted local, regional, statewide plan, or related planning document that describes conditions contributing to the cumulative effect. The lead agency may also blend the "list" and "plan" approaches to analyze the severity of impacts and their likelihood of occurrence.

The analysis below is based on a list approach to determine the Project's contributing effect on potential cumulative impacts to solid waste disposal. Implementation of the Project, in combination with the 117 cumulative projects shown on Table III-1 in **Section III, Environmental Setting**, of the Draft EIR, would result in the cumulative generation of solid waste. In addition, the Community Plan Update discussed in **Section III, Environmental Setting**, of the Draft EIR, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future

baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many cumulative projects. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects, which itself is a conservative assumption, would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption.

(a) Construction

As with the Project, the each of the cumulative projects would be required to comply with the Citywide C&D Waste Recycling Ordinance, which requires all mixed C&D waste generated within City limits to be taken to a City-certified C&D waste processor for recycling, and with LAMC Section 66.32, which requires 70 percent of solid waste (including C&D debris) generated in the City to be recycled. Additionally, as discussed previously, the County's 2016 Annual Report assessed future landfill disposal needs over a 15-year planning horizon based in part on forecasted waste generation and available landfill capacity. The analyses in the report concluded that the County would be able to meet the disposal needs of all jurisdictions through 2031. The cumulative generation of C&D waste would not require the need for new or expanded landfill capacity. **Therefore, cumulative construction impacts related to solid waste would be less than significant.**

(b) Operation

As shown in Table IV.M.3-5, the cumulative projects, in combination with the Project, would generate approximately 246.43 tons per day of operation solid waste, not taking into account the net reduction that would occur as a result of eliminating existing land uses and the effectiveness of recycling. As shown on Table IV.M.3-1, the combined available landfill capacity of 14,920 tpd would be adequate to accommodate the solid waste generated by cumulative development. As with the Project, the cumulative projects would be required to comply with LASAN's continued recycling efforts, including the Citywide Curbside Recycling Program and the Zero Waste Plan. Additionally, as discussed previously, the County's 2016 Annual Report assessed future landfill disposal needs over a 15-year planning horizon based in part on forecasted waste generation and available landfill capacity. The analyses in the report concluded that the County would be able to meet the disposal needs of all jurisdictions through 2031. Thus, cumulative development would not create the need for new or expanded landfills. **Therefore, cumulative impacts related to solid waste would be less than significant.**

Table IV.M.3-5
Estimated Cumulative Solid Waste Generation

Land Use	Size	Solid Waste Generation Rates[1]	Total (lbs per day)[2]	Total (tpd)[2]
Residential	30,590 du	12.23 lbs/day/du	347,116	187.06
School	553 students	1 lb/day/student	553	0.28
Retail	3,480,467 sf	5 lbs/day/1,000 sf	17,402	8.70
Restaurant	545,710 sf	5 lbs/day/1,000 sf	2,729	1.36
Hotel	3,631 rooms	2 lbs/day/room	7,262	3.63
Office	15,865,460 sf	5 lbs/day/1,000 sf	79,327	39.66
Gym	112,148 sf	5 lbs/day/1,000 sf	224	0.28
Cinema	18,600 sf[3]	5 lbs/day/1,000 sf	93	0.05
Commercial	1,305,587 sf	5 lbs/day/1,000 sf	6,528	3.26
Storage	63,585	5 lbs/day/1,000 sf	318	0.16
Event Space	122,079 sf	5 lbs/day/1,000 sf	610	0.31
Grocery	109,912 sf	5 lbs/day/1,000 sf	550	0.27
Sports Complex	43,000 sf	5 lbs/day/1,000 sf	215	0.11
Museum	70,000 sf	5 lbs/day/1,000 sf	350	0.18
Industrial Park	94,800 sf	5 lbs/day/1,000 sf	474	0.27
Related Projects Total			***463,751***	***245.58***
Project Net Total			***1,751***	***0.85***
Cumulative Total (pre-recycling)			***462,000***	***246.43***
Recycling Reduction			***76%***	***76%***
Cumulative Total (post-recycling)			**110,880**	**59.14**

lbs = pounds *sf = square feet* *tpd = tons per day* *du = dwelling unit*

[1] *CalRecycle Estimated Solid Waste Generation Rates: http://www.calrecycle.ca.gov/wastechar/wastegenrates/*
[2] *Numbers may not add due to rounding.*
[3] *Cumulative projects includes 744 cinema seats. For purposes of calculating estimated solid waste for the cinema use, this assumes 25 square feet per seat.*

(2) Mitigation Measures

No significant cumulative impacts related to solid waste have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to solid waste would be less than significant.

IV. Environmental Impact Analysis

M.4 Utilities and Service Systems – Energy Conservation

1. Introduction

This section of the Draft EIR provides the content and analysis required by Public Resources Code (PRC), Section 21100(b)(3) and described in Appendix F to the Guidelines for the Implementation of the California Environmental Quality Act (CEQA) (14 California Code of Regulations [CCR] §§ 15000 et seq.). This section analyzes the Project's potential impacts on energy resources, focusing on the following three energy resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). This section evaluates the demand for energy resources attributable to the Project during construction and operation; demonstrates whether the current and planned electrical, natural gas, and petroleum-based fuel supplies and distribution systems are adequate to meet the Project's forecasted energy consumption; and makes a determination regarding the Project's use and conservation of energy resources. The section is partially based on written correspondence from the Los Angeles Department of Water and Power (LADWP) and the Southern California Gas Company (SoCalGas), as well as energy calculations for the Project, included in **Appendix K** of the Draft EIR, respectively.

K-2. *Correspondence from Charles Holloway, Manager of Environmental Planning and Assessment, Los Angeles Department of Water and Power, October 3, 2017.*

K-3. *Correspondence from Miguel Benitez, Region Associate Engineer, Southern California Gas Company, September 27, 2017.*

K-4. *Energy calculations conducted by CAJA Environmental Services, May 2018.*

2. ENVIRONMENTAL SETTING

a) Regulatory Setting

(1) Federal

First established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and the United States Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.[1]

(2) State

(a) Building Energy Efficiency Standards

The Building Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) were first adopted in 1976 and have been updated periodically since then as directed by statute. The Building Energy Efficiency Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. PRC Sections 25402 (Subdivisions (a) and (b)) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the California Energy Commission (CEC) to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Building Energy Efficiency Standards include both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices are adopted along with the Building Energy Efficiency Standards that contain data and other information that helps builders comply with the Building Energy Efficiency Standards.

The 2016 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the

[1] *United States Department of Transportation, CAFE standards, www.nhtsa.gov/fuel-economy, accessed on May 7, 2018*

residential Building Energy Efficiency Standards include improvements for attics, walls, water heating, and lighting, as well as alignment with the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) 90.1 2013 national standards. New efficiency requirements for elevators and direct digital controls are included in the nonresidential Building Energy Efficiency Standards. The 2016 Building Energy Efficiency Standards also include changes made throughout all of its sections to improve the clarity, consistency, and readability of the regulatory language. The Building Energy Efficiency Standards are enforced through the local building or individual agency permit and approval processes.[2]

(b) California Green Building Standards Code

Part 11 of the Title 24 California Building Standards Code is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality." As of January 1, 2011, compliance with the CALGreen Code is mandatory for all new buildings constructed in the state. The CALGreen Code was updated in 2016 to include mandatory measures for nonresidential development related to site development; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. These updates came into effect on January 1, 2017. The Project would be required to comply with the lighting power requirements in the California Energy Code, CCR, Title 24, Part 6.

(c) California Renewable Portfolio Standard

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020.[3] The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.

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[2] *CEC, 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, June 2015.*

[3] *CPUC, California Renewables Portfolio Standard (RPS), www.cpuc.ca.gov/RPS_Homepage/, accessed May 7, 2018.*

(d) Senate Bill 350

SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 is the implementation of some of the goals of Executive Order B-30-15, issued in April 2015, which established a new statewide policy goal to reduce greenhouse gas (GHG) emissions 40 percent below their 1990 levels by 2030. The objectives of SB 350 are: (1) to increase the procurement of electricity from renewable sources from 33 percent to 50 percent, and (2) to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.[4]

(e) Assembly Bill 32

Assembly Bill (AB) 32 (Health and Safety Code Sections 38500–38599), also known as the California Global Warming Solutions Act of 2006, commits the State to achieving year 2000 GHG emission levels by 2010 and year 1990 levels by 2020. To achieve these goals, AB 32 tasked the CPUC and the CEC with providing information, analysis, and recommendations to the California Air Resources Board (CARB) regarding ways to reduce GHG emissions in the electricity and natural gas utility sectors.[5]

(f) Assembly Bill 1493/Pavley Regulations

AB 1493 (commonly referred to as CARB's Pavley regulations) was the first legislation to regulate GHG emissions from new passenger vehicles. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks) for model years 2009–2016. The Pavley regulations are expected to reduce GHG emissions from California's passenger vehicles by about 30 percent in 2016, while improving fuel efficiency and reducing motorists' costs.[6]

(g) Low Carbon Fuel Standard

The Low Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S-1-07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products, starting with 0.25 percent in 2011 and culminating in a 10-percent total reduction in 2020. Petroleum importers, refiners and wholesalers can either develop their own low carbon fuel products or buy LCFS credits

[4] *Senate Bill 350 (2015–2016 Reg, Session) Stats 2015, ch. 547.*

[5] *Ibid.*

[6] *Clean Car Standards - Pavley, Assembly Bill 1943, www.energy.ca.gov/low_carbon_fuel_standard/*

from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas, and hydrogen.[7]

(h) CARB's Advanced Clean Cars Regulation

Closely associated with the Pavley regulations, the Advanced Clean Car Standards emissions-control program (ACC program) was approved by CARB in 2012. The program combines the control of smog, soot, and GHG emissions with requirements for greater numbers of zero-emission vehicles for model years 2017-2025. The components of the ACC program include the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (i.e., battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.[8]

(i) Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13, California Code of Regulations, Division 3, Chapter 10, Section 2435) was adopted to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. This section applies to diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by the vehicle.

(j) Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or Senate Bill 375 (SB 375), coordinates land use planning, regional transportation plans, and funding priorities to help California meet the GHG emissions reduction mandates established in AB 32. SB 375 specifically requires the Metropolitan Planning Organization (MPO) to prepare a "sustainable communities strategy" (SCS) as a part of its Regional Transportation Plan (RTP) that will achieve GHG emission reduction targets set by CARB for the years 2020 and 2035 by reducing vehicle miles traveled (VMT) from light-

[7] *Low Carbon Fuel Standard: Fuels and Transportation Division Emerging Fuels and Technologies Office, www.energy.ca.gov/low_carbon_fuel_standard/*

[8] *CARB, California's Advanced Clean Cars Program, www.arb.ca.gov/msprog/acc/acc.htm, last reviewed by CARB January 18, 2017.*

duty vehicles through the development of more compact, complete, and efficient communities.[9]

The Project Site is located within the planning jurisdiction of the Southern California Association of Governments (SCAG). SCAG's first-ever SCS is included in the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (2012–2035 RTP/SCS), which was adopted by SCAG in April 2012. The goals and policies of the SCS that reduce VMT (and result in corresponding decreases in transportation-related fuel consumption) focus on transportation and land use planning that include building infill projects, locating residents closer to where they work and play, and designing communities so there is access to high quality transit service. In 2016, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS).[10] The goals and policies of the 2016-2040 RTP/SCS are the same as those in the 2012–2035 RTP/SCS.

(k) Senate Bill 1389

SB 1389 (Public Resources Code Sections 25300–25323) requires the development of an integrated plan for electricity, natural gas, and transportation fuels. The CEC must adopt and transmit to the Governor and Legislature an Integrated Energy Policy Report every two years. The most recently completed report, the 2016 Integrated Energy Policy Report, addresses a variety of issues, including the environmental performance of the electricity generation system, landscaped-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, update on the Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios and the *California Energy Demand Forecast*.[11]

(l) California Environmental Quality Act

In accordance with the California Environmental Quality Act (CEQA) and Appendix F, Energy Conservation, of the CEQA Guidelines, in order to assure that energy implications are considered in project decisions, EIRs are required to include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the CEQA Guidelines provides a list of energy-related topics that should be analyzed in the EIR. In addition, while not described or required as significance thresholds for determining the significance of impacts related to

[9] *Sustainable Communities, www.arb.ca.gov/cc/sb375/sb375.htm*

[10] *SCAG, 2016 RTP/SCS, dated April 2016.*

[11] *CEC, 2016 Integrated Energy Policy Report, docketed January 18, 2017.*

energy, Appendix F provides the following topics that the lead agency may consider in the discussion of energy use in an EIR, where topics are applicable or relevant to the project:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
- The effects of the project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources;
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

(3) Regional

As discussed in **Section IV.H, Land Use and Planning**, of the Draft EIR, SCAG's 2016-2040 RTP/SCS presents a long-term transportation vision through the year 2040 for the six-county region of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. On April 7, 2016, the SCAG Regional Council adopted the 2016-2040 RTP/SCS, the mission of which is "leadership, vision and progress which promote economic growth, personal well-being, and livable communities for all Southern Californians."[12] The 2016-2040 RTP/SCS includes land use strategies that focus on urban infill growth and walkable, mixed-use communities in existing urbanized and opportunity areas. More mixed-use, walkable, and urban infill development would be expected to accommodate a higher proportion of growth in more energy-efficient housing types like townhomes, apartments, and smaller single-family homes, as well as more compact commercial building types. Furthermore, the 2016-2040 RTP/SCS includes transportation investments and land use strategies that encourage carpooling, increase transit use, active transportation opportunities, and promoting more walkable and mixed-use communities, which would potentially help to reduce VMT.

[12] *SCAG, 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy, dated April 2016.*

The 2016-2040 RTP/SCS also establishes High-Quality Transit Areas (HQTA), which are described as generally walkable transit villages or corridors that are within 0.5 miles of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.[13] Local jurisdictions are encouraged to focus housing and employment growth within HQTAs to reduce VMT. The Project Site is located within a HQTA as designated by the 2016-2040 RTP/SCS.[14]

(4) Local

(a) Green LA: An Action Plan to Lead the Nation in Fighting Global Warming and ClimateLA

Green LA is the City's climate action plan. The plan, released in May 2007, sets forth a goal of reducing the City's GHG emissions to 35 percent below 1990 levels by the year 2030.[15] ClimateLA is the implementation program that provides detailed information about each action item discussed in the Green LA framework. ClimateLA includes focus areas addressing environmental issues including but not limited to energy, water, transportation, and waste.[16] The energy focus area includes action items with measures that aim to increase the use of renewable energy to 35 percent by 2020, reduce the use of coal-fired power plants, and present a comprehensive set of green building policies to guide and support private sector development.[17]

(b) City of Los Angeles Green Building Code

On December 20, 2016, the Los Angeles City Council approved Ordinance No. 184,692, which amended Chapter IX (Green Building Code) of the Los Angeles Municipal Code (LAMC), by amending certain provisions of Article 9 to reflect local administrative changes and incorporating by reference portions of the 2016 CALGreen Code. This is referred to as the Los Angeles Green Building Code (LAGBC). Projects filed on or after January 1, 2017, must comply with the provisions of the LAGBC. Specific mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2) nonresidential and high-rise residential buildings; and (3) additions and alterations to nonresidential and high-rise residential

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[13] *SCAG, 2016–2040 RTP/SCS, p. 8.*

[14] *SCAG, 2016–2040 RTP/SCS; Exhibit 5.1: High Quality Transit Areas in the SCAG Region for 2040 Plan, p. 77.*

[15] *City of Los Angeles, Green LA: An Action Plan to Lead the Nation In Fighting Global Warming, May 2007.*

[16] *City of Los Angeles, Climate LA: Municipal Program Implementing the GreenLA Climate Action Plan, 2008.*

[17] *Ibid.*

buildings. Article 9, Division 5 includes mandatory measures for newly constructed nonresidential and high-rise residential buildings.

(c) City of Los Angeles Solid Waste Programs and Ordinances

The recycling of solid waste materials also contributes to reduced energy consumption. Specifically, when products are manufactured using recycled materials, the amount of energy that would have otherwise been consumed to extract and process virgin source materials is reduced. For example, in 2015, 3.61 million tons of aluminum were produced by recycling in the United States, saving enough energy to provide electricity to 7.5 million homes.[18] The City includes programs and ordinances related to solid waste. They include: (1) the City of Los Angeles Solid Waste Management Policy Plan, which was adopted in 1993 and is a long-range policy plan promoting source reduction for recycling for a minimum of 50 percent of the City's waste by 2000 and 70 percent of the waste by 2020; (2) the RENEW LA Plan, which is a Resource Management Blueprint with the aim to achieve a zero waste goal through reducing, reusing, recycling, or converting the resources now going to disposal so as to achieve an overall diversion level of 90 percent or more by 2025; (3) the Waste Hauler Permit Program (Ordinance 181,519), which requires all private waste haulers collecting solid waste, including construction and demolition waste, to obtain AB 939 Compliance Permits and to transport construction and demolition waste to City certified construction and demolition processing facilities; and (4) Zero Waste LA (Ordinance No. 182,986), which, among other requirements, sets maximum annual disposal levels and specific diversion requirements for franchised waste haulers in the City to promote solid waste diversion from landfills in an effort to meet the City's zero waste goals. These solid waste reduction programs and ordinances help to reduce the number of trips to haul solid waste, therefore reducing the amount of petroleum-based fuel, and also help to reduce the energy used to process solid waste.

(d) 2016 Final Power Integrated Resource Plan19

LADWP released the 2016 Final Power Integrated Resource Plan (2016 IRP) in December 2016, which provides a 20-year framework to ensure LADWP can meet the future energy needs of its ratepayers by forecasting demand for energy and determining how that demand will be met. The 2016 IRP is an update of the 2015 IRP, and reflects evolving environmental, regulatory, and economic developments. The 2015 IRP included a newly created and redesigned energy efficiency (EE) program to achieve at

[18] *American Geosciences Institute, How Does Recycling Save Energy?, www.americangeosciences.org/critical-issues/faq/how-does-recycling-save-energy, accessed May 7, 2018.*

[19] *2016 Final Power IRP: https://www.ladwp.com/ladwp/faces/wcnav_externalId/a-p-doc?_adf.ctrl-state=12do6zwhm2_33&_afrLoop=86387266209556, accessed May 7, 2018.*

least 10 percent less customer usage of electricity by 2020; development of a new Power System Reliability Program (PSRP) to incorporate not only distribution, but also generation, transmission, and substations with a new prioritization model to improve system reliability; and plans for an agreement between Intermountain Power Agency and the Intermountain Power Project (IPP) participants to replace IPP coal-fired generation with new highly efficient gas-fired generators by no later than July 1, 2025, two years earlier than recommended in the 2012 IRP.

The 2016 IRP incorporates updates to reflect the latest load forecast, fuel price and projected renewable price forecasts, and other modeling assumptions. Major renewable projects approved or implemented include the approval of 460 mw of large scale solar, approval of the 250 mw Beacon Solar Project, implementation of Pine Tree and Adelanto Solar, and implementation of two geothermal projects. An innovative Solar Feed-in-Tariff (FiT) Program was implemented by the Department of Energy, which consists of a FiT 100 – Set Pricing Program and a FiT 50 – Competitive Pricing Program, which bundles Beacon Solar and Local Solar. The Fit 50 - Competitive Pricing Program is an innovative program that combines both a FiT local solar agreement committing to a large block of approximately 10mw, together with a commitment to a large utility scale project of approximately 50 mw to be built by the same vendor at LADWP's Beacon Solar site.[20] The 2016 IRP considers a 20-year planning horizon to guide LADWP as it executes major new and replacement projects and programs. The overriding purpose is to provide a framework to assure the future energy needs of LADWP customers are met in a manner that balances the following key objectives: superior reliability and supply of electric service; competitive electric rates consistent with sound business principles; and responsible environmental stewardship exceeding all regulatory obligations.[21]

b) Existing Conditions

(1) Electricity

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands.

[21] *Ibid.*

Energy capacity, or electrical power, is generally measured in watts (W), while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100-W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is one million W, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is one billion Wh.

LADWP provides electrical service throughout the City and many areas of the Owens Valley, serving approximately 4.0 million people within a service area of approximately 465 square miles, excluding the Owens Valley. Electrical service provided by the LADWP is divided into two planning districts: Valley and Metropolitan. The Valley Planning District includes LADWP's service area north of Mulholland Drive, and the Metropolitan Planning District includes LADWP's service area south of Mulholland Drive. The Project Site is located within LADWP's Metropolitan Planning District. LADWP generates power from a variety of energy sources, including hydropower, coal, gas, nuclear sources, and renewable resources, such as wind, solar, and geothermal sources. According to LADWP's 2016 IRP, LADWP has a net dependable generation capacity greater than 7,531 MW.[22] In 2017, LADWP's power system experienced an instantaneous peak demand of 6,432 MW.[23] Approximately 29 percent of LADWP's 2016 electricity purchases were from renewable sources, which is similar to the 25 percent statewide percentage of electricity purchases from renewable sources.[24]

LADWP supplies electrical power to the Project Site from electrical service lines located in the Project Site vicinity. Electricity is provided to the Project Site through a network of utility poles that are operated and maintained by LADWP. Overhead electrical lines run north-south on Seaton Street and Colyton Street adjacent to the western and eastern sides of the Project Site, respectively.

As discussed in detail in **Section II, Project Description**, of the Draft EIR, the Project Site is currently developed with a 91,200-square-foot building, containing approximately 45,600 square feet of light industrial/arts production uses and 10 live/work units. As shown in Table IV.M.4-1, existing uses on the Project Site consume approximately 679,896 kWh of electricity per year.

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22 *LADWP, 2016 Final Power Integrated Resource Plan.*

23 *LADWP, 2017 Retail Electric Sales and Demand Forecast, p. 6.*

24 *CEC, Utility Annual Power Content Labels for 2016,* www.energy.ca.gov/pcl/labels/*, accessed on May 7, 2018.*

Table IV.M.4-1
Estimated Existing Electricity Consumption on the Project Site

Land Use	Size	Total (kWh/yr)
Light Industrial	45,600 sf	635,990
Live/Work	10 units	43,879
	Total	**679,869**

sf =square feet *kWh = kilowatt-hour* *yr = year*

[1] *Calculated via CalEEMod. See **Appendix C** of the Draft EIR.*

Note: LADWP does not provide or comment on generation rates to provide an estimate of demand.

(2) Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the state, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network, and thus, resource availability is typically not an issue. Almost two-thirds of California households use natural gas for home heating, and about half of California's utility-scale net electricity generation is fueled by natural gas.[25]

Natural gas is provided to the Project Site by SoCalGas. SoCalGas is the nation's largest natural gas distribution utility and is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.6 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout Central and Southern California, from the City of Visalia to the Mexican border.[26]

SoCalGas receives gas supplies from several sedimentary basins in the western United States and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada, as well as local California supplies. Traditional Southwestern U.S. sources of natural gas will continue to supply most of SoCalGas's natural gas demand. Rocky Mountain supply supplements traditional Southwestern U.S. gas sources for Southern California, and the use of Canadian sources provides only a small share of SoCalGas supplies due to the high cost of transport. Gas supply available to SoCalGas from California sources

[25] *U.S. Energy Information Administration, California State Energy Profile, www.eia.gov/state/print.php?sid=CA, accessed July 6, 2018.*

[26] *Southern California Gas Company, Company Profile: About SoCalGas, https://www.socalgas.com/about-us/company-profile, accessed July 6, 2018.*

averaged 122 million cubic feet (cf) per day in 2016 (the most recent year for which data are available).[27]

SoCalGas supplies natural gas to the Project Site from natural gas service lines located in the Project Site vicinity. Natural gas is provided to the Project Site through a network of underground pipelines that are operated and maintained by SoCalGas. Two-inch distribution main gas lines are located adjacent to the Project Site in 5th Street and Colyton Street.

As discussed in detail in **Section II, Project Description**, of the Draft EIR, the Project Site is currently developed with a 91,200-square-foot building, containing approximately 45,600 square feet of light industrial/arts production uses and 10 live/work units. As shown in Table IV.M.4-2, existing uses at the Project Site consume approximately 385,524 cf of natural gas per year.

Table IV.M.4-2
Existing Natural Gas Consumption on the Project Site

Land Use	Size	Total (cf/yr)[1]
Light Industrial	45,600 sf	206,804
Live/Work	10 units	178,720
	Total	**385,524**

sf =square feet cf = cubic feet yr = year

[1] *Calculated via CalEEMod. See **Appendix C** of the Draft EIR. CalEEMod reports natural gas consumption in 1,000 British thermal units (kBTU). SoCalGas reports natural gas consumption in cubic feet (cf). For comparison purposes, the Project's natural gas consumption from the CalEEMod results has been converted into cf. One kBTU equals approximately 0.98 cf.*

Note: SoCalGas does not provide or comment on generation rates to provide an estimate of demand.

(3) Transportation Energy

In 2017, California consumed 15.6 billion gallons of gasoline (includes aviation fuel) and 3.01 billion gallons of diesel fuel.[28] Despite sales of low-carbon biofuels and electric vehicles steadily increasing and hydrogen fuel cell vehicles recently becoming commercially available, petroleum-based gasoline and diesel fuels still currently account for 91 percent of California's ground transportation fuel sources.[29] However, the state is

[27] *California Gas and Electric Utilities, 2016 California Gas Report, p. 15.*

[28] *CEC, Revised Transportation Energy Demand Forecast, 2018-2030, February 2018.*

[29] *CEC, 2018-2019 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, May 2018.*

now working on developing flexible strategies to reduce petroleum use. Over the last decade, California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce VMT. Accordingly, gasoline consumption in California has declined. Though California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.6 billion gallons in 2017 to between 12.1 and 12.6 billion gallons in 2030, a 19 percent to 22 percent reduction. This decline comes in response to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles.[30] According to CARB's EMFAC Web Database, Los Angeles County on-road transportation sources consumed 4.19 billion gallons of gasoline and 0.56 billion gallons of diesel fuel in 2017.[31]

The existing on-site land uses currently generate a demand for transportation-related fuel use as a result of vehicle trips to and from the Project Site. As shown in Table IV.M.4-3, the estimate of annual VMT associated with the existing Project Site uses is 1,691,140 per year.[32] Based on gasoline and diesel fuel consumption and VMT data provided by CARB for Los Angeles County in 2017, the average miles per gallon (mpg) in the County was 22.5 for gasoline and 8.6 for diesel.[33] Based on CARB's 2017 County VMT data, the approximate vehicle fuel split was 95 percent gasoline and 5 percent diesel. Thus, the VMT associated with existing uses currently on-site translates to approximately 71,404 gallons of gasoline and approximately 9,832 gallons of diesel per year.[34]

Table IV.M.4-3
Existing Vehicle Miles Traveled and Associated Fuel Consumption

Land Use	VMT[1]
Light Industrial	1,493,287
Live/Work	197,853
Total	**1,691,140**

[1] *Calculated via CalEEMod. See **Appendix C** of the Draft EIR.*

[30] *CEC, Revised Transportation Energy Demand Forecast, 2018-2030, February 2018.*

[31] *CARB, EMFAC2017 Web Database, www.arb.ca.gov/emfac/2017/, accessed on July 24, 2018.*

[32] *Refer to the CalEEMod calculations in **Appendix C** of the Draft EIR that include existing VMT.*

[33] *CARB, EMFAC2017 Web Database, https://www.arb.ca.gov/emfac/2017/, accessed on July 24, 2018. MPG calculations are provided in **Appendix K** of the Draft EIR.*

[34] *See **Appendix K** of the Draft EIR for detailed calculations.*

3. Project Impacts

a) Methodology

(1) Construction

Electricity usage associated with the supply and conveyance of water used for dust control during construction was calculated using CalEEMod. Electricity used to power lighting, electronic equipment, and other construction activities necessitating electrical power was assumed to be minimal. In terms of natural gas, construction activities typically do not involve the consumption of natural gas. Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files included in **Appendix C** of the Draft EIR. The total horsepower was then multiplied by fuel usage estimates per horsepower-hour included in Table A9-3-E of the South Coast Air Quality Management District's (SCAQMD) *CEQA Air Quality Handbook*. Fuel consumption from construction worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the CalEEMod construction output files. Total VMT was then calculated for each type of construction-related trip and divided by the corresponding county-specific miles per gallon factor using CARB's EMFAC 2014 model. EMFAC provides the total annual VMT and fuel consumed for each vehicle type. Consistent with CalEEMod, construction worker trips were assumed to include 50 percent light duty gasoline automobiles and 50 percent light duty gasoline trucks. Construction vendor and delivery/haul trucks were assumed to be heavy-duty diesel trucks. See **Appendix K** of the Draft EIR for detailed fuel calculations.

(2) Operation

Annual consumption of electricity (including electricity usage associated with the supply and conveyance of water) and natural gas was calculated using demand factors provided in CalEEMod as part of the GHG analysis included in **Section IV.F, Greenhouse Gas Emissions,** of the Draft EIR. CalEEMod provides default factors based on the 2013 Title 24 standards. 2016 Title 24 standards, which went into effect on January 1, 2017, are 28 percent more efficient than the 2013 Title 24 standards for residential construction and 5 percent more efficient for nonresidential construction.

Energy impacts associated with transportation during operation were also assessed. Daily trip generation used in this analysis was based on the *Arts District Center Project Draft Traffic Impact Analysis* prepared by the Fehr & Peers (January 2018) for the Project that is included as **Appendix I-1** of the Draft EIR. As discussed therein, the trip generation for the Project was determined based on the Institute of Transportation Engineers trip generation factors for the applicable land uses. The daily Project-related

trips were then input into CalEEMod, which calculated the annual VMT. The resulting annual VMT was used as part of the GHG emissions analysis included in **Section IV.F, Greenhouse Gas Emissions,** of the Draft EIR. Based on this annual VMT, gasoline and diesel consumption rates were calculated using the county-specific miles per gallon calculated using EMFAC 2014 The vehicle fleet mix for vehicles anticipated to visit the Project Site was calculated consistent with the CalEEMod default for Los Angeles County (see **Appendix C** of the Draft EIR). Supporting fuel calculations are provided in **Appendix K** of the Draft EIR. These calculations were used to determine if the Project causes the wasteful, inefficient, and/or unnecessary consumption of energy as required by Appendix F guidelines.

The Project's estimated energy demands were also assessed relative to LADWP's and SoCalGas existing and planned energy supplies in 2021 (i.e., the Project buildout year) to determine if these two energy utility companies would be able to meet the Project's energy demands.

b) Thresholds of Significance

Appendix F of the CEQA Guidelines was prepared in response to the requirement in Public Resources Code Section 21100(b)(3), which states that an EIR shall include a detailed statement setting forth "[m]itigation measures proposed to minimize significant effects of the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy."

In addition, with regard to potential impacts to energy, the L.A. CEQA Thresholds Guide (Thresholds Guide) states that a determination of significance shall be made on a case-by case basis, considering the following factors:

- The extent to which the project would require new (off-site) energy supply facilities and distribution infrastructure; or capacity-enhancing alterations to existing facilities;
- Whether and when the needed infrastructure was anticipated by adopted plans; and
- The degree to which the project design and/or operations incorporate energy-conservation measures, particularly those that go beyond City requirements.

Significance Threshold No. 1—With regard to energy use and consumption, the Project would result in significant impacts if it would cause wasteful, inefficient, or unnecessary consumption of energy.

In accordance with Appendix F and the Thresholds Guide, the following criteria are considered in determining whether this threshold of significance is met:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity;

3. The effects of the project on peak and base period demands for electricity and other forms of energy;

4. The degree to which the project complies with existing energy standards;

5. The effects of the project on energy resources;

6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

7. The degree to which the project design and/or operations incorporate energy- conservation measures, particularly those that go beyond City requirements.

8. Whether the Project conflicts with adopted energy conservation plans.

Significance Threshold No. 2—With regard to energy infrastructure, the Project would result in significant impacts if it would result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

c) Project Design Features

The Project would include Project Design Features (PDFs) designed to improve energy efficiency as set forth in **Section IV.F, Greenhouse Gas Emissions**, of the Draft EIR.

d) Analysis of Project Impacts

Significance Threshold No. 1 Would the Project result in wasteful, inefficient, or unnecessary use of energy based on the stated criteria?

(1) Impact Analysis

The analysis below considers the eight criteria identified in the Thresholds of Significance subsection above to determine whether this significance threshold would be exceeded.

(1) The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.

As discussed above, the Project would consume energy during construction and operational activities. Sources of energy for these activities would include electricity usage, natural gas consumption, and transportation fuels, such as diesel and gasoline. The analysis below includes the Project's energy requirements and energy use efficiencies by fuel type for each stage of the Project (construction, operations, maintenance and removal activities).

For purposes of this analysis, Project maintenance would include activities, such as repair of the building, landscaping, and architectural coatings. Energy usage related to Project maintenance activities are assumed to be included as part of Project operations. Project removal activities would include demolition or abandonment of the Project Site. However, it is not known when the Project would be removed. Therefore, analysis of energy usage related to Project removal activities would be speculative. For this reason, energy usage related to Project removal was not analyzed.

(a) Construction

During Project construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control and, on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. As discussed below, construction activities, including the construction of a new building, typically do not involve the consumption of natural gas. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project Site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities).

As shown in Table IV.M.4-4, Project construction would consume approximately a total of 2,036 kWh of electricity, 46,954 gallons of gasoline, and 86,236 gallons of diesel. Project construction is expected to be completed by 2021.

Table IV.M.4-4
Summary of Energy Use During Project Construction[1]

Fuel Type	Quantity
Electricity	
Water Consumption	2,036 kWh
Lighting, electronic equipment, and other construction activities necessitating electrical power	N/A[2]
Total Electricity	**2,036 kWh**
Gasoline	
On-Road Construction Equipment	46,954 gallons
Off-Road Construction Equipment	0 gallons[3]
Total Gasoline	***46,954 gallons***
Diesel	
On-Road Construction Equipment	68,454 gallons
Off-Road Construction Equipment	17,782 gallons
Total Diesel	***86,236 gallons***
Total Petroleum-Based Fuel	**133,190 gallons**

kWh = kilowatt-hours

1 *Detailed calculations are included in **Appendix K** of the Draft EIR.*
2 *Electricity usage associated with this line item is not easily quantifiable. Such electricity demand would be temporary, limited, and would cease at the completion of construction.*
3 *Off-road construction equipment uses diesel fuel.*

(i) Electricity

During construction of the Project, electricity would be consumed to supply and convey water for dust control and, on a limited basis, may be used to power lighting, electronic equipment, and other construction activities necessitating electrical power. Electricity would be supplied to the Project Site by LADWP and would be obtained from the existing electrical lines that connect to the Project Site. This would be consistent with suggested measures in the Threshold Guide to use electricity from power poles rather than temporary gasoline- or diesel-powered generators.

As shown in Table IV.M.4-4, a total of approximately 2,036 kWh of electricity is anticipated to be consumed during Project construction. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not

in use, electric equipment would be powered off so as to avoid unnecessary energy consumption.

The estimated construction electricity usage represents approximately 0.04 percent of the estimated net annual operational demand, which, as discussed below, would be within the supply and infrastructure service capabilities of LADWP. Moreover, construction electricity usage would be offset by the removal of the existing uses on-site.

(ii) Natural Gas

Construction activities, including the construction of a new building, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support Project construction activities; thus, there would be no demand generated by Project construction.

(iii) Transportation Energy

The petroleum-based fuel use summary provided above in Table IV.M.4-4 represents the amount of transportation energy that could potentially be consumed during Project construction based on a conservative set of assumptions outlined in **Appendix K** of the Draft EIR. As shown, on-road construction vehicles/equipment would consume an estimated 46,954 gallons of gasoline, and both on- and off-road construction vehicles/equipment would consume approximately 86,236 gallons of diesel fuel throughout the Project's construction. For comparison purposes, the fuel usage during Project construction would represent approximately 0.001 percent of the 2017 annual on-road gasoline-related energy consumption and 0.01 percent of the 2017 annual diesel fuel-related energy consumption in Los Angeles County, as shown in **Appendix K** of the Draft EIR.

(b) Operation

During operation of the Project, energy would be consumed for multiple purposes, including, but not limited to, heating/ventilating/air conditioning (HVAC); refrigeration; lighting; and the use of electronics, equipment, and machinery. Energy would also be consumed during Project operations related to water usage, solid waste disposal, and vehicle trips. As shown in Table IV.M.4-5, the Project's net demand for electricity would be approximately 4,538,308 kWh per year. As shown in Table IV.M.4-6, the Project's net demand for natural gas would be 12,401,397 cubic feet per year. As shown in Table IV.M.4-7, the Project's net demand for gasoline and diesel would be 359,969 and 49,567gallons per year, respectively.

Table IV.M.4-5
Estimated Project Electricity Demand

Land Use	Size	Total (kWh/yr)[1]
Live/Work Units	129 du	543,418
Hotel	97,850 sf	1,274,870
Art Galleries	10,341 sf	116,957
Retail	26,979 sf	373,939
Restaurant	31,719 sf	1,420,695
Artist CoLab	3,430 sf	35,158
Enclosed Parking	539,000 sf	1,453,140
	Project Total	**5,218,177**
	Less Existing	***679,869***
	Net Total	**4,538,308**

kWh = kilowatt-hours yr = year du = dwelling unit sf =square feet

[1] *Calculated via CalEEMod. See **Appendix C** of the Draft EIR.*

Note: LADWP does not provide or comment on generation rates to provide an estimate of demand.

Table IV.M.4-6
Estimated Project Natural Gas Demand

Land Use	Size	Total (cf/yr)[1]
Live/Work Units	129 du	1,411,402
Hotel	97,850 sf	3,873,780
Art Galleries	10,341 sf	184,111
Retail	26,979 sf	43,642
Restaurant	31,719 sf	7,182,481
Artist CoLab	3,430 sf	91,534
Enclosed Parking	539,000 sf	0
	Project Total	**12,786,950**
	Less Existing	***385,553***
	Net Total	**12,401,397**

cf = cubic feet yr = year du = dwelling unit sf =square feet

[1] *Calculated via CalEEMod. See **Appendix C** of the Draft EIR. CalEEMod reports natural gas consumption in 1,000 British thermal units (kBTU). SoCalGas reports natural gas consumption in cubic feet (cf). For comparison purposes, the Project's natural gas consumption from the CalEEMod results has been converted into cf. One kBTU equals approximately 0.98 cf.*

Note: LADWP does not provide or comment on generation rates to provide an estimate of demand.

Table IV.M.4-7
Estimated Project Transportation Petroleum-Based Fuel

Fuel Type	Gallons Per Year
Gasoline	
Project	431,373
Less Existing	*71,404*
Net Total Gasoline	***359,969***
Diesel	
Project	59,400
Less Existing	*9,832*
Net Total Diesel	***49,567***
Total Fuel	**409,536**
*Detailed calculations are included in **Appendix K** of the Draft EIR.*	

(i) Electricity

As shown in Table IV.M.4-5, with compliance with 2016 Title 24 standards and the applicable 2016 CALGreen Code and the LAGBC requirements, buildout of the Project would result in a projected net increase in the on-site demand for electricity totaling approximately 4,538,308 kWh per year. In addition, LADWP is required to procure at least 33 percent of their energy portfolio from renewable sources by 2020. The current sources procured by LADWP include wind, solar, and geothermal sources. These sources account for 29 percent of LADWP's overall energy mix in 2016, the most recent year for which data are available.[35] This represents the available off-site renewable sources of energy that would meet the Project's energy demand. Furthermore, the Project would comply with Section 110.10 of Title 24, which includes mandatory requirements for solar-ready buildings, and, as such, would not preclude the potential use of alternate energy sources.

Based on LADWP's 2016 IRP, LADWP forecasts that its total energy sales in the 2021–2022 fiscal year (the Project's buildout year) will be 26,835 GWh of electricity.[36] As such, the Project-related net increase in annual electricity consumption of 4,538,308 kWh per year would represent approximately 0.02 percent of LADWP's projected sales in 2021. In addition, as described in **Section II, Project Description,** of the Draft EIR and in **Section IV.F, Greenhouse Gas Emissions,** of the Draft EIR, the Project would incorporate a variety of energy conservation measures to reduce energy usage.

(ii) Natural Gas

As shown in Table IV.M.4-6, with compliance with 2016 Title 24 standards and the applicable 2016 CALGreen Code and the LAGBC requirements, buildout of the Project is projected to generate a net increase in the on-site demand for natural gas totaling approximately 12,401,397 cf per year. As discussed above, in addition to complying with applicable regulatory requirements regarding energy conservation, the Project would incorporate a variety of energy conservation measures to reduce energy usage.

As stated above, the Project's estimated net increase in demand for natural gas is 12,401,397 cf per year or approximately 33,976 cf per day.[37] Based on the 2016 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SoCalGas's planning area will be approximately 2,526 million cf per day in 2021 (the Project's buildout year). The Project would account for approximately 0.001 percent of the forecasted 2021 consumption in SoCalGas's planning area. In

[35] *CEC, Utility Annual Power Content Labels for 2016, www.energy.ca.gov/pcl/labels/.*

[36] *LADWP, 2016 Power Integrated Resource Plan, January 2017, Appendix A.*

[37] *California Gas and Electric Utilities, 2016 California Gas Report, p. 97.*

addition, the Project would incorporate a variety of energy conservation measures as required under the CALGreen Code and the LAGBC to reduce energy usage.

(iii) Transportation Energy

During operation, Project-related traffic would result in the consumption of petroleum-based fuels related to vehicular travel to and from the Project Site. As noted previously, the Project Site is located in a HQTA designated by SCAG, which indicates that the Project Site is an appropriate site for increased density and employment opportunities from a "smart growth" regional planning perspective.[38] As discussed in **Section IV.L, Transportation/Traffic,** of the Draft EIR, the Project Site is located approximately 0.5 miles from the Metro Gold Line Little Tokyo/Arts District Station and 0.25 miles from the Metro Rapid 720 bus stop at Alameda Street and 6th Street. In addition, Metro and DASH bus lines serve the Project Site, including 25 Metro bus lines and 2 DASH bus lines that would continue to provide service within the Project vicinity and would provide Project employees, residents, and guests with various public transportation opportunities. The Project would provide bicycle storage areas for Project residents and guests. The Project would also incorporate characteristics that would reduce trips and VMT as compared to standard ITE trip generation rates. The Project characteristics listed below are consistent with the CAPCOA guidance document, *Quantifying Greenhouse Gas Mitigation Measures*, which provides emission reduction values for recommended mitigation measures, and would reduce VMT and vehicle trips to the Project Site.[39] These Project characteristics would result in a corresponding reduction in VMT and vehicle trips and associated transportation energy consumption and, as such, reduce the potential for inefficient, wasteful, and unnecessary use of energy. Measures applicable to the Project include the following, with a brief description of the Project's relevance to the measure:

- **Increase Density (CAPCOA Measure LUT-1):** Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduces emissions associated with transportation as it reduces the distance people travel for work or

[38] *The Project Site is also located in a Transit Priority Area as defined by Public Resources Code Section 20199. Public Resources Code Section 21099 defines a "transit priority area" as an area within 0.5 mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." Public Resources Code Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Also refer to the City's ZIMAS system confirming the location of the Project Site within a Transit Priority Area.*

[39] *California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, 2010.*

services and provides a foundation for the implementation of other strategies, such as enhanced transit services. The Project would increase the site density from 10 live/work units and 45,600 square feet of industrial uses (employing approximately 50 people [approximately 50 jobs per acre]) to 129 work/live units and the net addition of approximately 211 employees (approximately 211 jobs per acre), in an area rich with transit services.

- **Increase Diversity of Urban and Suburban Developments (Mixed-Uses) (CAPCOA Measure LUT-3):** The Project would introduce new uses on the Project Site, including additional live/work. The Project would co-locate complementary commercial and residential land uses in proximity to other existing off-site commercial and residential uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and associated VMT by encouraging walking and non-automotive forms of transportation (i.e. walking and biking), which would result in corresponding reductions in transportation-related emissions.

- **Increase Destination Accessibility (CAPCOA Measure LUT-4):** The Project would be located in an area that offers access to nearby retail and entertainment destinations in the Artists-In-Residence District and Little Tokyo. In addition, the Project Site is located in the greater Downtown Los Angeles area, a primary job center, also easily accessible by public transportation. The access to multiple destinations in proximity to the Project Site would reduce vehicle trips and associated VMT compared to the statewide average and would encourage walking and non-automotive forms of transportation and would result in corresponding reductions in transportation-related emissions.

- **Increase Transit Accessibility (CAPCOA Measure LUT-5):** The Project would be located approximately 0.5 miles from the Metro Gold Line Little Tokyo/Arts District Station and 0.25 miles from the Metro Rapid 720 bus stop at Alameda Street and 6th Street and along 25 Metro transit and 2 DASH routes. The Project would also provide adequate bicycle parking spaces for residential and commercial uses to encourage utilization of alternative modes of transportation.

- **Improve Design of Development (CAPCOA Measure LUT-9)**: The Project would include improved design elements, including developing ground floor retail, restaurant, open space, and improved streetscape, which would enhance walkability in the Project Site vicinity. The Project would also locate a development in an area with a high level of street accessibility and connectivity.

- **Traffic Calming Measures (CAPCOA Measure SDT-2):** Providing traffic calming measures encourages people to walk or bike instead of using a vehicle.

This mode shift results in a decrease in VMT. Streets within a half mile of the Project Site are equipped with sidewalks, and several of the intersections include marked crosswalks and/or count-down signal timers that calm traffic.

As such, the Project's siting would minimize transportation fuel consumption through the reduction of VMT, as described above and discussed further in **Section IV.F, Greenhouse Gas Emissions,** of the Draft EIR.

As summarized in Table IV.M.4-7, when accounting for the measures that would be implemented to reduce VMT, the Project's estimated petroleum-based fuel usage would be approximately 359,969 gallons of gasoline and 49,567 gallons of diesel per year, or a total of 409,536 gallons of petroleum-based fuels annually.

(c) Summary of Energy Requirements and Energy Use Efficiencies

Appendix F recommends quantification of a project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle, including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed. The Project's energy requirements were calculated based on the methodology contained in CalEEMod for electricity and natural gas usage. Project VMT data were calculated based on CAPCOA guidelines. The calculations also took into account energy efficiency measures, such as Title 24, the CALGreen Code, the LAGBC, and vehicle fuel economy standards. Tables IV.M.4-4 through IV.M.4-7 provide a summary of Project construction and operational energy usage. During Project construction activities, a total of 2,036 kWh of electricity would be consumed along with approximately 133,190 gallons of transportation fuel (gasoline and diesel). During Project operations, a total of 4,538,308 kWh of electricity, 12,401,397 cf of natural gas, and 409,536 gallons of transportation fuel would be consumed on an annual basis.

(2) The effects of the project on local and regional energy supplies and on requirements for additional capacity.

(a) Construction

As discussed above, electricity would be intermittently consumed during the conveyance of the water used to control fugitive dust, as well as to provide electricity for temporary lighting and other general construction activities. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. The estimated construction electricity usage represents approximately

0.04 percent of the estimated net annual operational demand, which as discussed below, would be within the supply and infrastructure service capabilities of LADWP. Furthermore, the electricity demand during construction would be somewhat offset by the removal of the existing on-site uses, which currently generate a demand for electricity. Construction activities typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support Project construction activities. Thus, there would be no demand generated by construction, resulting in a net decrease when compared to existing operations. Transportation fuel usage during Project construction activities would represent approximately 0.001 percent of gasoline usage and 0.01 percent of diesel usage within Los Angeles County, respectively.[40] As energy consumption during Project construction activities would be relatively negligible, the Project would not likely affect regional energy consumption in years during the construction period.

(b) Operation

As stated previously, based on LADWP's 2016 IRP, LADWP forecasts that its total energy sales in the 2021–2022 fiscal year (the Project's buildout year) will be 26,835 GWh of electricity. The Project-related net increase in annual electricity consumption of 4,538,308 kWh per year would represent approximately 0.02 percent of LADWP's projected sales in 2021. Therefore, it is anticipated that LADWP's existing and planned electricity capacity and electricity supplies would be sufficient to support the Project's electricity demand.

As stated above, the Project's estimated net increase in demand for natural gas is 12,401,397 cf per year or approximately 33,976 cf per day.[41] Based on the 2016 California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SoCalGas's planning area will be approximately 2,526 million cf per day in 2021 (the Project's buildout year). The Project would account for approximately 0.001 percent of the forecasted consumption for 2021 in SoCalGas's planning area. At buildout, the Project would consume a total of 380,283 gallons of gasoline and 134,369 gallons of diesel per year, or a total of 514,652 gallons of petroleum-based fuels per year. For comparison purposes, the transportation-related fuel usage for the Project would represent approximately 0.001 and 0.01 percent of the 2017 annual on-road gasoline- and diesel-related energy consumption (respectively) in Los Angeles County, as shown in **Appendix K** of the Draft EIR.

In sum, energy consumption during Project operations would be relatively negligible, and energy requirements would be within LADWP's and SoCalGas's service provision.

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[40] *Refer to County fuel calculations in **Appendix K** of the Draft EIR.*

[41] *California Gas and Electric Utilities, 2016 California Gas Report, p. 97.*

(3) The effects of the project on peak and base period demands for electricity and other forms of energy.

As discussed above, electricity demand during construction and operation of the Project would have a negligible effect on the overall capacity of LADWP's power grid and base load conditions. With regard to peak load conditions, LADWP's power system experienced an all-time high peak of 6,432 MW on August 31, 2017.[42] LADWP also estimates a peak load based on two years of data known as base case peak demand to account for typical peak conditions. Based on LADWP estimates for 2017, the base case peak demand for the power grid is 5,854 MW.[43] Under peak conditions, the Project would consume 4,538,308 kWh on an annual basis, equivalent to 518 kW. In comparison to the LADWP power grid base peak load of 5,854 MW in 2017, the Project would represent approximately 0.009 percent of the LADWP base peak load conditions. In addition, LADWP's annual growth projection in peak demand of the electrical power grid of 0.4 percent would be sufficient to account for future electrical demand by the Project.[44] Therefore, Project electricity consumption during operational activities would have a negligible effect on peak load conditions of the power grid.

(4) The degree to which the project complies with existing energy standards.

Although Title 24 requirements typically apply to energy usage for buildings, construction equipment would also comply with Title 24 requirements where applicable. Electricity and Natural Gas usage during Project operations presented in Tables IV.M.4-5 and IV.M.4-6 (respectively) would comply with 2016 Title 24 standards and the applicable 2016 CALGreen Code and the LAGBC requirements. Therefore, Project construction and operational activities would comply with existing energy standards with regards to electricity and natural gas usage.

With regard to transportation fuels, trucks, and equipment used during proposed construction activities, the Project would comply with CARB's anti-idling regulations, as well as the In-Use Off-Road Diesel-Fueled Fleets regulation. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in efficient use of construction-related energy. During Project operations, vehicles traveling to and from the Project Site are assumed to comply with CAFE fuel economy standards. Project-related vehicle trips would also comply with Pavley and Low Carbon Fuel Standards, which are designed to reduce vehicle GHG emissions but would also result in fuel savings in addition to CAFE

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[42] *LADWP, 2017 Retail Electric Sales and Demand Forecast, September 2017, p. 6.*

[43] *Ibid.*

[44] *Ibid.*

standards. Therefore, Project construction and operational activities would comply with existing energy standards with regards to transportation fuel consumption.

(5) Effects of the Project on Energy Resources

As discussed above, LADWP's electricity generation is derived from a mix of non-renewable and renewable sources, such as coal, natural gas, solar, geothermal, wind, and hydropower. LADWP's most recently adopted 2016 IRP identifies adequate resources (natural gas, coal) to support future generation capacity.

Natural gas supplied to the Southern California is mainly sourced from out of state with a small portion originating in California. Sources of natural gas for the Southern California region are obtained from locations throughout the western United States, as well as Canada.[45] According to the U.S. Energy Information Administration (EIA), the United States currently has over 90 years of natural gas reserves based on 2016 consumption.[46] Compliance with energy standards is expected to result in more efficient use of natural gas (lower consumption) in future years. Therefore, Project construction and operation activities would have a negligible effect on natural gas supply.

Transportation fuels (gasoline and diesel) are produced from crude oil, which is imported from various regions around the world. Based on global proved oil reserves in 2017, crude oil production would be sufficient to meet over 50 years of global production at 2017 levels.[47] The Project would also comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also comply with Pavley and Low Carbon Fuel Standards, which are designed to reduce vehicle GHG emissions but would also result in fuel savings in addition to CAFE standards. Therefore, Project construction and operation activities would have a negligible effect on the transportation fuel supply.

As discussed above in the Regulatory Framework, one of the objectives of SB 350 is to increase procurement of California's electricity from renewable sources from 33 percent to 50 percent by 2030. Accordingly, LADWP is required to procure at least 50 percent of their energy portfolio from renewable sources by 2030. The current sources of renewable energy procured by LADWP include wind, solar, and geothermal sources. These sources account for 29 percent of LADWP's overall energy mix in 2016, the most

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[45] *California Gas and Electric Utilities, 2016 California Gas Report, 2016.*

[46] *U.S. Energy Information Administration, Frequently Asked Questions, www.eia.gov/tools/faqs/faq.php?id=58&t=8, accessed May 7, 2018.*

[47] *BP Global, Oil reserves, https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/oil/oil-reserves.html, accessed May 7, 2018.*

recent year for which data are available.[48] This represents the available off-site renewable sources of energy that would meet the Project's energy demand.

With regard to on-site renewable energy sources, as required under the LAGBC, the Project would include the provision of conduit that is appropriate for future photovoltaic and solar thermal collectors. However, due to the Project Site's location, other on-site renewable energy sources would not be feasible to install on-site as there are no local sources of energy from the following sources: biodiesel, biomass hydroelectric and small hydroelectric, digester gas, fuel cells, landfill gas, municipal solid waste, ocean thermal, ocean wave, and tidal current technologies, or multi-fuel facilities using renewable fuels. Furthermore, while methane is a renewable derived biogas, and the Project Site is located in a City-defined Methane Zone, it is not available on the Project Site in commercially viable quantities or form, and its extraction and treatment for energy purposes would result in secondary impacts. Additionally, wind-powered energy is not viable on the Project Site due to the lack of sufficient wind in the Los Angeles basin.

Specifically, based on a map of California's wind resource potential, the Project Site is not identified as an area with wind resource potential.[49]

(6) The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

As discussed previously, the Project's high-density design and proximity to job centers and retail uses would allow for more residents to live closer to work and shopping areas, reducing the associated VMT. The design of the Project, which includes dedicated bicycle parking facilities and an improved streetscape with pedestrian amenities, also would encourage non-automotive forms of transportation, such as walking or biking to destinations. In addition, the Project would be located approximately 0.5 miles from the Metro Gold Line Little Tokyo/Arts District Station and 0.25 miles from the Metro Rapid 720 bus stop at Alameda Street and 6th Street and several bus routes, which would encourage alternative modes of transportation. As shown in Table IV.L-7 in **Section IV.L, Transportation/Traffic,** of the Draft EIR, due to the Project's mixed-use nature, the Project would result in a reduction of approximately 2,695 daily trips, resulting in an associated reduction in VMT, as well as the petroleum-based fuel usage. Therefore, the Project would encourage the use of efficient transportation alternatives.

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[48] CEC, Utility Annual Power Content Labels for 2016, www.energy.ca.gov/pcl/*labels/.*

[49] *CEC, National Renewable Energy Laboratory (NREL) Wind Prospector, https://maps.nrel.gov/wind-prospector/#/?aL=kM6jR-%255Bv%255D%3Dt%26xY_VBM%255Bv%255D%3Dt%26xY_VBM%255Bd%255D%3D1%26qCw3hR%255Bv%255D%3Dt%26qCw3hR%255Bd%255D%3D2&bL=groad&cE=0&lR=0&mC=34.04042715062517%2C-118.23829650878906&zL=11, accessed July 25, 2018.*

(7) The degree to which the project design and/or operations incorporate energy-conservation measures, particularly those that go beyond City requirements.

The LAGBC requires compliance with the CALGreen Code and California's Building Energy Efficiency Standards (Title 24). The Project would be required to comply with the LAGBC. In addition, the Project would include 20 percent of the total code-required parking spaces shall be capable of supporting future electric vehicle charging equipment.

The City has also adopted several plans and regulations to promote the reduction, reuse, recycling, and conversion of solid waste going to disposal systems. These regulations include the City of Los Angeles Solid Waste Management Policy Plan, the RENEW LA Plan, and the Exclusive Franchise System Ordinance (Ordinance No. 182,986). These solid waste reduction programs and ordinances help to reduce the number of trips associated with hauling solid waste, thereby reducing the amount of petroleum-based fuel consumed. Furthermore, recycling efforts indirectly reduce the energy necessary to create new products made of raw material, which is an energy-intensive process. Thus, through compliance with the City's construction-related solid waste recycling programs, the Project would contribute to reduced fuel-related energy consumption.

(8) Whether the Project conflicts with adopted energy conservation plans.

The Project would comply with applicable regulatory requirements for the design of new buildings, including the provisions set forth in the 2016 CALGreen Code and California's Building Energy Efficiency Standards, which have been incorporated into the LAGBC.

With regard to transportation uses, the Project design would reduce the VMT throughout the region and encourage use of alternative modes of transportation. The Project would be consistent with regional planning strategies that address energy conservation. As discussed above and in **Section IV.H, Land Use and Planning**, of the Draft EIR, SCAG's 2016-2040 RTP/SCS focuses on creating livable communities with an emphasis on sustainability and integrated planning and identifies mobility, economy, and sustainability as the three principles most critical to the future of the region. As part of the approach, the 2016-2040 RTP/SCS focuses on reducing fossil fuel use by decreasing VMT, reducing building energy use, and increasing use of renewable sources. The Project would be consistent with the energy efficiency policies emphasized in the 2016-2040 RTP/SCS. Most notably, the Project would be a mixed-use development consisting of live/work units, neighborhood-serving retail and restaurant uses, an art gallery, and an Artist CoLab, located in the Arts District, which is characterized by a high degree of pedestrian activity. The Project would provide greater

proximity to neighborhood services, jobs, and residences and would be well-served by existing public transportation, including Metro and LADOT bus lines and rail lines. This is evidenced by the Project Site's location within a designated HQTA. The introduction of new housing and job opportunities within a HQTA, as proposed by the Project, is consistent with numerous policies in the 2016-2040 RTP/SCS related to locating new housing and jobs near transit. The 2016-2040 RTP/SCS would result in an estimated 8-percent decrease in VMT by 2020, an 18-percent decrease in VMT by 2035, and a 21-percent decrease in VMT by 2040. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an approximately 21-percent decrease in VMT by 2040 (an additional 3-percent reduction in the 5 years between 2035 [18 percent] and 2040 [21 percent]), the 2016-2040 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the state's GHG emission reduction goals. Thus, consistent with the 2016-2040 RTP/SCS, the Project would reduce daily trips by approximately 2,695, approximately 50,450 VMT per day, and associated petroleum-based fuel. As such, based on the above, the Project would be consistent with adopted energy conservation plans.

(9) Conclusion Regarding Significance Threshold No. 1

As demonstrated in the analysis of the eight criteria discussed above, the Project would not cause a significant impact with respect to energy use and consumption and would not result in the wasteful, inefficient, or unnecessary consumption of energy during construction or operation. The Project's energy requirements would not significantly affect local and regional supplies or capacity. The Project's energy usage during peak and base periods would also be consistent with electricity and natural gas future projections for the region. Electricity generation capacity and supplies of natural gas and transportation fuels would also be sufficient to meet the needs of Project-related construction and operations. During operations, the Project would comply with the City's existing energy efficiency requirements under the LAGBC. In summary, the Project's energy demands would not significantly affect available energy supplies and would comply with existing energy efficiency standards. Therefore, Project impacts related to energy use under Significance Threshold No. 1 would be less than significant during construction and operation.

(2) Mitigation Measures

No significant impacts with regard to energy use have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts with regard to energy use would be less than significant.

Significance Threshold No. 2 ***Would the Project result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?***

(1) Impact Analysis

(a) Construction

(i) Electricity

As discussed above, construction activities at the Project Site would require minor quantities of electricity for lighting, power tools, and other support equipment. Heavy construction equipment would be powered with diesel fuel.

During Project construction activities, electricity usage represents 0.04 percent of the estimated net annual Project operational demand, which as described below, LADWP's existing electrical infrastructure currently has enough capacity to provide service for. Moreover, construction electricity usage would replace the existing electricity usage at the Project Site during construction since the existing on-site uses, which currently generate a demand for electricity would be removed. As existing power lines are located in the vicinity of the Project Site, temporary power poles may be installed to provide electricity during Project construction. Existing off-site infrastructure would not have to be expanded or newly developed to provide electrical service to the project during construction or demolition. Therefore, construction of the Project would not result in an increase in demand for electricity that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

With regard to existing electrical distribution lines, the Applicant would be required to coordinate electrical infrastructure removals or relocations with LADWP and comply with site-specific requirements set forth by LADWP, which would ensure that service disruptions and potential impacts associated with grading, construction, and development within LADWP easements are minimized. Project contractors would notify and coordinate with LADWP to identify the locations and depth of all existing electricity

lines and avoid disruption of electricity service to other properties. As such, construction of the Project is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

(ii) Natural Gas

Construction activities typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support Project construction activities. Thus, there would be no demand generated by construction. However, the Project would involve installation of new natural gas connections to serve the Project Site. Since the Project Site is located in an area already served by existing natural gas infrastructure, it is anticipated that the Project would not require extensive off-site infrastructure improvements to serve the Project Site. Construction impacts associated with the installation of natural gas connections would be confined to trenching in order to place the lines below surface. In addition, prior to ground disturbance, Project contractors would notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service to other properties. Therefore, construction of the Project would not result in an increase in demand for natural gas to affect available supply or distribution infrastructure capabilities and would not result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

(b) Operation

(i) Electricity

As shown in Table IV.M-5, the Project's operational electricity usage would be 4,538,308 kWh per year, which is approximately 0.02 percent of LADWP's projected sales in 2021. In addition, during peak conditions, the Project would represent approximately 0.009 percent of the LADWP estimated peak load. LADWP has confirmed that the Project's electricity demand can be served by the facilities in the Project Site area.[50] Therefore, during Project operations, it is anticipated that LADWP's existing and planned electricity capacity and electricity supplies would be sufficient to support the Project's electricity demand.

(ii) Natural Gas

As stated above, the Project's estimated net increase in demand for natural gas is 12,401,397 cf per year or approximately 33,976 cf per day.[51] Based on the 2016

[50] *Correspondence from Charles Holloway, Manager of Environmental Planning and Assessment, Los Angeles Department of Water and Power, October 3, 2017. Refer to* ***Appendix K-2*** *of the Draft EIR.*

[51] *California Gas and Electric Utilities, 2016 California Gas Report, p. 97.*

California Gas Report, the California Energy and Electric Utilities estimates natural gas consumption within SoCalGas's planning area will be approximately 2,526 million cf per day in 2021 (the Project's buildout year). The Project would account for approximately 0.001 percent of the forecasted 2021 consumption in SoCalGas's planning area. SoCalGas's existing and planned natural gas supplies would be sufficient to support the Project's net increase in demand for natural gas.

(c) Conclusion Regarding Significance Threshold No. 2

As demonstrated in the analysis above, construction and operation of the Project would not result in an increase in demand for electricity or natural gas that exceeds available supply or distribution infrastructure capabilities that could result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, Project impacts related to energy infrastructure capacity would be less than significant during construction and operation.

(2) Mitigation Measures

No significant impacts with regard to energy infrastructure have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts with regard to energy infrastructure would be less than significant without mitigation.

e) Cumulative Impacts

(1) Impact Analysis

Significance Threshold No. 1 (Wasteful, Inefficient, and Unnecessary Use of Energy)

Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. Based on the information presented in Table III-1 in **Section III, Environmental Setting,** of the Draft EIR, there are 117 related projects located within the vicinity of the Project Site. In addition to the 117 cumulative projects, the Community Plan Update discussed in **Section III, Environmental Setting,** of the Draft EIR, once adopted, will be a long-range plan designed to accommodate growth in the Community Plan area until 2040. Only the initial period of any such projected growth would overlap with the Project's future

baseline forecast, as the Project is to be built out by 2021, well before the Community Plan Update's horizon year. Moreover, the Project's projected buildout year is similar to that of many cumulative projects. Accordingly, it can be assumed that the projected growth reflected by the list of cumulative projects, which itself is a conservative assumption would account for any overlapping growth that may be assumed by the Community Plan Update upon its adoption. The geographic context for the cumulative analysis of electricity is LADWP's service area and the geographic context for the cumulative analysis of natural gas is SoCalGas's service area. While the geographic context for transportation-related energy use is more difficult to define, it is meaningful to consider the Project in the context of County-wide consumption. Growth within these geographies is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure, such as new or expanded energy facilities.

(a) Electricity

Buildout of the Project, related projects, and additional forecasted growth in LADWP's service area would cumulatively increase the demand for electricity supplies and infrastructure capacity. As stated previously, LADWP forecasts that its total energy sales in the 2021–2022 fiscal year (the Project buildout year) will be 26,835 GWh of electricity. Based on the Project's estimated net new electrical consumption of 4,538,308 kWh per year, the Project would account for approximately 0.02 percent of LADWP's total projected sales in 2021. Thus, although Project development would result in the use of renewable and non-renewable electricity resources during construction and operation, which could limit future availability, the use of such resources would be on a relatively small scale, would be reduced by measures making the Project more energy-efficient, and would be consistent with growth expectations for LADWP's service area. Furthermore, as with the Project, during construction and operation, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations, including the CALGreen Code and state energy standards under Title 24, and incorporate mitigation measures, as necessary. As such, the Project's contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of electricity would not be cumulatively considerable and thus, would be less than significant.

(b) Natural Gas

Buildout of the Project, related projects, and additional forecasted growth in SoCalGas's service area would cumulatively increase the demand for natural gas supplies and infrastructure capacity. As stated previously, based on the 2016 California Gas Report, the CEC estimates natural gas consumption within SoCalGas's planning area will be approximately 2,526 million cf per day in 2021 (the Project's buildout year). The Project

would account for approximately 0.001 percent of the forecasted 2021 consumption in SoCalGas's planning area. SoCalGas forecasts take into account projected population growth and development based on local and regional plans. Although Project development would result in the use of natural gas resources, which could limit future availability, the use of such resources would be on a relatively small scale, would be reduced by measures rendering the Project more energy-efficient, and would be consistent with regional and local growth expectations for SoCalGas's service area. Furthermore, future development projects would be expected to incorporate energy conservation features, comply with applicable regulations, including the CALGreen Code and state energy standards under Title 24, and incorporate mitigation measures, as necessary. As such, the Project's contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of natural gas would not be cumulatively considerable and, thus, would be less than significant.

(c) Transportation Energy

Buildout of the Project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. As described above, at buildout, the Project would consume a total of 359,969 gallons of gasoline and 49,567 gallons of diesel per year, or a total of 409,536 gallons of petroleum-based fuels per year. For comparison purposes, the transportation-related fuel usage for the Project would represent approximately 0.001 percent of the 2017 annual on-road gasoline-related energy consumption and 0.01 percent of the 2017 annual diesel fuel-related energy consumption in Los Angeles County, as shown in **Appendix K** of the Draft EIR.

Additionally, as described above, petroleum currently accounts for 90 percent of California's transportation energy sources. However, over the last decade the state has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce VMT, which would reduce reliance on petroleum fuels. According to the CEC, gasoline consumption has declined by 6 percent since 2008, and the CEC predicts that the demand for gasoline will continue to decline over the next 10 years and that there will be an increase in the use of alternative fuels, such as natural gas, biofuels, and electricity. As with the Project, other future development projects would be expected to reduce VMT by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions.

Furthermore, as discussed previously, the Project would be consistent with the energy efficiency policies emphasized by the 2016-2040 RTP/SCS. Specifically, the Project would be a mixed-use development consisting of live/work units, neighborhood-serving

retail and restaurant uses, an art gallery, and an Artist CoLab, located in the Arts District, which is characterized by a high degree of pedestrian activity. The Project would provide greater proximity to neighborhood services, jobs, and residences and would be well-served by existing public transportation, including Metro and LADOT bus lines and rail line. The Project also would introduce new housing and job opportunities within a HQTA, which is consistent with numerous policies in the 2016-2040 RTP/SCS related to locating new jobs near transit. These features would serve to reduce VMT and associated transportation fuel consumption. By its very nature, the 2016-2040 RTP/SCS is a regional planning tool that addresses cumulative growth and resulting environmental effects. Since the Project is consistent with the 2016-2040 RTP/SCS, its contribution to cumulative impacts related to wasteful, inefficient and unnecessary use of transportation fuel would not be cumulatively considerable, and thus, would be less than significant.

(d) Conclusion

Based on the analysis provided above, the Project's contribution to cumulative impacts related to energy consumption (i.e., electricity, natural gas, and fuel) would not result in a cumulatively considerable effect related to the wasteful, inefficient, and unnecessary consumption of energy during construction or operation. As such, the Project's impacts would not be cumulatively considerable. Therefore, cumulative energy impacts under Significance Threshold No. 1 would be less than significant.

(2) Mitigation Measures

No significant cumulative impacts related to Significance Threshold No. 1 have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to Significance Threshold No. 1 would be less than significant

Significance Threshold No. 2 (Infrastructure Capacity Analysis)

(1) Impact Analysis

(a) Electricity

Electricity infrastructure is typically expanded in response to increasing demand, and system expansion and improvements by LADWP are ongoing. As described in LADWP's 2016 IRP, LADWP would continue to expand delivery capacity as needed to meet demand increases within its service area at the lowest cost and risk consistent

with LADWP's environmental priorities and reliability standards. The IRP takes into account future energy demand, advances in renewable energy resources and technology, energy efficiency, conservation, and forecast changes in regulatory requirements. Development projects within the LADWP service area would also be anticipated to incorporate site-specific infrastructure improvements, as necessary. Each of the related projects would be reviewed by LADWP to identify necessary power facilities and service connections to meet the needs of their respective projects. Project applicants would be required to provide for the needs of their individual projects, thereby contributing to the electrical infrastructure in the Project Site area. As such, the Project's contribution to cumulative impacts with respect to electricity infrastructure would not be cumulatively considerable, and thus, would be less than significant.

(b) Natural Gas

Natural gas infrastructure is typically expanded in response to increasing demand and system expansion and improvements by SoCalGas occur as needed. It is expected that SoCalGas would continue to expand delivery capacity if necessary to meet demand increases within its service area. Development projects within its service area, including the Project and related projects also served by the existing SoCalGas infrastructure, would also be anticipated to incorporate site-specific infrastructure improvements, as appropriate. As such, the Project's contribution to cumulative impacts with respect to natural gas infrastructure would not be cumulatively considerable, and thus, would be less than significant.

(c) Conclusion

Based on the analysis provided above, the Project's contribution to cumulative impacts related to energy consumption (i.e., electricity, natural gas, and fuel) would not result in a cumulatively considerable effect related to the available supply or distribution infrastructure capabilities that could result in the need for new energy facilities or expansion of existing facilities, or the construction of which could cause significant environmental effects. As such, the Project's impacts would not be cumulatively considerable. Therefore, cumulative energy impacts under Significance Threshold No. 2 would be less than significant.

(2) Mitigation Measures

No significant cumulative impacts related to Significance Threshold No. 2 have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts with regard to Significance Threshold No. 2 would be less than significant.

IV. Environmental Impact Analysis

N. Tribal Cultural Resources

1. Introduction

This section of the Draft EIR provides an analysis of the Project's potential impacts on tribal cultural resources. Potential impacts to tribal cultural resources are based on coordination and consultation with California Native American tribes that are traditionally and culturally affiliated with the Project Site, as well as a Sacred Land Files (SLF) records search conducted by the Native American Heritage Commission (NAHC).

This section is based in part on the following documents, included in **Appendix J** of the Draft EIR:

J-1. *Tribal Cultural Resources Assessment for the Arts District Center Project, City of Los Angeles, California, SWCA Environmental Consultants, December 2018.*

J-2. *Sacred Lands File Search, Dr. Gayle Totton, California Native American Heritage Commission, July 11, 2017.*

J-3. *AB 52 Consultation Documents.*

2. Environmental Setting

a) Regulatory Framework

(1) Tribal Cultural Resources

On September 25, 2014, Governor Brown signed into law Assembly Bill 52 (AB 52), which amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to require that an analysis of a project's impact on cultural resources include whether the project would impact "tribal cultural resources." As set forth in PRC Section 21074:

(a) "Tribal cultural resources" are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.[1]

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

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

For a project for which a notice of preparation for a draft EIR was filed on or after July 1, 2015, the lead agency is required to consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if: (1) the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area; and (2) the tribe requests consultation, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Section 21080.3.1(b) of the PRC defines "consultation" with a cross reference to Government Code Section 65352.4, which applies when local governments consult with tribes on certain planning documents and states the following:

[1] *Per subdivision (k) of PRC Section 5020.1, "local register of historical resources" means a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.*

> *"Consultation" means the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.*

The provisions in Section 21080.3.2(a) of the PRC enumerate topics that may be addressed during consultation, including tribal cultural resources, the potential significance of project impacts, possible mitigation measures, and project alternatives.

Section 21084.3 of the PRC also states that public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. This section of the PRC also includes examples of mitigation measures that may be considered to avoid or minimize the significant adverse effects.

Consultation ends when either of the following occurs prior to the release of the environmental document:

1. Both parties agree to measures to avoid or mitigate a significant effect on a tribal cultural resource. Agreed upon mitigation measures shall be recommended for inclusion in the environmental document (PRC Section 21082.3(a)); or

2. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Sections 21080.3.2(b)(1)-(2) and 21080.3.1(b)(1)).

(2) Treatment of Human Remains

The disposition of burials falls first under the general prohibition on disturbing or removing human remains under California Health and Safety Code (CHSC) Section 7050.5. More specifically, remains suspected to be Native American are treated under CEQA at California Code of Regulations (CCR) Section 15064.5. PRC Section 5097.98 illustrates the process to be followed if remains are discovered. If human remains are discovered during excavation activities, the following procedure shall be observed:

- Stop immediately and contact the County Coroner.

- If the remains are determined to be of Native American descent, the Coroner has 24 hours to notify the NAHC.

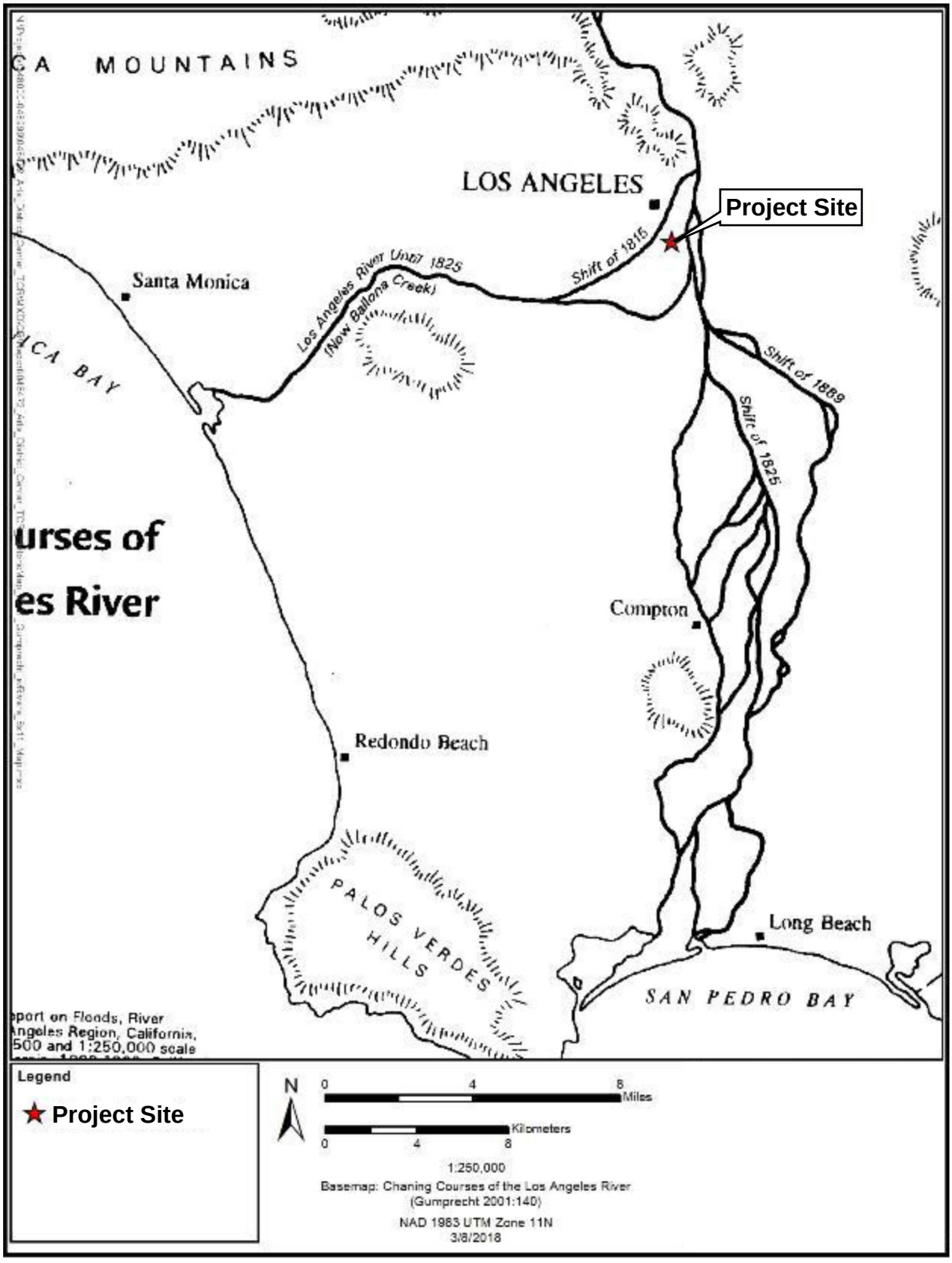
- The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the deceased Native American.

- The MLD has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.
- If the owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC.

b) Existing Conditions

The Project Site is in the Los Angeles Basin, a broad, level plain defined by the Pacific Ocean to the west, the Santa Monica Mountains and Puente Hills to the north, and the Santa Ana Mountains and San Joaquin Hills to the south. This extensive basin is filled with predominantly alluvial sediments and is drained by several major watercourses, including the Los Angeles, Rio Hondo, San Gabriel, and Santa Ana rivers. The Project Site is currently set within a complete urbanized environment since it was developed in the middle nineteenth century.

The south-flowing Los Angeles River is currently located approximately 0.6 kilometers (km) (0.4 miles) east of the Project Site. However, historically the channel has shifted courses several times during flood events, with the main channel shifting its location relative to the Project Site twice in the last 100 years (refer to Figure IV.N-1). The first recorded shift of the river occurred in 1815, when floodwaters overflowed the former channel, shifting the course previously located to the east of the Project Site, at least 0.8 km (0.5 miles) to the southwest, near the present route of North Spring Street, northwest of the Project Site. The flood destroyed structures built as part of the original Los Angeles Pueblo and is presumed to have also destroyed a Native American village site (Yaanga) also located north of the Project Site. At that time and before 1825, the river flowed west within the Los Angeles Basin, discharging into the Ballona Wetlands along what is now Ballona Creek, near Santa Monica. Flooding in 1825 then produced the most dramatic shift historically observed in the river's course as the newly formed channel overflowed its banks and shifted its course again, relocating the channel back east of the Project Site, now flowing fully south and emptying into the bay near San Pedro. Subsequent shifts occurred along the braided streams within the broader, south-flowing flood plain. The Los Angeles River flooded multiple times, including a catastrophic flood in 1938. Flood events such as these can produce substantial deposits of alluvial sediments within the respective floodplains. Alluvial terraces formed where flooding water eroded into adjacent hillsides. In the downtown Los Angeles area, the backslopes in the location of Bunker Hill delineate the edge of the historical floodplain.



Multiple courses of the Los Angeles River channel as depicted by Gumprecht (2001:140).

Figure IV.N-1
Los Angeles River Channel Courses

Source: SWCA Environmental Consultants, 2018.

Before the last decades of the nineteenth century the Project Site was subject to ranching and farming, followed by industrialization during the early twentieth century. Disturbances to the physical setting from these historic-period developments are represented in the sediment profiles presented in the geotechnical report prepared for the Project.[2] Bore samples drilled at four locations within the Project Site identified artificial fill extending up to 12 feet below the modern concrete surface and containing pieces of bricks and construction debris. Below these fill soils, Quaternary-age alluvium extends to a depth of at least 50 feet. These sediments form strata consisting of sand, sand with gravels, cobbles, and potentially larger boulders, and intermittent lenses of silty sand, which are consistent with high-energy depositional trends near rivers with shifting courses and flooding events.

(1) Cultural Setting

(a) Prehistory

As discussed in the Tribal Cultural Resources Assessment (TCR Assessment), in the past several decades, researchers have devised numerous prehistoric chronological sequences to aid in understanding cultural changes in southern California. Building on early studies and focusing on data synthesis, Wallace developed a prehistoric chronology for the Southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas. Four horizons are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although Wallace's 1955 synthesis initially lacked chronological precision due to a paucity of absolute dates, this situation has been alleviated by the availability of thousands of radiocarbon dates that have been obtained by southern California researchers in the last three decades. As such, several revisions were subsequently made to Wallace's 1955 synthesis using radiocarbon dates and projectile point assemblages. The summary of prehistoric chronological sequences for southern California coastal and near-coastal areas presented below is a composite of information in Wallace and Warren, as well as more recent studies, including Koerper and Drover.

(i) Horizon I: Early Man (CA. 10,000–6,000 BC)

The earliest accepted dates for archaeological sites on the southern California coast are from two of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this area approximately 10,000 years ago. On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago. Present-day Orange and San Diego counties contain several sites dating from 9,000 to 10,000 years ago. Although the dating of these finds remains controversial, several sets of human

[2] *The geotechnical report prepared for the Project is included in **Appendix E** of the Draft EIR.*

remains from the Los Angeles Basin (e.g., “Los Angeles Man,” “La Brea Woman,” and the Haverty skeletons) apparently date to the middle Holocene, if not earlier.

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas, and a greater emphasis on large-game hunting inland.

(ii) Horizon II: Milling Stone (6,000–3,000 BC)

Set during a drier climatic regime than the previous horizon, the Milling Stone horizon is characterized by subsistence strategies centered on collecting plant foods and small animals. The importance of the seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages, namely milling stones (metates) and handstones (manos). Recent research indicates that Milling Stone horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions.

(iii) Horizon III: Intermediate (3,000 BC–AD 500)

The Intermediate horizon is characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. An increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites from this horizon along the California coast. Related chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment and signaling a shift away from the processing and consuming of hard seed resources to the increasing importance of the acorn.

(iv) Horizon IV: Late Prehistoric (AD 500–Historic Contact)

In the Late Prehistoric horizon, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric horizon, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points suggests increased use of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Steatite cooking vessels and containers are also present in sites from this time, and there is an increased presence of smaller bone and shell circular fishhooks; perforated stones; arrow shaft straighteners made of steatite; a variety of bone tools; and personal ornaments such as beads made from shell, bone, and stone. There was also an increased use of asphalt

for waterproofing and as an adhesive. Late Prehistoric burial practices are discussed in the Ethnographic Overview section below.

By AD 1000, fired clay smoking pipes and ceramic vessels were being used at some sites. The scarcity of pottery in coastal and near-coastal sites implies that ceramic technology was not well developed in that area, or that ceramics were obtained by trade with neighboring groups to the south and east. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels.

During this period, there was an increase in population size accompanied by the advent of larger, more permanent villages. Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally.

In Warren's cultural ecological scheme, the period between AD 500 and European contact, which occurred as early as 1542, is divided into three regional patterns: Chumash (Santa Barbara and Ventura counties), Takic/Numic (Los Angeles, Orange, and western Riverside counties), and Yuman (San Diego County). The seemingly abrupt introduction of cremation, pottery, and small triangular arrow points in parts of modern-day Los Angeles, Orange, and western Riverside counties at the beginning of the Late Prehistoric period is thought to be the result of a Takic migration to the coast from inland desert regions. Modern Gabrielino/Tongva, Juaneño, and Luiseño people in this region are considered to be the descendants of the Uto-Aztecan, Takic-speaking populations that settled along the California coast in this period.

(b) Ethnographic Overview

The Project Site is in an area historically occupied by the Gabrielino/Tongva. Surrounding native groups included the Chumash and Tatataviam/Alliklik to the north, the Serrano to the east, and the Luiseño/Juaneño to the south. There is well-documented interaction between the Gabrielino and many of their neighbors in the form of intermarriage and trade.

The name Gabrielino (sometimes spelled Gabrieleno or Gabrieleño) denotes those people who were administered by the Spanish from Mission San Gabriel. This group is now considered to be a regional dialect of the Gabrielino language, along with the Santa Catalina Island and San Nicolas Island dialects. In the post-European contact period, Mission San Gabriel included natives of the greater Los Angeles area, as well as members of surrounding groups such as Kitanemuk, Serrano, and Cahuilla. There is little evidence that the people we call Gabrielino had a broad term for their group; rather,

they identified themselves as an inhabitant of a specific community through the use of locational suffixes (e.g., a resident of Yaanga was called a Yabit, much the same way that a resident of New York is called a New Yorker).

Native words that have been suggested as labels for the broader group of Native Americans in the Los Angeles region include Tongva (or Tong-v) and Kizh (Kij or Kichereno, although there is evidence that these terms originally referred to local places or smaller groups of people within the larger group that we now call Gabrielino. Nevertheless, many present-day descendants of these people have taken on Tongva as a preferred group name because it has a native rather than Spanish origin . Thus, the term Gabrielino/Tongva is used in the remainder of this report to designate native people of the Los Angeles Basin and their descendants.

The Gabrielino/Tongva subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal eco-niches. Like that of most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate period). Inhabitants supplemented acorns with the roots, leaves, seeds, and fruits of a variety of flora (e.g., islay, cactus, yucca, sages, and agave). Freshwater and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed.

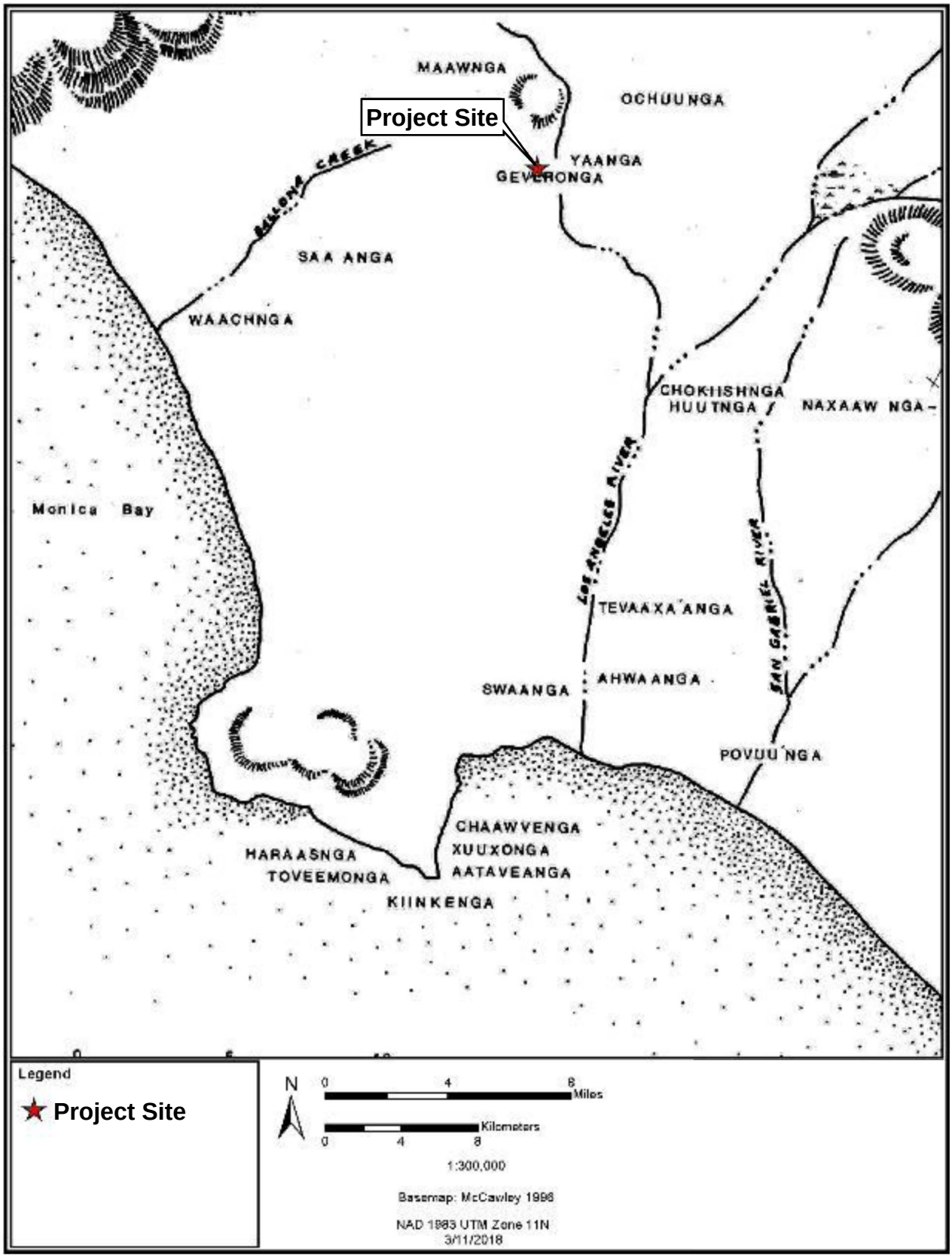
The Gabrielino/Tongva used a variety of tools and implements to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Groups residing near the ocean used oceangoing plank canoes and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands. Gabrielino/Tongva people processed food with a variety of tools, including hammer stones and anvils, mortars and pestles, manos and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks. Food was consumed from a variety of vessels. Catalina Island steatite was used to make ollas and cooking vessels.

At the time of Spanish contact, the basis of Gabrielino/Tongva religious life was the Chinigchinich cult, centered on the last of a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions, and also taught the people how to dance, the primary religious act for this society. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws. The Chinigchinich religion seems to have been relatively new when the Spanish arrived. It was spreading south into the southern Takic groups even as Christian missions were being built and may represent a mixture of native and Christian belief and practices.

Deceased Gabrielino/Tongva were either buried or cremated, with inhumation more common on the Channel Islands and the neighboring mainland coast, and cremation predominating on the remainder of the coast and in the interior. Remains were buried in distinct burial areas, either associated with villages or without apparent village association. Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes, as well as scattered among broken ground stone implements. Archaeological data such as these correspond with ethnographic descriptions of an elaborate mourning ceremony that included a variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wood tools, shell beads, bone and shell ornaments, and projectile points and knives. Offerings varied with the sex and status of the deceased.

(i) Yaanga and Other Native American Communities in Los Angeles

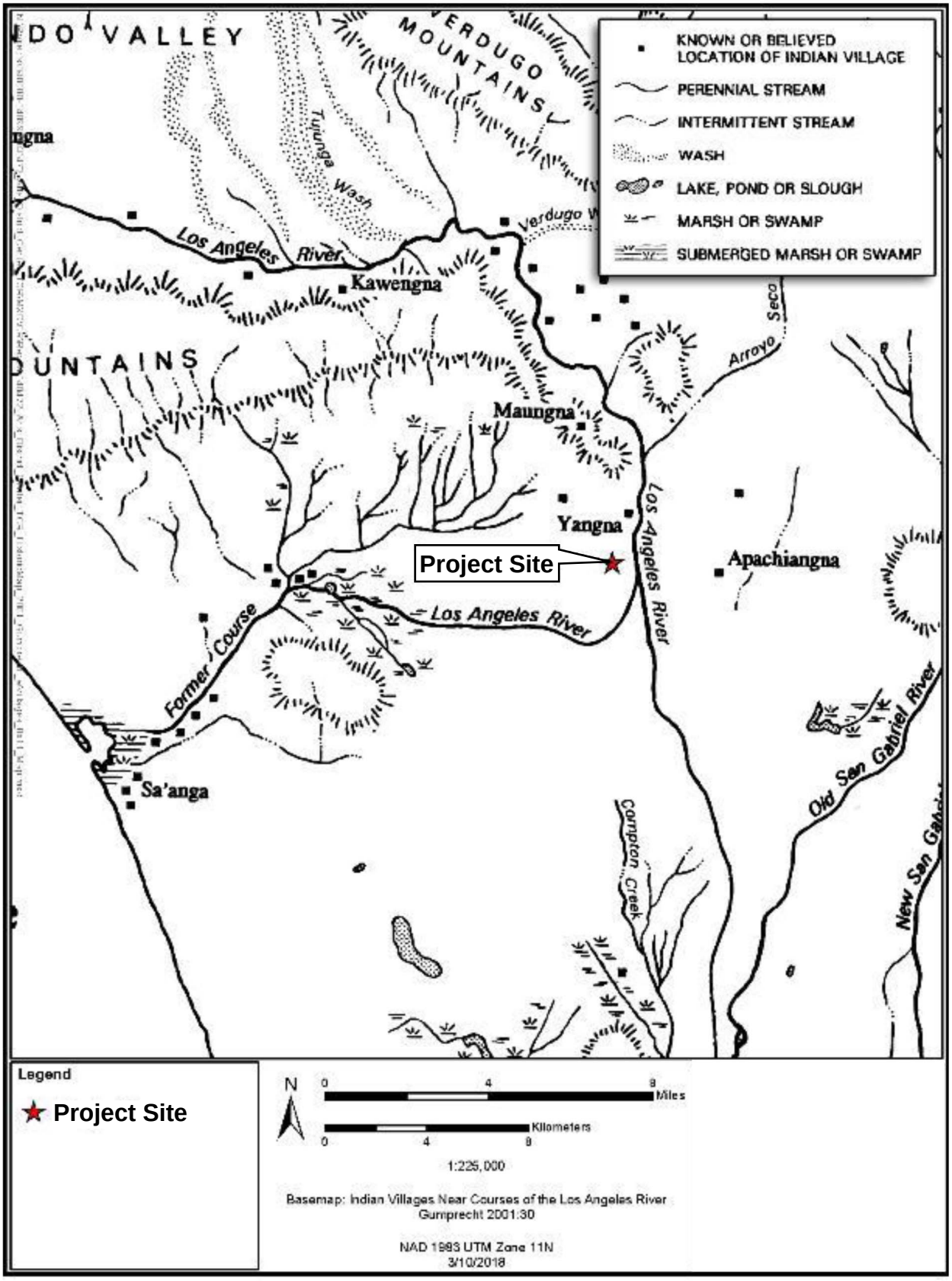
The Project Site is situated within traditional territory of the Gabrielino/Tongva . The closest ethnographically documented village to the Project Site is Yaanga (alternative spellings and names include Yang-na, Yangna, and Yabit). Though the actual location is disputed, generally Yaanga is believed to have been located near present-day Union Station, approximately 1.4 km (0.86 miles) north of the Project Site (refer to Figure IV.N-2 through Figure IV.N-5). In general, it has proven very difficult or impossible to establish definitively the precise location of Native American villages occupied in the Ethnohistoric period. Native American place names referred to at the time of Spanish contact did not necessarily represent a continually occupied settlement within a discrete location. Instead, in at least some cases, the communities were represented by several smaller camps scattered throughout an approximate geography, shaped by natural features that were subject to change over generations. Many of the villages had long since been abandoned by the time ethnographers, anthropologists, and historians attempted to document any of their locations, at which point the former village sites were affected by urban and agricultural development, and Native American lifeways had been irrevocably changed. Alternative names and spellings for communities, and conflicting reports on their meaning or locational reference, further confound efforts at relocation. McCawley quotes Kroeber for his remarks on the subject, writing “the opportunity to prepare a true map of village locations ‘passed away 50 years ago.’” Thus, even with archaeological evidence, it can be difficult to conclusively establish whether any given assemblage represents the remains of the former village site.



Project Site and 0.5 - mile radius plotted on McCawley's (1996:36) map showing the approximate location of villages cited in Gabrielieno/Tongva ethnographic sources.

Figure IV.N-2
Approximate Location of Gabrielieno/Tongva Villages

Source: SWCA Environmental Consultants, 2018.



Project Site plotted on Gumprecht's (2001:30) map showing hypothetical locations of Native American villages along the Los Angeles River and other waterways in the Los Angeles Basin.

Figure IV.N-3
Hypothetical Locations of Native American Villages along Los Angeles Waterways

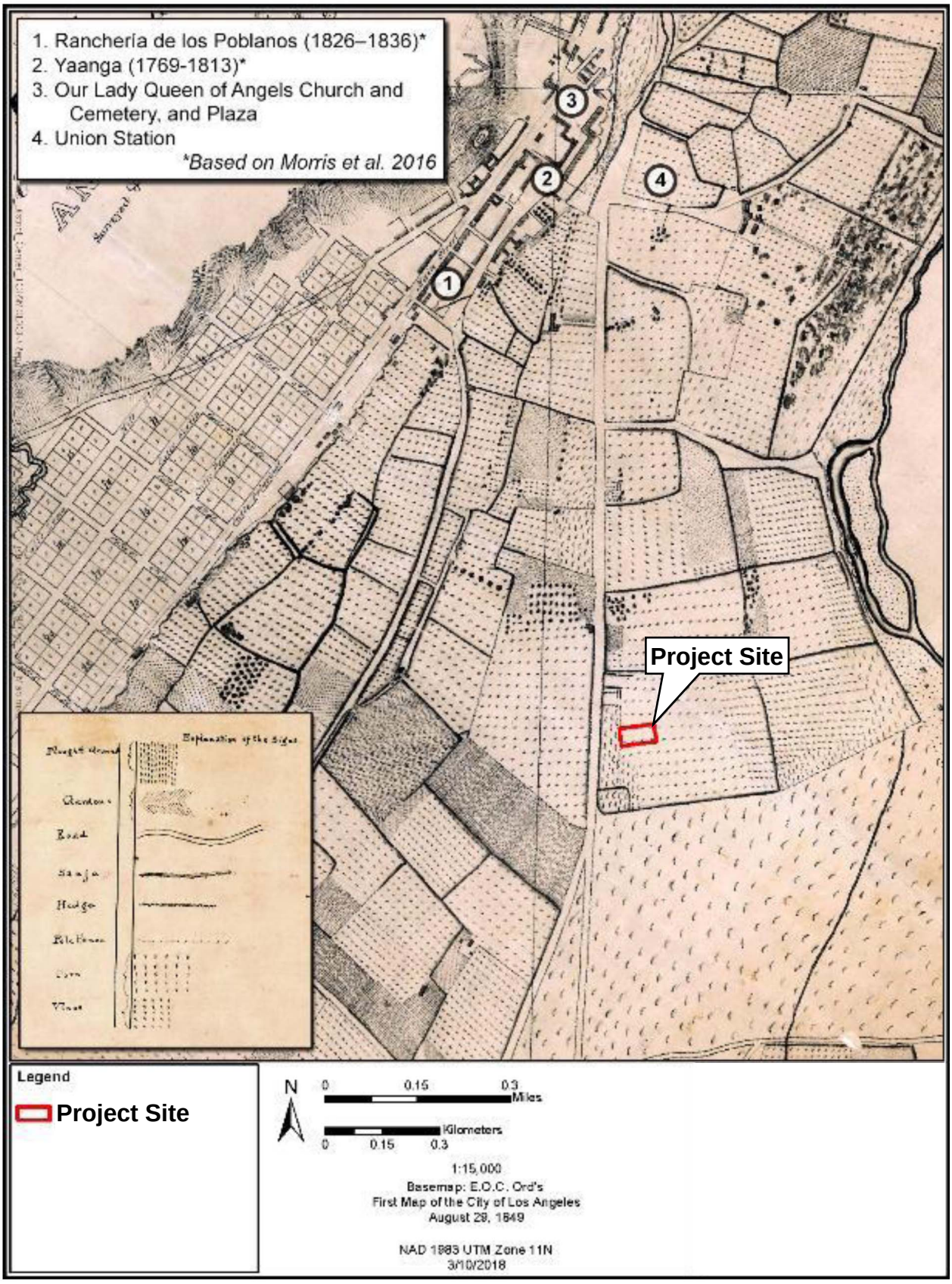
Source: SWCA Environmental Consultants, 2018.



Project Site plotted on map of alleged Native American village locations and historical features in the Los Angeles Basin published by the Southwest Museum (1962) and re-printed in Johnston (1962).

Figure IV.N-4
Alleged Native American Village Locations
and Other Historical Features

Source: SWCA Environmental Consultants, 2018.



Project Site shown on Ord's 1849 survey map appended with prominent historical landmarks and the location of Yaanga reported by Morris et al. (2016).

Figure IV.N-5
Prominent Historical Landmarks and the Location of Yaanga

Source: SWCA Environmental Consultants, 2018.

Historical records place Yaanga in the vicinity of Los Angeles's original plaza, located near present-day Union Station. Historians and archaeologists have presented multiple possible village locations in this general area. However, as with the pueblo itself, it is likely that the village was relocated from time to time due to major shifts of the Los Angeles River during years of intense flooding. Dillon (presented an exhaustive review of the potential locations, most within several blocks of the pueblo plaza. Johnston concluded that "in all probability *Yangna* lay scattered in a fairly wide zone along the whole arc [from the base of Fort Moore Hill to Union Station], and its bailiwick included as well seed-gathering grounds and oak groves where seasonal camps were set up." A second village, known as Geveronga, has also been described in ethnographic accounts as immediately adjoining the Pueblo of Los Angeles, though much like Yaangna, its location can only be inferred from ethnographic information.

Aside from the ethnographic evidence suggesting the location of these villages, little direct, indisputable archaeological evidence for the location of either village has been produced to date. Archaeological materials reportedly were unearthed during the construction of Union Station in 1939 and "considerably more" during the rebuilding of the Bella Union Hotel in 1970—on the 300 block of North Main Street. The preponderance of the available evidence indicates that one or more early historic Native American communities were situated west of the Los Angeles River in the vicinity of the original plaza site. This assumption is supported through several lines of ethnographic evidence including the expedition journal of Fr. Juan Crespi and engineer Miguel Costansó, both of whom were associated with the 1769 Portolá expedition. The notes from these sources indicate the village was located between 2.0 and 2.4 km (1.3 and 1.5 miles) west-southwest from the Los Angeles River on high-level ground. The Pueblo of Los Angeles was documented to have been founded directly adjacent to this village. The location of Yaanga was also referenced by long-time Los Angeles resident Narciso Botello and Gabrielino consultant José María Zalvidea, who indicated that Yaanga was originally located adjacent to the original site of the Los Angeles plaza.

After the settlement of Los Angeles in 1781, Yaanga faced many new challenges because of its proximity to the new city. The last recorded birth at Yaanga is believed to have been in 1813, after which the village was forced to relocate south of the original site. This new village, known as Ranchería de los Poblanos by the Angelenos, is believed to have been located at the intersection of Main Street and First Street (refer to Figure IV.N-5).

Although the precise location of any given village is subject to much speculation, it is clear that the banks of the Los Angeles River were home to many Gabrielino/Tongva villages throughout the greater Los Angeles area, and several maps have been produced throughout the twentieth century depicting this settlement pattern. This pattern of settlements concentrated along the Los Angeles River appears in Gumprecht (refer

to Figure IV.N-3), as well as Johnston (refer to Figure IV.N-4), and George Kirkman's (1938) map of historical sites ca. 1860–1937 (refer to Figure IV.N-6). These maps convey a general sense of significant historical areas and were created using the best available evidence at respective times. However, these documents are intended as a representational depiction of these locations rather than explicit geographic points.

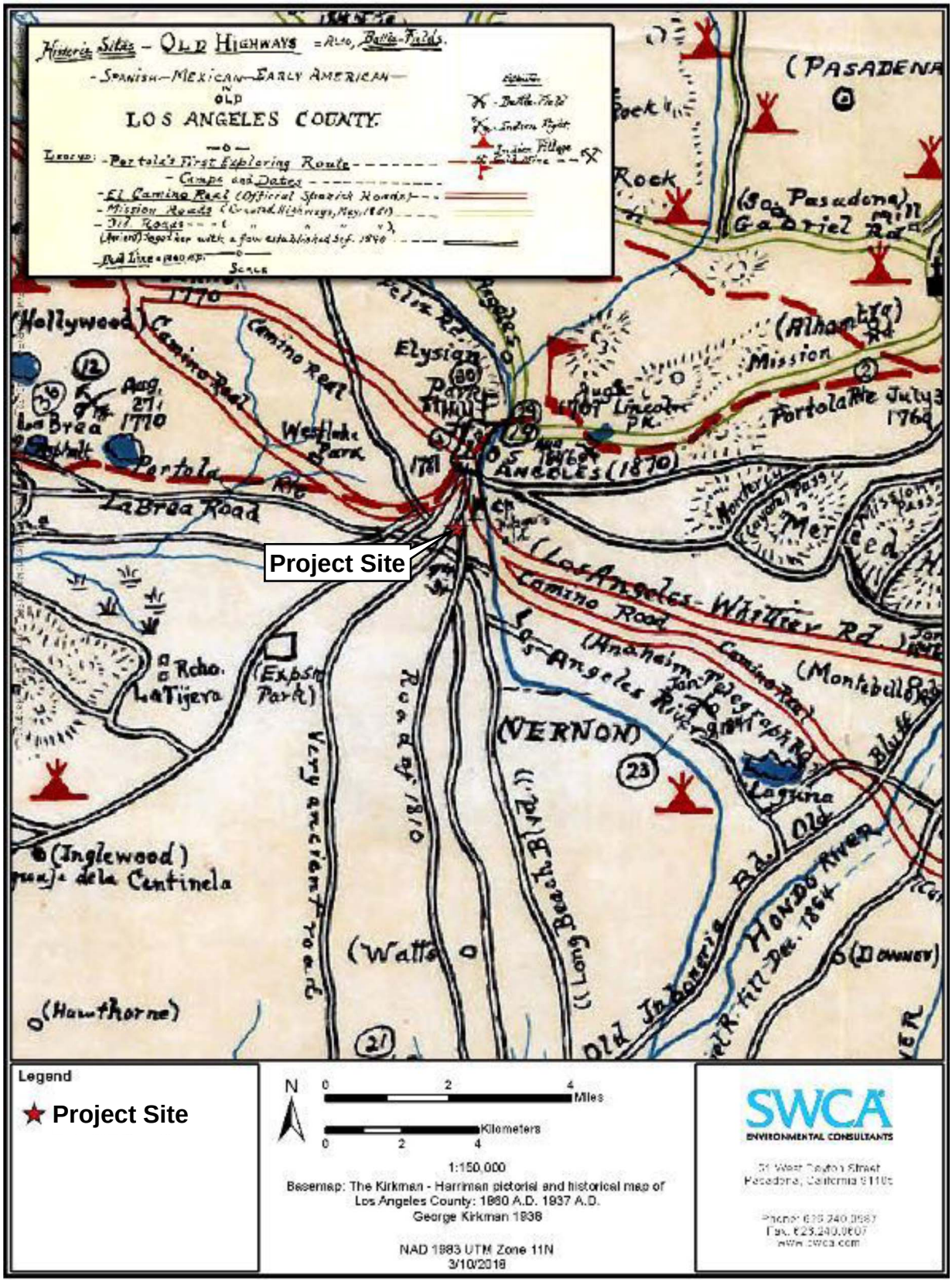
(c) History

Post-Contact history for the state of California is generally divided into three periods: the Spanish period (1769–1822), Mexican period (1822–1848), and American period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American period, when California became a territory of the United States.

(i) Spanish Period (1769-1822)

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

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.



Kirkman-Harriman's pictorial and historical map of Los Angeles County, 1860–1937. Historical sites and features are depicted with symbols to indicate representational rather than explicit geographic locations. (Courtesy of Los Angeles Public Library. Call Number 91.7941 L88Ki.)

Figure IV.N-6
Kirkman-Harriman's Pictorial and Historical Map of Los Angeles County

Source: SWCA Environmental Consultants, 2018.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Juan Crespí, a member of the expedition, named "the campsite by the river *Nuestra Señora la Reina de los Angeles de la Porciúncula*" or "Our Lady the Queen of the Angeles of the Porciúncula." Two years later, Fr. Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771. In 1781, a group of 11 Mexican families traveled from Mission San Gabriel Arcángel to establish a new pueblo called El Pueblo de la Reyna de Los Angeles (the Pueblo of the Queen of the Angels). This settlement consisted of a small group of adobe-brick houses and streets and would eventually be known as the Ciudad de Los Angeles (City of Angels).

(ii) Mexican Period (1822-1848)

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

Extensive land grants were established in the interior during the Mexican period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos.

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

(iii) American Period (1848-Present)

War in 1846 between Mexico and the United States began at the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. This battle was a defeat for the Americans and bolstered the Calfiornios' resolve against American rule, emboldening them to continue the offensive in later battles at Dominguez Field and in San Gabriel. However, this early skirmish was not a sign of things to come and the Americans were ultimately the victors of this two-year war. The Mexican–American War officially ended with the Treaty of Guadalupe Hidalgo in 1848, which resulted in the annexation of California and much of the present-day southwest, ushering California into its American period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. territories. Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity.

On April 4, 1850, only two years after the Mexican–American War and five months prior to California's achieving statehood, Los Angeles was officially incorporated as an American city. Settlement of the Los Angeles region continued steadily throughout the early American period. Los Angeles County was established on February 18, 1850, one of 27 counties established in the months prior to California's acquiring official statehood in the United States. The city at this time was bordered on the north by the Los Felis and the San Rafael Land Grant and on the south by the San Antonio Luge-Land Grant. Many of the ranchos in the area now known as Los Angeles County remained intact after the United States took possession of California. However, a severe drought in the 1860s resulted in many of the ranchos being sold or otherwise acquired by Americans. Most of these ranchos were subdivided into agricultural parcels or towns.

Ranching retained its importance through the mid-nineteenth century, and by the late 1860s, Los Angeles was one of the top dairy production centers in the country. By 1876, the county had a population of 30,000. Los Angeles maintained its role as a regional business center, and the development of citriculture in the late 1800s and early 1900s

further strengthened this status. These factors, combined with the expansion of port facilities and railroads throughout the region, contributed to the impact of the real estate boom of the 1880s on Los Angeles. By the late 1800s, government leaders recognized the need for water to sustain the growing population in the Los Angeles area. Irish immigrant William Mulholland personified the city's efforts for a stable water supply. By 1913, the City of Los Angeles had purchased large tracts of land in the Owens Valley, and Mulholland planned and completed the construction of the 240-mile aqueduct that brought the valley's water to the city.

Los Angeles continued to grow in the twentieth century, in part due to the discovery of oil in the area and its strategic location as a wartime port. The county's mild climate and successful economy continued to draw new residents in the late 1900s, with much of the county transformed from ranches and farms into residential subdivisions surrounding commercial and industrial centers. Hollywood's development into the entertainment capital of the world and southern California's booming aerospace industry were key factors in the county's growth in the twentieth century.

(iv) Los Angeles: From Pueblo to City

On September 4, 1781, 44 settlers from Sonora, Mexico, accompanied by the governor, soldiers, mission priests, and several Native Americans, arrived at a site alongside the Rio de Porciúncula (later renamed the Los Angeles River), which was officially declared El Pueblo de Nuestra Señora de los Angeles de Porciúncula, or the Town of Our Lady of the Angels of Porciúncula. The site chosen for the new pueblo was elevated on a broad terrace 0.8 km (0.5 miles) west of the river. By 1786, the area's abundant resources allowed the pueblo to attain self-sufficiency, and funding by the Spanish government ceased.

Efforts to develop ecclesiastical property in the pueblo began as early as 1784 with the construction of a small chapel northwest of the plaza. Though little is known about this building, it was located at the pueblo's original central square near the corner of present-day Cesar Chavez Avenue and North Broadway. However, following continued flooding, the pueblo was relocated to its current location on higher ground, and the new town plaza soon emerged.

Alta California became a state in 1821, and the town slowly grew in size as the removal of economic restrictions attracted settlers to Los Angeles. The population continued to expand throughout the Mexican period and on April 4, 1850, only 2 years after the Mexican–American War and 5 months prior to California earning statehood, the city of Los Angeles was formally incorporated. Los Angeles maintained its role as a regional business center in the early American period and the transition of many former rancho lands to agriculture, as well as the development of citriculture in the late 1800s, further

strengthened this status. These factors, combined with the expansion of port facilities and railroads throughout the region, contributed to the real estate boom of the 1880s in Los Angeles.

(v) Historical Development of the Project Site

Maps and illustrations depicting pre-1880s Los Angeles capture an important, pre-industrial phase of the city's history, before small farms gave way to residential, commercial, and industrial developments. These documents depict the Project Site area within what was, for most of the nineteenth century, one of several abutting agricultural properties—mostly vineyards, but also fruit and nut trees—located immediately south of the city's historic core and west of the Los Angeles River. Farms in this area varied in size and shape—ranging up to approximately 50 acres with boundaries defined within a non-linear street grid—and were irrigated by water from Zanja Nos. 1, 2, 3, and 4.

The 1880s population boom resulted quickly in the subdivision of these small farms into lots, which were sold for primarily residential and commercial properties However, industrial developments quickly came to define the vicinity of the Project Site, so that by 1924 the entirety of the block was devoted to industrial and commercial buildings. Most of these developments were built as general storage warehouses or as purpose-built facilities. By 1906 at least three lines extended form the main AT&SF railroad to Carolina Street (now Hewitt Street) and Palmetto Street. To the west at Central and Fourth Street was the Arcade Depot, built in 1888 in a Victorian style, at the convergence of three railways—the Los Angeles Railway Company, Pacific Electric Railway Company, and the Los Angeles Inter-Urban Railway Company. The Arcade Depot was dismantled in 1915, after the Southern Pacific Railroad opened its Central Depot at Central and Fifth Street.

The City Council's decision to create an industrial district between Main Street and the river, and subsequent zoning changes in the 1910s quickened the conversion of the area into a fully industrial sector, with few remaining residences and an increasing number of manufacturers establishing warehouses and other facilities. Smaller gauge railroad spurs were constructed along many of the smaller streets to connect each block to the primary rail lines. A few of the original houses remained until the 1950s.

The mid-twentieth century saw many changes within the Project Site and Los Angeles as a whole. There was a growth in automobile sales, as well as the demise of Los Angeles's public transportation system, and as the railroads gave way to the trucking industry. By 1964 the Central Depot and the railways it served were demolished and built over and vacant warehouses began to decay, before being repurposed in the 1970's and beyond.

(2) California Historical Records Information System Records Search

(a) Previously Conducted Cultural Resources Studies

Results of the California Historical Records Information System (CHRIS) records search at the SCCIC indicate that 64 cultural resource studies have been conducted within 0.8 km (0.5 miles) of the Project Site (See Appendix A of the Tribal Cultural Resources Assessment included in **Appendix J** of the Draft EIR). One of these previous studies (LA-13239) intersects the Project Site. However, the only information included in the report is a map of the entire zanja system, mistakenly referred to as the Zanja Madre, and a list of three segments of the zanja system (possibly only segments of the Zanja Madre) that have been documented as archaeological sites. No original sources for the creation of the map were identified.

(b) Previously Recorded Cultural Resources

A total of nine previously recorded cultural resources were documented in the CHRIS within a 0.5-mile radius of the Project Site (refer to Table IV.N-1), none of which are located within the Project Site. Each of the sites are historic archaeological resources and do not contain prehistoric components. Though not directly within the Project Site, P-19-004460 (hereafter LAN-4460H) was documented in an adjacent block with a nearly identical land-use history to the present Project Site. LAN-4460H was a historic archaeological site identified in 2014 by Environmental Science Associates (ESA) during construction monitoring within the boundaries of a city block bound by Fifth Street to the north, Colyton Street to the west, Palmetto Street to the south, and South Hewitt Street to the east. No tribal cultural resources were found intermixed or underlying the Historic-period materials.

Table IV.N-1
Previously Recorded Resources within 0.5 miles of the Project Site

Primary Number	Trinomial Number	Time Period	Resource Description	Recorded By Affiliation	Year	Relationship to Project Site
P-19-002563	CA-LAN-002563H	Historic	Y & S #1	John M. Foster, Robin D. Turner, Greenwood & Associates	1997	Outside
P-19-002610	CA-LAN-002610H	Historic	Old Santa Fe Ave / Stone Pavement, Street Car	Shelley M Owen, Greenwood & Associates; Shannon Loftus, ACE Environmental	1997; 2011	Outside
P-19-003338	CA-LAN-003338H	Historic	--	Humphries, Frank, William Self Associates; Moore, Leann, Cogstone Resource Management	2000; 2000; 2006	Outside
P-19-003588	CA-LAN-003588H	Historic	--	John M. Foster, Greenwood & Associates.	2006	Outside
P-19-004171	CA-LAN-004171H	Historic	Little Tokyo / Art District Station	Denise Ruzicka, ArchaeoPaleo Resource Management	2009	Outside
P-19-004174	CA-LAN-004174H	Historic	1st / Vignes	Denise Ruzicka, ArchaeoPaleo Resource Management	2009	Outside
P-19-004192	CA-LAN-004192H	Historic	MTA-Temp-1	L. Solis, N. Orsi, URS Corporation	2010	Outside
P-19-004193	CA-LAN-004193H	Historic	MTA-Temp-2	L. Solis, N. Orsi, URS Corporation	2010	Outside
P-19-004460	CA-LAN-004460H	Historic	Block F Site	Michael Vader, ESA; V. Ortiz, ESA	2014; 2016	Outside

Source: SWCA, August 2018.

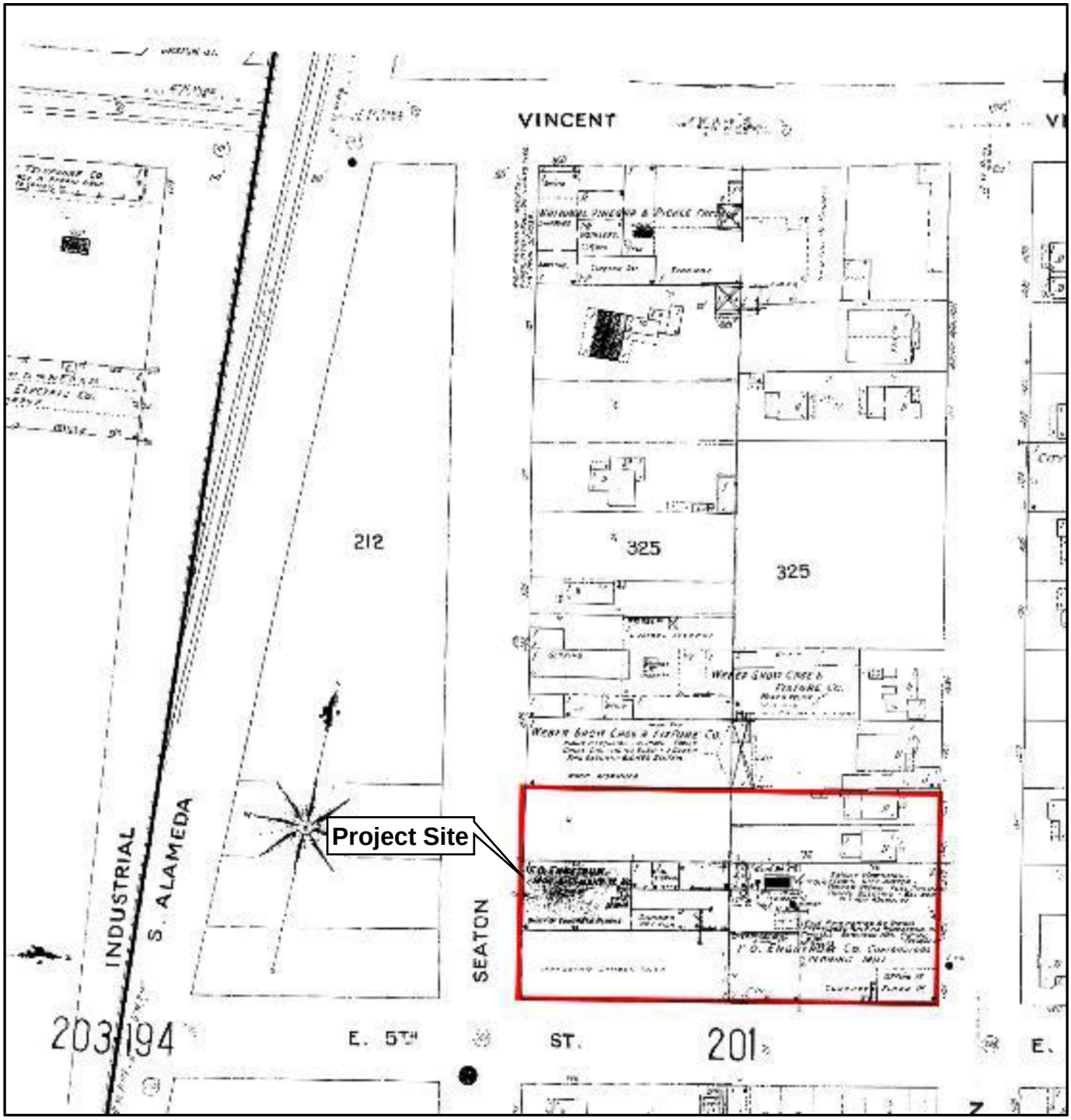
(3) Archival Research

The TCR Assessment prepared for the Project conducted an archival research that included a review of historical maps and descriptions of the Project Site, with a focus on documenting historical modifications to the physical setting and identifying any potential natural or artificial features with relevance to use by Native Americans or (e.g., stream courses, vegetation, historical topography, roads, habitation markers) or use of the location by non-Native American people in the Historic period. The Project Site is located south of the historic core of downtown Los Angeles and was included in the earliest surveys of the city, first by Lieutenant E. O. C. Ord in 1849 and then by Henry Hancock and George Hanson in 1853 and 1857 (refer to Figure IV.N-5). Ord's map depicts the Project Site in a cornfield, directly adjacent to a ploughed field. H.J. Stevenson's 1884 map of Los Angeles shows the Project Site within a property owned

by O.H. Bliss, who in 1874 purchased for $18,000 what was described as the “old Rowland homestead property.” Other descriptions of the sale gave a more detailed inventory of the property as containing a residence, tens of acres of fruit trees (orange, walnut, lime, lemon, apple, peach, and pear), an acre of “fine old grapes,” and was noted as being irrigated by one of the zanjas (Zanja No. 2).

The 1880s population boom in Los Angeles quickly manifested in the sale and subdivision of many such agricultural properties. Sale of parcels within the Bliss Tract had commenced by 1886, at which point residential developments had already begun in the adjacent areas, such as the Johnston Tract located one block to the north between First Street and Georgie Street (now Third Street). As farms were developed into residential tracts, surveys were commissioned to define property boundaries and delineate lots. The 1894 Sanborn Insurance map also depicts two residences in the northeast corner of the Project Site, listed at 443 and 445 Colyton Street. In 1906 the F.O. Engstrom Company had constructed two buildings within the Project Site, including a planing mill—the largest in the entire city containing a dry kiln, glue room, oil storage, and lumber storage—and a small iron and cement operation, on the east-facing side of the property along Seaton Street and west-facing side along Colyton Street, respectively (refer to Figure IV.N-7). Sometime around 1915 the property was purchased by Weber Showcase & Fixtures Company. Research conducted for the current Project by GPA Consulting (refer to the Historical Resources Report included as **Appendix D-1** of the Draft EIR) found that the former F.O. Engstrom Company warehouse on Seaton Street was demolished around the time they acquired the property in 1915. However, the existing office building on the southeast corner was apparently retained and incorporated into the subsequent construction of the two-story warehouse that currently occupies the Project Site.

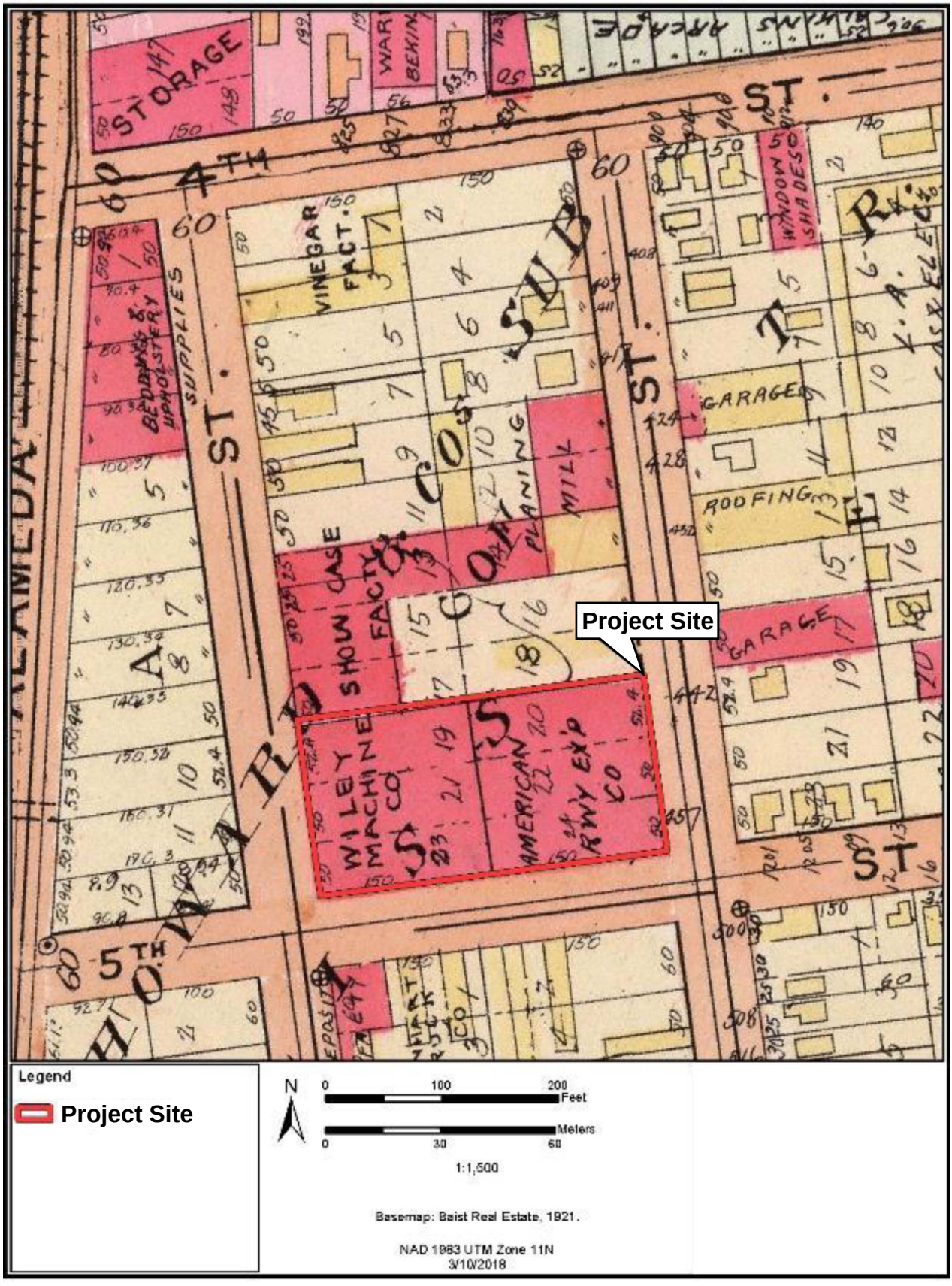
A Baist Real Estate map from 1921 shows the existing Project Site split between the Wiley Machine Company and the American Railway Export Company in the western and eastern halves, respectively (refer to Figure IV.N-8). At this point the two residences previously located in the northeast corner of the Project Site were likely demolished or relocated. The property was later purchased by the Jenny Nibley Warehouse, who owned the entire block by 1923 and occupied the former warehouse complex until 1970, using the former Weber Company building for general storage (see the Historical Resources Report included as **Appendix D-1** of the Draft EIR). Subsequent maps depict railway spurs running along Fifth Street and Colyton Street, connecting to the Southern Pacific Railroad Company tracks along Alameda Street. By 1972 the tracks were either paved over or removed.



Sanborn Fire Insurance Map from 1906 and the Project Site (red outline).

Figure IV.N-7
Sanborn Fire Insurance Map from 1906

Source: SWCA Environmental Consultants, 2018.



Baist Real Estate Survey Map from 1921 and the Project Site.

Figure IV.N-8
Baist Real Estate Survey Map from 1921

Source: SWCA Environmental Consultants, 2018.

(4) Sacred Lands File Search

In response to an SLF search, in a letter dated July 11, 2017, the NAHC indicated that there are no sacred sites in the SLF documented within the Project Site, but that the area is "sensitive for potential tribal cultural resources." The letter also notes that neither the SLF or CHRIS are exhaustive inventories of resources that may be present in any given area, and that tribes may uniquely possess information on the presence of an archaeological or tribal cultural resource. A list of five Native American contacts was provided and the letter suggests contacting them to provide information on sacred lands that may not be listed in the SLF. The City used this list of contacts as part of conducting AB 52 consultation. The NAHC letter is included in Appendix B of the Tribal Cultural Resources Assessment included in **Appendix J** of the Draft EIR.

(5) AB 52 Notification and Tribal Consultation

On April 6, 2017, the NAHC notified City Planning that they received the notice of preparation for the Project's draft environmental impact report and provided a list of 10 Native American tribes to be notified under AB 52. As lead agency, City Planning mailed letters to the listed Native American tribes that were identified by the NAHC and are included on the City's consultation list. Letters were sent out to all contacts on June 15, 2017 (see **Appendix J-3** of the Draft EIR). Table IV.N-2 summarizes the results of Native American outreach conducted in compliance of AB 52.

Table IV.N-2
Native American Outreach Results

Native American Contact	City Planning Consultation Effort	Tribal Response
Gabrieleno/Tongva Tribe Linda Candelaria, Co-Chairperson 1199 Avenue of the Stars, unit 1100 Los Angeles, CA 90067	**June 15, 2017:** Letter sent by U.S. Mail;	No response.
Gabrieleno/Tongva Indians of California Tribal Council Robert F. Dorame, Chairperson P.O. Box 490 Bellflower, CA 90707	**June 15, 2017:** Letter sent by U.S. Mail;	No response.
Gabrieleno/Tongva Nation Sam Dunlap, Cultural Resources Director PO Box 86908 Los Angeles, CA 90086	**June 15, 2017:** Letter sent by U.S. Mail;	No response.

Table IV.N-2
Native American Outreach Results

Native American Contact	City Planning Consultation Effort	Tribal Response
Fernandeño Tataviam Band of Mission Indians Kimia Fatehi 1019 2nd Street San Fernando, CA 91340	**June 15, 2017:** Letter sent by U.S. Mail;	No response.
Gabrieleno/Tongva Nation Sandonne Goad, Chairperson 106 1/2 Judge John Aiso St., #231 Los Angeles, CA 90012	**June 15, 2017:** Letter sent by U.S. Mail;	No response.
Torres Martinez Desert Cahuilla Indians Michael Mirelez, Cultural Resources Coordinator PO Box 1160 Thermal, CA 92274	**June 15, 2017:** Letter sent by U.S. Mail;	No response.
Gabrieleno/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson P.O. Box 693 San Gabriel, CA 91778	**June 15, 2017:** Letter sent by U.S. Mail;	No response.
Soboba Band of Luiseño Indians Joseph Ontiveros, Cultural Resources Director, and Ms. Morillo PO Box 487 San Jacinto, CA 92581	**June 15, 2017:** Letter sent by U.S. Mail;	No response.
Gabrieleno Band of Mission Indians-Kizh Nation Andrew Salas, Chairperson P.O. Box 393 Covina, CA 91723	**June 15, 2017:** Letter sent by U.S. Mail; **June 2017:** Consultation initiated—request for consultation acknowledged and coordination for follow-up meeting began, via email. **07/12/17:** Conference call and follow-up email.	**06/21/17:** Response letter sent acknowledging receipt of notification letter and indicating the area is sensitive for tribal cultural resources and requesting consultation. **07/12/17:** Participated in conference call; provided information on traditional use of the area and known resources in the vicinity. **07/13/17 and 7/14/17:** Emails providing three documents cited as evidence of tribal cultural

Table IV.N-2
Native American Outreach Results

Native American Contact	City Planning Consultation Effort	Tribal Response
		resource presence and sensitivity.
San Fernando Band of Mission Indians John Valenzuela, Chairperson PO Box 221838 Newhall, CA 91322	**June 15, 2017:** Letter sent by U.S. Mail;	No response.
Source: SWCA, August 2018.		

To date, the City has received one response in a letter dated June 21, 2017 from Mr. Andrew Salas, Chairman of the Gabrieleño Band of Mission Indians - Kizh Nation (Kizh Nation). Chairman Salas stated that the Project Site is in a sensitive area and that the Project may cause a substantial adverse change in the significance of tribal cultural resources. Chairman Salas requested consultation with City Planning during which time further information would be provided regarding tribal history and potential resources located within or near the Project Site. William Lamborn of the City Planning Department responded to a request for consultation via email and scheduled a conference call that occurred on July 12, 2017. The call was attended by Chairman Salas and Mr. Matt Teutimez, staff biologist with the Gabrieleño Band of Mission Indians-Kizh Nation. Chairman Salas and Mr. Teutimez shared tribal information related to traditional Native American use of the area, which they consider highly sensitive for tribal cultural resources and requested a Native American monitor be present during construction. Discoveries made in downtown Los Angeles near Union Station (located approximately one mile to the north of the Project Site, were cited on the call and in follow-up email correspondences on July 13 and 14, 2017, Chairman Salas provided three documents as evidence to substantiate their sensitivity finding and request for monitoring:

Non-Confidential

Exhibit 1: Full text copy of *Cultural Resources Assessment for the Metro Emergency Security Operations Center, Los Angeles, California*; and

Exhibit 2: Pages 1, 121, 122, 176 from *California's Gabrielino Indians*.

Confidential

Exhibit 3: Cover and pages 16, 28–30, and 32 from *The Metropolitan Water District of Southern California Headquarters Facility Project, The People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H*.

The results of the July 12, 2017 conference call were summarized in an email by William Lamborn of City Planning and sent to Chairman Salas on July 12, 2017. Pursuant to PRC Section 21082.3 (c), non-confidential exhibits are included in Appendix B of the TCR Assessment included in **Appendix J-1** of the Draft EIR, and the consultation correspondence record and confidential exhibit are included as a confidential appendix (Appendix C of the TCR Assessment).

(a) AB 52 Consultation Document Review

According to PRC Section 21074 (a)(2), a tribal cultural resource is any resource that is 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 PRC Section 5024.1, and that the significance of the resource to a California Native American tribe shall be considered. In their capacity as lead agency, the City must determine whether substantial evidence exists for a tribal cultural resource in the Project Site.

The TCR Assessment reviewed Exhibits 1 through 3 to assist the City in determining whether the information submitted could demonstrate the presence of a tribal cultural resource within the Project Site, and whether the requested mitigation measures are required to avoid potential adverse impacts to any tribal cultural resources that might be present. Locations discussed in the exhibits are shown in relationship to the Project Site in Figure IV.N-9. Consistent with the confidentiality requirements of PRC Section 21082.3(c), the confidential exhibit (Exhibit 3) is discussed here in general terms.

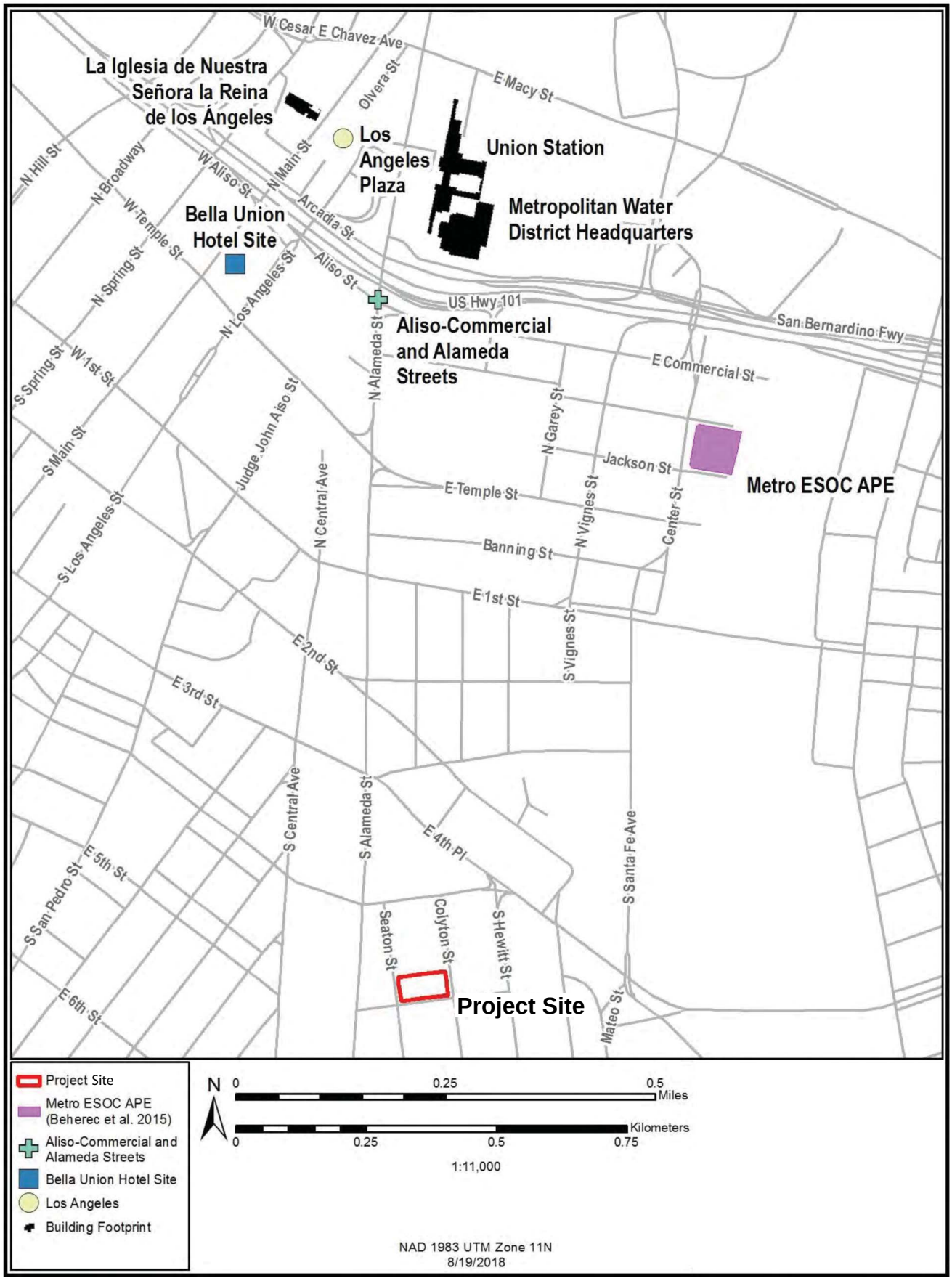


Figure IV.N-9
Locations Associated with AB 52 Consultation

Source: SWCA Environmental Consultants, 2018.

Exhibit 1. *Cultural Resources Assessment for the Metro Emergency Security Operations Center, Los Angeles, California*.

AECOM prepared this paleontological and cultural resources study for the Los Angeles County Metropolitan Authority (Metro) Emergency Security Operations Center (ESOC) project located at 410 Center Street, approximately 0.7 miles north of the current Project Site. The Metro ESOC report documents the results of a Phase I resources assessment conducted in compliance with National Historic Preservation Act (NHPA), NEPA, and CEQA to identify cultural resources within the project site's area of potential effects (referred to here as Metro ESOC APE). At the time of the study the project parcel was developed with structures, a paved surface, prepared gravel surfaces, and a narrow swath of unpaved ground adjacent to Jackson Street. AECOM conducted an SLF through the NAHC, a CHRIS records search (0.5-mile radius), archival research, and a pedestrian survey. Two historical built environment structures were identified in the Metro ESOC APE; no known archaeological or tribal cultural resources were identified by the records searches, background research, and/or survey. The authors assess the sensitivity for unidentified buried archaeological resources and conclude there is potential for the presence of prehistoric and historic sites. Specifically, Beherec et al. cite the project site's proximity (within 0.5 miles) to the village site of Yaanga, the historic heart of el Pueblo de Nuestra Senora la Reina de los Angeles (Los Angeles Pueblo), and the Los Angeles River as an indication of prehistoric archaeological resource sensitivity. The potential for deeply buried archaeological resources resulting from the shifting courses of the Los Angeles River is also referenced.

Several factors constrain the applicability of the Metro ESOC report to the analysis of potential for tribal cultural resources within the Project Site. First, the CHRIS records search and background research conducted by Beherec et al. is based on a 0.5-mile radius surrounding the Metro ESOC APE. The sensitivity assessment and recommendations provided in the report were specifically stated as applying to the Metro ESOC APE and not the surrounding 0.5-mile radius. The current Project Site is located approximately 0.2 miles south of the Metro ESOC search radius. Therefore, the Metro ESOC report does not identify any known tribal cultural resources within the Project Site for the Project, and the sensitivity assessment finding does not directly extend to the current Project Site.

Second, whereas the Metro ESOC APE is within 0.25 miles of significant prehistoric archaeological sites in the vicinity of the Metropolitan Water District (MWD) headquarters, Union Station, and the historical location of the Los Angeles Pueblo (near the Los Angeles Plaza and La Iglesia de Nuestra Señora la Reina de los Ángeles [Plaza Church]), the Project Site is 0.9 miles south.

These sites are considered potential remnants of the Gabrielino village of Yaanga. Background research presented by Beherec et al. and in the TCR Assessment suggests that the greatest sensitivity for the former site of Yaanga (and any associated tribal cultural resources) occurs generally along an east-west gradient between the Los Angeles Plaza and MWD building, well outside of the Project Site.

Finally, the Metro ESOC report cites the potential for buried prehistoric archaeological resources, including those that could be deeply buried by alluvial sediments from the Los Angeles River. However, the report does not provide detailed information on the soil conditions within the Metro ESOC APE, including measurements of prior historical or natural disturbances (i.e., from development and flooding, respectively). Therefore, there is no means of directly comparing the sensitivity specifically for prehistoric archaeological resources (including those that could be considered tribal cultural resources) within the Metro ESOC APE with those of the current Project Site, except by general reference to their location within alluvial sediments.

For these reasons stated above, the TCR Assessment concluded that Exhibit 1 does not include evidence for the presence of a known tribal cultural resource or increased sensitivity for unidentified resources within the Project Site.

Exhibit 2. *California's Gabrielino Indians*

This is a four-page excerpt from a book published in 1962 by Bernice Johnston on the Gabrielino Indians. The selected pages all discuss the Gabrielino village Yaanga (spelled Yangna in the text), including its possible location and archaeological finds in the vicinity, specifically those near Union Station and the Bella Union Hotel as described in the following passages:

> *The ford by which the Spaniards crossed the (Los Angeles) river may have been the one at old Downey Street, near the present North Broadway bridge and from which can be seen the silhouette of the public buildings in the Civic Center of Los Angeles. The records of the expedition mention two Indian rancherias, one in the lovely spot where camp made on the night of August 2nd, another which was reached the next day after traveling "half a league" from crossing the river. This second village was undoubtedly Yangna…. Measuring with a radius of half a league from the probable crossing, one can draw an arc extending from the base of Fort Moore hill, now greatly cut back from its original girth, to the Union Station. There are those who place Yangna at the intersection of Aliso or Commercial and Alameda Streets but the rancheria there was merely a*

segregated district, a sad remnant of the original settlement. Where, on this arc, was the prehistoric village? …In actuality some characteristic items were unearthed during the building of Union Station in 1939, and considerably more, enough to interest the local newspapermen in 1870, when the historic Bella Union Hotel was rebuilt. This site, between Main and Los Angeles Streets north of Commercial, was cleared for a parking lot in 1940. It is on higher ground and appears to be more typical of the place in which a Gabrielino would have chosen to live…

…in all probability Yangna lay scattered in a fairly wide zone along the whole arc, and its bailiwick included as well seed-gathering grounds and oak groves where seasonal camps were set up.

Harrington's informant placed Jangna on the site of the plaza in the Pueblo of Los Angeles.

All locations referenced by Johnston are located between 0.8 and 1.1 miles north of the Project Site. Therefore, it the TCR Assessment concludes that Exhibit 2 does not include evidence for the presence of a known tribal cultural resource or increased sensitivity for unidentified resources within the Project Site.

Exhibit 3 (CONFIDENTIAL). *The Metropolitan Water District of Southern California Headquarters Facility Project, The People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H*

This is a five-page excerpt taken from a confidential technical report summarizing the results of archaeological data recovery conducted in 1996 by Applied Earthworks for the MWD Headquarters Facility Project. The report specifically discusses the prehistoric component of site P-19-001575/H (CA-LAN-1575/H) uncovered during excavation for the project. The site included extensive historical features including privies, wells, and architectural remains (reported separately), as well as a prehistoric Native American cemetery with several primary and secondary internments and numerous prehistoric artifacts, which were analyzed and presented in the report. The excerpted pages submitted during consultation include a section from the historical context that describes the ethnographic evidence for the location of Yaanga and previous archaeological research conducted within P-19-001575/H and the vicinity. The last page is taken from a section describing the methods and means by which burials and archaeological features were identified and recorded. Specifically, the text describes Native American deposits identified below, but also partially intermixed with a stratum of Historic-period sediments, both of which were identified

underneath a surface stratum of construction fill. The section also notes disturbances to the human remains from a utility trench.

The data obtained from P-19-001575/H clearly demonstrates the potential for significant prehistoric archaeological resources to be preserved beneath Historic-period deposits, which, in turn, can be preserved underneath asphalt and modern construction debris in a fully urbanized setting. The report documents archaeological remains preserved as far below the modern grade as 3.0 m (9.8 feet). The material was discovered within lenses of alluvial sediments deposited during floods within the Los Angeles River floodplain. Furthermore, they show that the deeper, coarse, and gravelly deposits lacked any archaeological materials, whereas the comparatively finer lenses of pebbly sand, sand, silty sand, and clayey silt were those that contained Native American human remains, artifacts, and features.

The relevance of the Goldberg et al. study to the Project Site is constrained by the scope of its research, which was not intended as a tribal cultural resources assessment for the entirety of the Los Angeles River floodplain. The authors do not specifically cite any known archaeological resources or the sensitivity for unidentified resources near the Project Site. Rather, Goldberg et al. focus on the specific site location and consider its physical setting and historical developments. The only discussion of the potential for resource potential outside its study are for the immediately adjoining parcels for which excavation was not continued, and the other known prehistoric finds between the MWD building and the Los Angeles Plaza, where the village site of Yaanga was reported to exist. Given these constraints, the TCR Assessment finds that the excerpts from Goldberg et al. evaluated here support three conclusions on the potential for unidentified sensitivity for the Project Site: that the presence of historical disturbances does not eliminate any possibility for tribal cultural resources to be preserved underneath; that the presence of low-energy alluvial sediments increases the overall potential; and that depth below surface is not an absolute indicator of potential.

To summarize, the TCR Assessment's review of Exhibits 1 through 3 did not find substantial evidence of an existing tribal cultural resource within the Project Site. The exhibits provide strong evidence of an overall increase in sensitivity for undocumented tribal cultural resources within the greater vicinity of the Project Site, particularly to the north, including underneath any non-native sediments, based on the proximity of the Project Site to the Los Angeles River, the former village site of Yaanga, and the recent archaeological discoveries described in Exhibits 1 and 3. However, no evidence was submitted that considers the specific location of the Project Site, including an account of its land-use history and the effect on resource preservation, and no criteria were

provided to indicate why the Project Site should be considered sensitive enough such that monitoring for tribal cultural resources would be required to avoid adverse impacts.

For these reasons, after engaging in a meaningful and good faith consultation with Gabrieleno Band of Mission Indians-Kizh Nation, the City concluded AB 52 consultation in a letter sent to Chairman Salas on November 28, 2018 (see **Appendix J-3** of the Draft EIR).

(6) Sensitivity Assessment

As discussed previously, the CHRIS records search and archival research identified nine archaeological resources, all historic period sites, within a 0.8-km (0.5-mile) radius of the Project Site. The NAHC returned negative results in their SLF search, though the Project Site was noted to be sensitive for the presence of undocumented tribal cultural resources. A previously recorded historic archaeological site (LAN-4460H) was identified during construction monitoring immediately southwest of the Project Site. The site contained a substantial deposit of domestic items and structural remains associated with residential development between the 1880s and 1920s. No tribal cultural resources were found intermixed or underlying the Historic-period materials.

Archival research documents the land-use history of the Project Site in its conversion from agriculture in the mid-nineteenth century, to mixed residential and industrial properties in the 1880s, to primarily industrial uses by the 1910s. Agricultural uses almost certainly involved plowing, which would have disturbed any native surface sediments and displacing any archaeological material that might have been located within the Project Site. Though no specific figures are available for middle nineteenth century agricultural practices in Los Angeles, plow zones observed in archaeological contexts typically do not extend more than a few feet (less than 1.0 m) below the surface.

Two 1890s residences were formerly located on the northeastern corner of the Project Site and were demolished or moved sometime between 1915 and 1921. In the lots adjacent to the residences, two warehouses were constructed and demolished prior to 1924, when the two-story building currently occupying the Project Site was constructed. Notably, one two-story office building at the northwest corner of Fifth Street and Colyton Street, originally constructed in 1915, was not demolished and is incorporated (with modifications) into the existing building in the southeast corner of the Project Site.

Geotechnical boring for the current Project documented up to 12 feet of fill directly underneath the paved surface and building. This fill material is described as containing construction debris, specifically brick fragments. Below the fill are deposits of dense sand with inclusions of gravel, cobbles, and potentially boulders, extending at least 80 feet below the surface. The bore samples also identified relatively thin—up to 8 or 9 feet

thick—lenses of sandy silt and silty sand, and loose-medium density sand within the larger sand matrix. The depositional pattern is consistent with high-energy alluvial deposits resulting from flood events along the Los Angeles River. Since 1815, two shifts of the river's alignment have been documented, with the main channel shifting from the east to the west side, then back again in 1825. Floods along the Los Angeles River were episodic but occurred numerous times in recorded history, which can potentially preserve archaeological remains where lower energy deposition occurs, or displace archaeological material in higher energy, erosional settings. These differential patterns of preservation would have varied on both large and small scales within the flood plain of the Los Angeles River and throughout the prehistoric and historic periods, until the modern flood control infrastructure was built in the middle twentieth century.

Archaeological finds near Union Station (approximately 0.9 miles north of the Project Site), also situated within the flood plain between the two former river courses, demonstrate that significant Native American archaeological remains can exist within alluvial sediment deposits underlying pavement, historic period disturbances, and fill. Many archaeologists have speculated that the archaeological site documented at Union Station was affiliated with the ethnographically documented Native American village of Yaanga, but archaeological finds at the MWD Headquarters Facility found the association with those materials and the village site to be unsupported. Most accounts of the village location consider it to have been situated throughout a relatively broad area between Fort Moore Hill and Union station, within a few blocks of the pueblo plaza.

That Native American settlements and activity occur in higher concentration around permanent water sources is undisputed by archaeologists. The significance of the Los Angeles River to the Gabrielino is well documented in ethnographic works and oral history and was emphasized in Native American consultation conducted for the current Project. Because of the proximity to the Los Angeles River and the estimated location of Yaanga relative to the Project Site, the TCR Assessment finds an overall increase in the sensitivity for Native American activity near the Project Site. However, additional criteria are required to distinguish levels of sensitivity for unidentified tribal cultural resource potential. Specifically, land-use history, existing disturbances to the Project Site, and the depositional setting must be considered in greater detail and given weight in determining the sensitivity. The presence of non-native or otherwise historically modified sediments at depths of 8–12 feet (2.5–3.7 m), combined with the evidence of a high-energy depositional setting in the alluvial substrate, significantly reduces the sensitivity for the preservation of any tribal cultural resources within the Project Site. Given these considerations, the TCR Assessment finds the Project Site has a low to moderate sensitivity for containing tribal cultural resources.

3. Project Impacts

a) Methodology

This section presents an overview of the methodology used to identify the potential for archaeological resources within the Project Site.

(1) CHRIS Records Search

On February 14, 2018 the TCR Assessment conducted a confidential search of the CHRIS records at the SCCIC, located on the campus of California State University, Fullerton. The SCCIC maintains records of previously documented cultural resources (including those that meet the definition of a tribal cultural resource) and technical studies; it also maintains copies of the OHP's portion of the Historic Resources Inventory. The search included any previously recorded archaeological resources (i.e., excludes historic buildings) within the Project Site and surrounding 0.8-km (0.5-miles) area. The purpose of the CHRIS records search is to identify whether any archaeological or tribal cultural resources have been documented in the Project Site and assess the potential for undocumented resources to be present by comparison to adjacent areas. Confidential CHRIS results include specific information on the nature and location of sensitive archaeological sites, which should not be disclosed to the public or unauthorized persons and are exempt from the Freedom of Information Act. The information included in a confidential CHRIS records search is needed to assess the sensitivity for undocumented tribal cultural resources and inform the impact analysis. Appendix A of the Tribal Cultural Resources Report included in **Appendix J** of the Draft EIR includes a summary of previous studies conducted in the Project Site and records search radius, but site records and copies of reports have been excluded. Thus, Appendix A is not considered confidential.

(2) Archival Research

Concurrent with the confidential CHRIS records search, the TCR Assessment also reviewed property-specific historical and ethnographic context research to identify information relevant to the Project Site. Research focused on a variety of primary and secondary materials relating to the history and development of the Project Site, including historical maps, aerial and ground photographs, ethnographic reports, and technical reports prepared for the Project. Historical maps that have been drawn to-scale were georeferenced using ESRI ArcMAP v10.5 in order to show precise relationships to the Project Site.

Sources consulted included the following publicly accessible data sources:

- City of Los Angeles OHR (SurveyLA);
- City of Los Angeles Department of Building and Safety (building permits);
- Sanborn Fire Insurance Company Maps (Sanborn maps);
- Los Angeles Public Library (maps and photographs);
- Huntington Library Digital Archives (maps);
- University of Southern California Digital Library (photographs and manuscripts);
- University of California, Santa Barbara Digital Library (aerial photographs);
- David Rumsey Historical Map Collection;
- Library of Congress (maps and illustrations); and
- USGS historical topographic maps.

In addition, the TCR Assessment reviewed technical reports prepared for the project including the geotechnical report and the Historical Resources Report included as **Appendix D-1** of the Draft EIR.

(3) Sensitivity Assessment

In circumstances where a known archaeological resource or tribal cultural resource is not present, the TCR Assessment assessed the potential for an undocumented resource (in the form of a buried archaeological site) to be present. That determination considers historical use of the Project vicinity, broadly, and the physical setting, specifically, including an assessment of whether the setting is capable of containing buried archaeological material. Lacking any data specifically gathered to assess the presence or absence of archaeological material below the surface, the resulting sensitivity is by nature qualitative, ranging along a spectrum of increasing probability for encountering such material, designated here as low, moderate, and high. The TCR Assessment assessed the sensitivity of the Project Site to contain tribal cultural resource, including either prehistoric or historic-period Native American archaeological resources. In general, for areas in which there was historical use and poor physical integrity within the Project Site, (e.g., high levels of disturbances from recent development), the resulting sensitivity assessment would be low. Areas that show some evidence of activity or a likelihood based on the presence of natural features (e.g. perennial water), and retain sediments dated to the approximate time period of that activity, the resulting sensitivity assessment will be either moderate or high. In some

cases, evidence of archaeological material from non-archaeological by sources (e.g. geotechnical boring logs, anecdotal accounts by local residents or listed in historical accounts) can be sufficient for elevating the sensitivity from moderate to high.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to tribal cultural resources if it would:

- ***Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

(2) L.A. CEQA Thresholds Guide

The *L.A. CEQA Thresholds Guide* (Threshold Guide) does not specifically address tribal cultural resources. Thus, in assessing impacts related to tribal cultural resources in this section, the City will use Appendix G as the thresholds of significance.

c) Project Design Features

No specific project design features (PDFs) are proposed with regard to tribal cultural resources as part of the Project.

d) Analysis of Project Impacts

Threshold (a) ***Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of size and scope of the landscape, sacred place, or object with cultural value to a California Native tribe, and that is 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)?***

Threshold (b) ***Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of size and scope of the landscape, sacred place, or object with cultural value to a California Native tribe, and that is 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, the lead agency shall consider the significance of the resource to a California Native American tribe?***

(1) Impact Analysis

No previously recorded tribal cultural resources were identified within the Project Site. The Project Site was further assessed for the potential to contain deeply buried, previously unidentified archaeological materials, including those that meet the definition of a tribal cultural resources, and this potential was found to be low to moderate. The City submitted notification letters to the tribal parties listed above in Table IV.N-2. The City received one response requesting consultation from the Gabrieleño Band of Mission Indians—Kizh Nation. During a conference call conducted on July 12, 2017 and in subsequent email correspondences, the Gabrieleño Band of Mission Indians—Kizh Nation stated that tribal cultural resources could be present to a depth of 40 feet below the surface, submitted three documents as evidence to substantiate the claim of a tribal cultural resource being potentially present, and requested a Native American monitor be present during all ground disturbing activities. The documents submitted during consultation were reviewed as part of the TCR Assessment and found not to provide substantial evidence of a known tribal cultural resource within the Project Site. The documents provide strong evidence of increased sensitivity for undocumented tribal cultural resources in the general vicinity of the Project Site, but given the existing

disturbances, the likelihood of any such resources being preserved is sufficiently low, such that the level of Native American monitoring for tribal cultural resources would not be warranted.

For these reasons, after engaging in a meaningful and good faith consultation with Gabrieleno Band of Mission Indians-Kizh Nation, the City concluded AB 52 consultation in a letter sent to Chairman Salas on November 28, 2018 (see **Appendix J-3** of the Draft EIR).

Though unlikely, if present, it is possible that unidentified tribal cultural resources may be inadvertently discovered through implementation of the Project. However, the City has established a standard condition of approval to address inadvertent discovery of tribal cultural resources. Should tribal cultural resources be inadvertently encountered, the City's standard condition of approval regarding the inadvertent discovery of tribal cultural resources provides for temporarily halting of construction activities near the encounter and the Project's certified construction monitor notifying the City and Native American tribes that have informed the City that they are traditionally and culturally affiliated with the geographic area of the Project Site. If the City determines that the object or artifact appears to be a tribal cultural resource, the City would provide any affected tribe a reasonable period of time to conduct a site visit and make recommendations regarding the monitoring of future ground disturbance activities, as well as the treatment and disposition of any discovered tribal cultural resources. The Project Applicant would then implement the tribe's recommendations, if a qualified archaeologist reasonably concludes that the tribes' recommendations are reasonable and feasible. The recommendations would then be incorporated into a tribal cultural resource monitoring plan, and once the plan is approved by the City, ground disturbance activities could resume.

Thus, the Project would not adversely affect known tribal cultural resources. Therefore, the Project would not result in significant impacts related to a substantial adverse change in the significance of a tribal cultural resource, as defined in PRC Section 21074.

(2) Mitigation Measures

No significant impacts related to tribal cultural resources have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Impacts related to tribal cultural resources would be less than significant.

e) Cumulative Impacts

(1) Impact Analysis

As provided in **Section III, Environmental Setting**, of this Draft EIR, there are 117 cumulative development projects within an approximate 1.5-mile radius of the Project Site. While the majority of these projects are located a substantial distance from the Project Site (as shown in Figure IV.L-6 in **Section IV.L, Transportation/Traffic**, of the Draft EIR), several are located in proximity to the Project Site. Collectively, the cumulative projects involve a variety of residential uses (i.e., live/work units and condominiums), retail, restaurant, commercial, hotel, industrial, and office uses, consistent with existing uses in the Project Site, as well as the Arts District and Central City North Community Plan area.

The Project and the cumulative projects are located within an urbanized area that has been disturbed and developed over time. In the event that tribal cultural resources are uncovered, each cumulative project would be required to comply with applicable regulatory requirements in the event of inadvertent discovery. In addition, all cumulative projects and other future development within the area would be required to comply with the consultation requirements of AB 52 to determine and mitigate any potential impacts to tribal cultural resources. **Therefore, cumulative impacts to tribal cultural resources would be less than significant.**

(2) Mitigation Measures

No significant cumulative impacts related to tribal cultural resources have been identified. Thus, no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to tribal resources would be less than significant.

IX. Preparers of the Draft EIR

Lead Agency

City of Los Angeles
Department of City Planning
221 N. Figueroa, Suite 1350
Los Angeles, CA 90012
William Lamborn, City Planner

Project Applicant

Arts District Development, LLC
1129 E. 5th Street
Los Angeles, CA 90013
Kevin Chen

Architect

Togawa Smith Martin, Inc.
444 S. Flower Street, Suite 1220
Los Angeles, CA 90071
Tom Greer, Principal
Tom, Hsieh, Principal

Entitlement and Infrastructure Consultant

Psomas
555 Flower Street, Suite 4300
Los Angeles, CA 90071
Anne Williams, Senior Project Manager
David Curtis, Senior Project Manager, Engineering

CEQA Consultant

CAJA Environmental Services, LLC
15350 Sherman Way, Suite 315
Van Nuys, CA 91406
Chris Joseph, Owner/Principal
Rob Carnachan, Principal
Kerrie Nicholson, Principal
Rachel Zacuto, Assistant Environmental Planner
Andrea Schultz, Head of Operations
Sherrie Cruz, Senior Graphics Specialist

Air Quality/GHG Emissions and Noise Consultant

DKA Planning
1513 W. Sepulveda Boulevard, Suite D
Torrance, CA 90501
Doug Kim, Principal
Noah Transki, Associate Environmental Planner

Archaeological and Tribal Resources Consultant

SWCA Environmental Consultants
51 W. Dayton Street
Pasadena, CA 91105
Chris Millington, Senior Archaeologist

Historic Resources Consultant

GPA Consulting
617 S. Olive Street, Suite 910
Los Angeles, CA 90014
Teresa Grimes, Principal Architectural Historian
Laura Groves van Onna, Architectural Historian I
Emily Rinaldi, Architectural Historian II

Geotechnical and Environmental Consultant

GeoDesign, Inc.
2121 S. Town Centre Place, Suite 300
Anaheim, CA 92806
Chris, Zadoorian, G.E.

Traffic Consultant

Fehr & Peers
600 Wilshire Boulevard, Suite 1050
Los Angeles, CA 90017
Tom Gaul, Principal
Amanda Heinke, Senior Engineer/Planner

Public Agencies and Departments Consulted

Los Angeles Bureau of Sanitation
Ali Poosti, Wastewater Engineering Division Manager

Los Angeles Police Department
Commander Andrew J. Smith

Los Angeles Fire Department
Ralph M. Terrazas, Fire Chief
Kristin Crowley, Fire Marshal

Los Angeles Department of Recreation and Parks
Michael A. Shull, General Manager

Los Angeles Unified School District
Rena Perez, Director of Master Planning and Demographics

Los Angeles Public Library

Los Angeles Department of Transportation
Wes Pringle, Transportation Engineer

V. Other CEQA Considerations

1. Summary of Significant Unavoidable Impacts

Section 15126.2(b) of the State CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided. Specifically, Section 15126.2(b) states:

> *Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.*

Based on the analysis included in **Section IV, Environmental Impact Analysis,** of the Draft EIR, the Project would result in a significant unavoidable environmental impacts related to the following issues:

- Noise
    - Construction vibration (human annoyance) (Project-specific and cumulative impacts)
    - Cumulative construction noise
- Transportation/Traffic
    - Cumulative intersection level of service (LOS)

All other impacts associated with the Project would be less than significant or reduced to less than significant with mitigation.

a) Noise

(1) Construction Vibration (Human Annoyance)

(a) Project-Specific Impact

As discussed in **Section IV.I, Noise,** of the Draft EIR, the 1201 E. 5th Street Residence (a vibration-sensitive receptor) is located just 60 feet east of the Project Site. At this distance, the receptor could experience groundborne vibration decibel (VdB) levels of 75.6 VdB from auger drills and large steel-tracked earthmoving equipment. This would exceed the Federal Transit Administration's (FTA) 72 VdB significance criteria for

frequent vibration events impacting residential land uses. Additionally, loaded haul and delivery trucks driving past this receptor could expose it to peak groundborne vibration levels of 97.9 VdB, which would also exceed the FTA significance criteria for this land use. Additionally, although Beacon Lofts (a vibration-sensitive receptor) is located 500 feet north of the Project Site, well beyond the distance where on-site construction-generated vibrations could be perceptible, up to 40 haul trucks per hour and delivery trucks could pass this receptor when accessing the Project Site, exposing the receptor to peak groundborne vibration levels of 81.6 VdB. This would also exceed the FTA's 72 VdB significance criteria for frequent vibration events impacting residential land uses. Therefore, without mitigation, the Project's human annoyance vibration impact would be significant.

The following mitigation measures have been identified to reduce the Project's human annoyance vibration impact:

NOI-MM-3: No more than 7 haul trucks per hour shall access or exit the Project via Colyton Street. The Project Applicant (or grading or haul contractor) shall maintain logs documenting the hourly and daily number of haul trucks accessing or exiting the site via Colyton Street that shall be provided to the Construction Monitor. The logs shall contain license plate numbers or vehicle identification numbers (VIN) to identify trucks visiting the site. The logs shall be validated every two weeks by the Construction Monitor and maintained on-site and made available to the SCAQMD or the City for inspection upon request.

NOI-MM-4: Construction activities that produce vibration shall be sequenced so that vibration sources within 80 feet of the 1201 E. 5th Street Residence and within 11 feet of 440 Seaton Street and 441 S. Colyton Street do not operate simultaneously.

Mitigation Measure NOI-MM-4 would reduce the Project's on-site construction vibration sources affecting the 1201 E. 5th Street Residence by restricting the simultaneous operation of construction equipment that could generate substantial human annoyance groundborne vibration levels at this receptor. However, it would be infeasible to outright prohibit the individual operations of all construction equipment capable of generating such an impact at the 1201 E. 5th Street Residence. As a result, even with mitigation, the receptor could still be exposed to frequent vibration events exceeding the FTA's 72 VdB significance criteria for residential uses. Therefore, even with this mitigation measure in place, the Project's human annoyance vibration impact associated with on-site construction sources would be significant and unavoidable.

With regard to human annoyance due to vibration impacts from haul trucks and other construction vehicles, Mitigation Measure NOI-MM-3 would prohibit more than 7 haul trucks from accessing the Project via Colyton Street per hour. This would reduce the number of haul truck passbys and associated vibration events affecting Beacon Lofts and the 1201 E. 5th Street Residence from potentially 40 inbound trucks per hour (320 per work day) to no more than 7 inbound trucks per hour (42 per workday). Despite this mitigation, the impact of 42 haul truck passbys per day generating peak potential vibration events of 81.6 VdB at Beacon Lofts and 97.9 VdB at the 1201 E. 5th Street Residence would still exceed the FTA's 75 VdB residential land use significance criteria for between 30 and 70 vibration events per day. Though it is likely that both of these residences already experience frequent truck passbys each hour due to their locations in a largely industrial and commercial neighborhood with many nearby warehouses (Beacon Lofts, in particular, as it is located adjacent to a major arterial roadway), this impact would nevertheless be considered significant. Therefore, even with this mitigation measure in place, the Project's human annoyance vibration impact associated with off-site construction vehicles would be significant and unavoidable.

(b) Cumulative Impact

Groundborne vibration resulting from the Project's on-site construction activities and off-site haul truck trips would have a significant and unavoidable impact at the nearest off-site residential receptor (1201 E. 5th Street). The nearest cumulative project to this location is approximately 220 feet away (Cumulative Project No. 101). Groundborne vibration generated by this cumulative project's on-site construction activities would not be perceptible at the residential receptor. However, any construction-related haul truck trips generated by this and the other cumulative projects that pass by the 1201 E. 5th Street Residence could create additional vibration events at this receptor that would exceed the FTA's criteria for residential land uses, which range between 72 and 80 VdB. Given that the Project's human annoyance vibration impact would be significant and unavoidable at the 1201 E. 5th Street Residence and potentially at the Beacon Lofts residential receptor, any additional construction noise associated with the cumulative projects would exacerbate this impact. No technically feasible mitigation measures beyond Mitigation Measures NOI-MM-3 and NOI-MM-4 are available to further reduce the Project's contribution to potential cumulative construction vibration impacts. Therefore, the Project's contribution to a potentially significant cumulative construction vibration impact would be significant and unavoidable.

(2) Cumulative Construction Noise

As discussed in **Section IV.I, Noise**, of the Draft EIR, it was determined that with mitigation (i.e., Mitigation Measures NOI-MM-1 through NOI-MM-3), the Project's on- and off-site construction activities could increase ambient noise levels at the 1201 E. 5th

Street Residence (a noise-sensitive receptor) by 4.8 dBA L_{eq}. Though this noise level would not exceed the 5 dBA threshold of significance and would not result in a Project-specific construction noise impact, practically any additional noise from concurrent construction activities would be capable of causing a cumulative noise impact in excess of 5 dBA. Cumulative projects in the vicinity of the 1201 E. 5th Street Residence. Cumulative projects in the vicinity of the 1201 E. 5th Street Residence include Project No. 84 (926 E. 4th Street), Project No. 78 (940 E. 4th Street), Project No. 89 (401 S. Hewitt Street), Project No. 99 (527 Colyton Street), and Project No. 101 (1100 E. 5th Street). Cumulative Project No.101 and Cumulative Project No. 99, the nearest cumulative projects, are each located over 200 feet from the 1201 E. 5th Street Residence (approximately 220 feet and 420 feet, respectively). It is unlikely that the on-site construction activities of these cumulative projects would be capable of raising noise levels at the receptor by more than an additional 1 dBA, especially if these cumulative projects have adopted or will adopt mitigation programs similar to the measures adopted by the Project. Nevertheless, given the small margin between the Project's own 4.8 dBA impact at this noise-sensitive receptor and the 5 dBA threshold, it is likely that concurrent construction activities would have the potential to exceed this threshold, especially if the cumulative projects were to require haul truck access via 5th Street and Colyton Street. No technically feasible mitigation measures beyond Mitigation Measures NOI-MM-1 through NOI-MM-3 (listed below) are available to further reduce the Project's contribution to potential cumulative construction noise impacts. Therefore, the Project's contribution to a potentially significant cumulative construction noise impact would be significant and unavoidable.

NOI-MM-1: All diesel-powered construction vehicles shall be equipped with exhaust mufflers or other suitable noise-reduction devices.

NOI-MM-2: Temporary sound barriers with a transmission loss value of at least 25 dBA shall be erected along the Project's eastern boundary. At plan check, building plans shall include documentation prepared by a noise consultant verifying compliance with this measure.

NOI-MM-3: No more than 7 haul trucks per hour shall access or exit the Project via Colyton Street. The Project Applicant (or grading or haul contractor) shall maintain logs documenting the hourly and daily number of haul trucks accessing or exiting the site via Colyton Street that shall be provided to the Construction Monitor. The logs shall contain license plate numbers or vehicle identification numbers (VIN) to identify trucks visiting the site. The logs shall be validated every two weeks by the Construction Monitor and maintained on-site and made available to the SCAQMD or the City for inspection upon request.

b) Transportation/Traffic

As discussed in **Section IV.L, Transportation/Traffic**, of the Draft EIR, the analysis of future (2021) with Project traffic conditions concluded that without mitigation, the Project would result in significant impacts at 6 of the 14 study intersections. With implementation of Mitigation Measures TR-MM-1 and TR-MM-2 (listed below), impacts at 5 of the 6 significantly impacted intersections would be reduced to less than significant. The Los Angeles Department of Transportation (LADOT) considered whether physical traffic mitigation improvements were available to fully mitigate the significant intersection LOS impacts. However, no feasible physical mitigation measures are available, due to the constraints of the existing physical conditions and new standards and geometric design constraints outlined in the recently adopted Vision Zero, Mobility Plan 2035, and Complete Streets Design Guide. For these reasons, impacts to the intersection of Alameda Street and 6th Street would remain significant and unavoidable during the AM peak hour.

TR-MM-1: A preliminary Transportation Demand Management (TDM) program shall be prepared as part of the Project and provided for Los Angeles Department of Transportation (LADOT) review prior to the issuance of the first building permit for the Project. A final TDM program approved by LADOT shall be required prior to the issuance of the first certificate of occupancy for the Project. The TDM program should include, but not be limited to, the following strategies:

- An on-site Transportation Information Center;
- Preferential rideshare loading/unloading or parking location;
- Convenient parking and facilities for bicycle riders;
- Guaranteed ride home programs for employees;
- Allowance for flexible and alternative work schedules;
- Administrative support for the formation of carpools/vanpools;
- Promotion of transit, walk, or bike to work events;
- Project design elements to ensure a bicycle, transit, and pedestrian-friendly environment;
- Unbundled parking from housing cost;

- Parking cash-out programs for Project and uses as appropriate;
- A Covenant and Agreement to ensure that the TDM program will be maintained;
- Make a one-time financial contribution of $50,000 to the City of Los Angeles Department of Transportation to be used in the implementation of the Mobility Hub in the general area of the Project;
- Make a one-time fixed-fee financial contribution of $50,000 to the City's Bicycle Plan Trust Fund to implement bicycle improvements in the general Downtown Los Angeles area of the Project.

TR-MM-2: The Project shall contribute up to $175,000 toward Transportation Systems Management (TSM) improvements within the Central District that may be considered to better accommodate intersection operations and increase intersection capacity throughout the study area. LADOT's ATSAC Section has identified the need of new system upgrades from Alameda Street & 4th Place/3rd Street to Alameda Street & 7th Street, and from Alameda Street & 7th Street to 7th Street & Mateo Street. The system upgrades would provide and improve the network capacity for additional closed-circuit television (CCTV) cameras to real-time video monitoring of intersection, corridor, transit, and pedestrian operations in Downtown Los Angeles. Collectively, these TSM improvements provide a system wide benefit by reducing delays experienced by motorists at study intersections.

2. Reasons Why the Project is being Proposed, Notwithstanding Significant Unavoidable Impacts

In addition to identification of a project's significant unavoidable impacts, Section 15126.2(b) of the CEQA Guidelines states that where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.

As discussed in **Section II, Project Description**, of the Draft EIR, the Project would involve the construction and operation of a new mixed-use live/work, hotel, retail, restaurant, art gallery, and artist collaborative space in an existing urbanized area of the

City of Los Angeles (City). The Project Site is located approximately 0.5 miles south of the Los Angeles County Metropolitan Transportation Authority (Metro) Gold Line Little Tokyo/Arts District Station and approximately 0.2 miles northeast from the Metro Rapid 720 bus stop. The Metro Gold Line provides access to other transit lines operated by Metro. The Project Site is also served by LADOT's Downtown DASH A and D bus lines, which run on weekdays along 3rd Street and Temple Street (respectively) near the Project Site, and Metro Local 18 bus service along 6th Street near the Project Site on both weekdays and weekends.

As discussed further in **Section IV.H, Land Use and Planning**, of the Draft EIR, proximity of the Project Site to the Metro Gold Line Little Tokyo/Arts District Station, the Metro Rapid 720 bus line, and other transit options would encourage the use of transit by on-site residents and their guests, as well as by hotel guests and retail and restaurant patrons. The Project's inclusion of a mix of retail uses and residential units and bicycle spaces/storage on a site within close proximity of transit lines would promote walkability in the vicinity of the Project Site, and encourage the use of bicycles as a mode of transportation. In addition, the Project's residential units would contribute toward meeting the demand for housing in the City.

The Project would support policy directives reflected in both local and regional land use plans. Specifically, as discussed in **Section IV.C, Air Quality**, and **Section IV.L, Transportation/Traffic**, of the Draft EIR, the Project Site is located in a High-Quality Transit Area (HQTA) as designated by the Southern California Association of Governments (SCAG). HQTAs are described as generally walkable transit villages or corridors that are within 0.5 miles of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. Local jurisdictions are encouraged to focus housing and employment growth within HQTAs. The Project would focus growth within a HQTA, concentrating mixed-use, pedestrian-friendly development in an area well-served by existing public transportation, including Metro bus lines as well as the Metro Gold Line Little Tokyo/Arts District Station.

In addition, the Project would be located on a site that is in proximity to established commercial, retail, restaurant, and entertainment uses within the greater Downtown Los Angeles area. At the street level, the Project would promote pedestrian-friendliness through its placement of distinct pedestrian-level entrances to the proposed retail, restaurant, and hotel uses, an art plaza on the southwest corner of the Project Site, and a mixture of movable and fixed outdoor furniture and an outdoor dining area along the sidewalk at the southeast corner of the site.

As discussed above, the Project would result in significant and unavoidable impacts related to construction vibration (human annoyance), cumulative construction noise, and traffic intersection LOS. Three alternatives to the Project were considered in **Section VI,**

Alternatives, of the Draft EIR – **Alternative 1 (No Project Alternative), Alternative 2 (Existing Zoning Alternative),** and **Alternative 3 (Reduced Density Alternative)**. Other alternatives taken into consideration in an effort to reduce or avoid the Project's significant and unavoidable construction vibration (human annoyance) (Project-specific and cumulative impacts), cumulative construction noise, and traffic intersection LOS impacts included a Preservation of Existing Structure alternative, an Alternative Setbacks alternative, a Reduced Construction Hours alternative, and an Alternative Project Site alternative. These alternatives were generally rejected for further review primarily due to inability of the alternatives to substantially reduce or avoid the identified significant and unavoidable impacts and due to the infeasibility of implementing the alternatives.

The **No Project Alternative (Alternative 1)** would avoid all of the Project's significant and unavoidable impacts. However, Alternative 1 would not meet any of the Project Objectives or the Project's underlying purpose of redeveloping a site within the Arts District with a new mixed-use development that includes a combination of complementary uses, such as live/work dwelling units and community-serving retail, hotel, and Artist CoLab uses..

The **Existing Zoning Alternative (Alternative 2)** would redevelop the Project Site in accordance with the existing zoning designation, height limit, and floor area ratio (FAR) allowed at the Project Site. Alternative 2 would eliminate the significant and unavoidable intersection LOS at the intersection of Alameda Street and 6th Street during the AM peak hour. Alternative 2 would reduce the duration of but would not eliminate the significant and unavoidable construction vibration impacts (Alternative-specific and cumulative impacts) or the cumulative construction noise impact. These impacts would remain significant and unavoidable.

Alternative 2 would not fully achieve the Project objectives to the same extent as the Project. Specifically, Alternative 2 would be 82 percent smaller than the Project and would not maximize the density of an existing TPA site to the same extent as the Project. This would result in less density in proximity to mass transit for employees and visitors. Furthermore, by excluding residential and hotel uses, Alternative 2 would not create the range of uses within a mixed-use project, including hotel and residential, called for in the Project Objectives, nor would some of the complementary uses defined in the Project Objectives (Artist CoLab and live/work units) be achieved at the Project Site with Alternative 2.

Alternative 2 would result in a reduction of 94 jobs compared to the jobs created by the Project and, thus, would not create as many permanent jobs to support local workers as the Project. Additionally, Alternative 2 would not achieve the Project Objective to improve public safety to the same extent as the Project since residents and hotel guests

would not be on-site to activate the area on a 24-hour basis. Alternative 2 would contribute to the City's economic growth by developing land uses that generate tax revenues and provide construction jobs, but it would do so to a lesser degree than the Project as it would not have hotel rooms or residential units and would create fewer jobs than the Project. Overall, Alternative 2 would be either inconsistent or partially consistent with eight of the nine Project Objectives.

The **Reduced Density Alternative (Alternative 3)** includes redevelopment of the Project Site a manner similar to the Project but with a density reduction of approximately 27 percent. With mitigation, Alternative 3 would eliminate the significant and unavoidable intersection LOS impact at the intersection of Alameda Street and 6th Street during the AM peak hour. Alternative 3 would reduce the duration of but would not eliminate the significant and unavoidable construction vibration impacts (Alternative-specific and cumulative impacts) or the cumulative construction noise impact.

Alternative 3 would not fully achieve the Project objectives to the same extent as the Project. Alternative 3 would reduce the number of live/work units developed at the Project Site as compared to the Project. Thus, Alternative 3 would provide less density within a TPA site than the Project. Also, by reducing the amount of retail and restaurant space, Alternative 3 would not achieve the vehicle trip-reducing benefits of mixed-use co-location or increase access to local transit for local residents, employees, and visitors to the same extent as the Project. Alternative 3 would not provide as many needed housing units, including market-rate and affordable units, in proximity to the Metro Gold Line Little Tokyo/Arts District Station as would the Project.

Alternative 3 would contribute to the City's economic growth by developing land uses that generate tax revenues and provide construction jobs, but it would do so to a lesser degree than the Project as it would have significantly fewer hotel and residential units and would create fewer jobs than the Project. Alternative 3 would result in a reduction of 109 jobs compared to the jobs created by the Project and thus, would not contribute to the City's economic growth to the same extent as the Project.

Overall, Alternative 3 would be consistent with six of the nine Project Objectives. Alternative 3 would also be consistent, but to a lesser degree than the Project, with the remaining three Project Objectives, because of the Alternative's decreased number of housing units, decreased number of affordable housing units, decreased number of hotel rooms, and reduction in jobs created when compared to the Project.

Alternative 2 was selected as the Environmentally Superior Alternative to the Project. Alternative 2 represents a reduced density development that is in accordance with the existing zoning designation, height limit, and FAR allowed within the Project Site. Alternative 2 would eliminate the sole significant and unavoidable operational impact of

the Project (AM peak hour-traffic impacts at the intersection of Alameda Street and 6th Street), but would not eliminate the significant and unavoidable vibration and cumulative noise impacts during Project construction. However, Alternative 2, would not meet most of the Project Objectives to the same degree as the Project, because the alternative would not develop residential units, restaurants, or hotel rooms and would not increase density on a TPA site, thus reducing the multiple environmental benefits that arise from mixed-use development in an urban, transit-accessible location.

The Project, as proposed, satisfies the Project Objectives to a greater degree than any of the proposed alternatives. The Draft EIR also includes mitigation measures that reduce the potential impacts associated with the Project to the maximum extent feasible. Overall, the Project presents several benefits that override the limited adverse effects the Project may have on the environment.

3. Significant Irreversible Environmental Changes

Section 15126.2(c) of the CEQA Guidelines states that the "[u]ses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely." Section 15126.2(c) further states that "[i]rretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

The types and level of development associated with the Project would consume limited, slowly renewable and non-renewable resources. This consumption would occur during construction of the Project and would continue throughout its operational lifetime. The development of the Project would require a commitment of resources that would include: (1) building materials, (2) fuel and operational materials/resources, and (3) the transportation of goods and people to and from the Project Site.

Demolition of the existing building on the Project Site and excavation would result in production of waste material. As discussed in **Section IV.M.4, Utilities and Service Systems – Solid Waste**, of the Draft EIR, the Project would recycle and salvage construction soil export and debris including concrete, asphalt, wood, drywall, metals and other miscellaneous and composite materials. Proper separation of demolition debris would assist environmental clean up and allow for the proper disposal of hazardous materials that may be found within existing buildings or in on-site soil materials. On March 5, 2010, the City Council approved Ordinance No. 181,519 pertaining to a Citywide Construction and Demolition (C&D) Debris Recycling Ordinance that requires all mixed C&D waste generated within City limits be taken to City certified C&D waste processors. The ordinance became effective in January 2011.

Construction of the Project would require consumption of resources that cannot be replenished or which may renew slowly as to be considered non-renewable. These resources would include certain types of lumber and other forest products, aggregate materials used in concrete and asphalt (e.g., sand, gravel and stone), metals (e.g., steel, copper and lead), petrochemical construction materials (e.g., plastics) and water. Fossil fuels, such as gasoline and oil, would also be consumed in the use of construction vehicles and equipment.

The commitment of resources required for the type and level of proposed development would limit the availability of these resources for future generations for other uses during the operation of the Project. However, this resource consumption would be consistent with growth and anticipated change in the Los Angeles region. In addition, during operation, the Project would provide a designated recycling area for Project residents to facilitate recycling in accordance with the City's Space Allocation Ordinance (Ordinance No. 171,687) and the Los Angeles Green Building Code (LAGBC). Thus, the consumption of non-renewable building materials such as lumber, aggregate materials, and plastics would be reduced.

The Project would be developed within an existing urbanized area and would provide greater density in close proximity to existing transit, including the Metro Gold Line Little Tokyo/Arts District Station, thereby helping to reduce vehicle miles traveled (VMT), which could also potentially reduce the need for additional infrastructure. In addition, the Project would be consistent with the LAGBC, which requires that energy efficient, renewable, and water saving features and technologies be utilized in Project design and construction. Finally, the Project would incorporate the following sustainability features:

- Water Conservation
    - High-efficiency toilets (with flush volume of 1.06 gallons of water per flush or less) throughout, including ultra-low-flow urinals in all nonresidential restrooms, as appropriate.
    - Residential lavatory faucets with a maximum flow rate of 1.2 gallons per minute and kitchen faucets with a maximum flow rate of 1.5 gallons per minute.
    - High-efficiency washers, whether within individual units (with water factor of 6.0 or less) and/or in common laundry rooms (commercial washers with water factor of 7.5 or less). Equipment is required to be Energy Star-certified.
    - High-efficiency dishwasher within individual units, using 3.5 gallons per cycle or less. Equipment is required to be Energy Star-certified.

- No-flush or waterless urinals in all nonresidential restrooms as appropriate.
- Nonresidential lavatory faucets with a maximum flow rate of 0.4 gallons per minute and of a self-closing design (i.e., that would automatically turn off when not in use.
- Nonresidential kitchen faucets (except restaurant kitchens) with a maximum flow rate of 1.5 gallons per minute. Restaurant kitchen faucets shall have pre-rinse self-closing spray heads with a maximum flow rate of 1.6 gallons per minute.
- Installation of tankless and on-demand water heaters in commercial kitchens and restrooms, where appropriate.
- Water-saving pool filter.
- Pool/spa recirculating filtration equipment.
- Pool splash troughs around the perimeter that drain back into the pool.
- Leak detection system for swimming pools and Jacuzzi.
- Minimum irrigation system distribution uniformity of 75 percent.
- Use of proper hydro-zoning, turf minimization, zoned irrigation and use of native/drought-tolerant plant materials.
- Use of landscape contouring to minimize precipitation runoff.

• Energy Conservation and Efficiency

- Installation of Energy Star-certified products and appliances, where appropriate.
- Meeting or exceeding Title 24, Part 6, California Energy Code baseline standard requirements for energy efficiency, based on the 2016 Energy Efficiency Standards requirements. Examples of design methods and technologies that could be implemented may include, but would not be limited to, high-performance glazing on windows, appropriately-oriented shading devices, high-efficiency boilers (if single metered); instantaneous water heaters (if individual meters), and enhanced insulation to minimize thermal gain.
- Application of energy-saving lighting technologies and components to reduce the Project's electrical usage profile. Examples of these

components include occupancy-sensing controls (where applicable), use of light-emitting diode (LED) lighting or other energy-efficient lighting technologies where appropriate, and exterior lighting controlled by photo sensor and/or timeclocks to ensure safety and visibility while preventing unnecessary energy usage.

- Commissioning of building energy systems to verify that the Project's building energy systems are installed, calibrated, and performing to the Owner's Project requirements.

- Transportation
  - Provision of EV charging stations in the parking structure; 5 percent of total spaces designated for low emitting, fuel-efficient and carpool/van pool vehicles.
  - Twenty percent of the total code-required parking spaces shall be capable of supporting future electric vehicle charging equipment.
- Air Quality
  - Prohibit the use of natural gas-fueled fireplaces in the proposed live/work units.
  - Provide filtered outside air supply sufficient to meet American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) 62.1 standards.
  - Participation in fundamental refrigerant management to preclude the use of chlorofluorocarbons (CFCs) in heating, cooling, and ventilation (HVAC) systems.
  - Use of adhesives, sealants, paints, finishes, and other materials that emit low quantities of volatile organic compounds (VOCs) and/or other air quality pollutants.
- Solid Waste
  - At least 50 percent of construction and demolition debris from Project construction would be diverted from landfills.
  - Provide on-site recycling containers to promote the recycling of paper, metal, glass, and other recyclable materials and adequate storage areas for such containers.

- Use of locally (within 500 miles) manufactured construction materials and of building materials with recycled content, where possible.

- Water Quality
  - Installation of a Low Impact Development (LID) compliant on-site stormwater treatment system, capable of treating the volume of stormwater runoff from a local 85th percentile storm event.
  - Installation of pre-treatment stormwater infrastructure for the stormwater runoff tributary to the on-site stormwater treatment system.
  - During construction of the Project, best management practices (BMPs) would be implemented to control stormwater runoff and minimize pollutant loading and erosion effects.
  - During operation, BMPs would be implemented to minimize pollutant loading in stormwater runoff.

- Construction and Design Elements
  - Contractors would reference Partnership for Advancing Technology in Housing (PATH) and other current references for state-of-the-art construction methods, materials, and mechanical equipment and utilize same methods where applicable.
  - Recycling and reuse of building and construction materials to the maximum extent feasible, including the on-site recycling and reuse of concrete removed during demolition and salvaging of existing appliances and fixtures.
  - Waste diversion accounting would be utilized.
  - Installation of a “cool roof” that reflects the sun’s heat and reduces urban heat island effect.
  - Use of sub-base in parking lots, fly ash-based concrete and recycled content in joists and joist girders when feasible.
  - 15 percent of the roof area set aside for future solar panels.

Based on the above, Project construction and operation would require the irretrievable commitment of limited, slowly renewable, and non-renewable resources, which would limit the availability of these resources and the Project Site for future generations or for other uses. However, the consumption of such resources would not be considered substantial and would be consistent with regional and local growth forecasts and

development goals for the area. Therefore, although irreversible environmental changes would result from the Project, such changes are concluded to be less than significant, and the limited use of nonrenewable resources that would be required by Project construction and operation is justified.

4. Growth Inducing Impacts of the Proposed Project

Section 15126.2(d) of the State CEQA Guidelines requires a discussion of the ways in which a proposed project could be growth-inducing. This would include ways in which the project would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Section 15126.2(d) of the State CEQA Guidelines states the following:

> *Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may further tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*

Although the Project would provide new live/work, hotel, commercial, and arts-oriented uses, it would not necessitate the extension of roads or other infrastructure. The Project would be developed within an existing urbanized area and would provide greater density around existing and planned transit, such as bus lines and the Metro Gold Line Little Tokyo/Arts District Station. The Project's location would reduce VMT and would potentially reduce the need for additional infrastructure.

As discussed in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR residential development on the Project Site would consist of 129 live/work units, which would generate approximately 289 net new residents. Compared to the anticipated population growth in the City between the 2017 baseline year and the Project's anticipated buildout year of the 2021, the Project's residential population would represent 0.26 percent of the forecasted population growth in the City. Further, compared to the anticipated population growth in the City between the 2017 baseline year and 2040, the Project's residential population would represent 0.05 percent of the forecasted population growth in the City.

The Project is an infill development in an already urbanized area, located near Downtown Los Angeles, which is among the region's largest areas for employers, and is also consistent with SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS) and its focus on integrated land use planning. Specifically, the Project Site's location near local transit services places the site in an HQTA. The 2016-2040 RTP/SCS forecasts that these areas, while comprising only 3 percent of land area in the region, will make up 46 percent of future household growth and 55 percent of future job growth.

Also, the City's Framework Element focuses on providing strategies for accommodating growth by encouraging growth in a number of higher-intensity commercial and mixed-use districts, centers, boulevards and industrial districts particularly in proximity to transportation corridors and transit stations, while Community Plan policies call for developing new housing in a manner that reduces vehicle trips and makes services and facilities accessible to residents, by encouraging the development of multi-residential land uses in commercial zones. The Project includes development that is consistent with these City plans.

The Project's vertical integration of land uses on the Project Site would produce reductions in auto-mode share to and from the Project Site that would help the region accommodate growth and promote public transit ridership that minimizes environmental impacts, such as those associated with traffic and pollutant emissions increases, and reduces per capita emissions consistent with the 2016-2040 RTP/SCS. It should be noted that the Project's percentage of the forecasted citywide population growth conservatively assumes that all of the projected residents of the Project would be in-migrants to the City and would not be relocating to the Project from elsewhere within the City.

As also discussed in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, the proposed hotel, retail, art gallery, Artist CoLab, and restaurant land uses within the Project would generate a net increase of approximately 239 employees after the existing uses on-site are removed. Compared to the anticipated employment growth in the City between the 2017 baseline year and the Project's anticipated buildout year of the 2021, the Project's employment would represent 0.35 percent of the forecasted employment growth in the City. Compared to the anticipated growth in the City between 2017 and 2040, the Project's employment would represent a 0.06 percent of the forecasted employment growth in the City. It is likely that the existing availability of employees in the Project Site area would fill the jobs generated by the Project and would not draw new people to the City to fill the jobs. Thus, operation of the Project's commercial and retail land uses would not cause an increase in population to induce population growth indirectly in the Project Site area

Finally, the infrastructure (e.g., water facilities, electricity transmission lines, natural gas lines, etc.) associated with the Project would not induce growth because the facilities would only serve the Project. The construction of a potential growth-inducing roadway or other infrastructure extensions would not be required. The Project Site is already developed and connected to all local utility infrastructures, including water, wastewater, electricity, and natural gas. The area surrounding the Project Site is already developed, and the Project would not remove impediments to growth. The Project Site is located within an urban area that is currently served by existing utilities and infrastructure. Although the Project may require minor local infrastructure upgrades to maintain and improve water, sewer, electricity, and natural gas lines on-site and in the immediate vicinity of the Project Site, such improvements would be limited to serving Project-related demand and would not necessitate major local or regional utility infrastructure improvements that have not otherwise been accounted and planned for on a regional level.

Overall, the Project would be consistent with the growth forecast for the City and would be consistent with regional policies to reduce urban sprawl, efficiently utilize existing infrastructure, reduce regional congestion, and improve air quality through the reduction of VMT. In addition, the Project would not require any major roadway improvements nor would the Project open any large undeveloped areas for new use. Any access improvements would be limited to driveways necessary to provide immediate access to the Project Site and to improve safety and walkability. Therefore, direct and indirect growth-inducing impacts would be less than significant.

5. Potential Secondary Effects of Mitigation Measures

Section 15126.4(a)(1)(D) of the CEQA Guidelines states that “if a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed.” With regard to this section of the CEQA Guidelines, the potential impacts that could result with the implementation of each mitigation measure identified for the Project were reviewed.

All of the mitigation measures identified for the Project are listed in Table I-1 in **Section I, Executive Summary**, of the Draft EIR. None of the mitigation measures require physical alterations to the environment and would not generate any additional traffic, pollutant emissions, noise, or demand for public services or utilities. Thus, the mitigation measures identified for the Project would not result in any secondary environmental impacts.

VI. Alternatives

1. Introduction

The identification and analysis of alternatives to a project is a fundamental aspect of the environmental review process under the California Environmental Quality Act (CEQA). Specifically, Public Resources Code (PRC) Section 21002.1(a) establishes the need to address alternatives in an environmental impact report (EIR) by stating that in addition to determining a project's significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, "the purpose of an environmental impact report is…to identify alternatives to the project."

Direction regarding the consideration and discussion of project alternatives in an EIR is provided in CEQA Guidelines Section 15126.6. More specifically, CEQA Guidelines Section 15126.6(a) states the following:

> *An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decisionmaking and public participation. An EIR is not required to consider alternatives which are infeasible.*

In addition, CEQA Guidelines Section 15126.6(b) states the following:

> *Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly.*

The CEQA Guidelines Section 15126.6(c) indicates that the selection of project alternatives "shall include those that could feasibly accomplish most of the basic objectives and could avoid or substantially lessen one or more of the significant effects. The CEQA Guidelines further direct that the range of alternatives be guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are

addressed. In selecting project alternatives for analysis, potential alternatives must be feasible. CEQA Guidelines Section 15126.6(f)(1) states that:

> *Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries […], and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site […]*

Beyond these factors, CEQA Guidelines Section 15126.6(e) requires the analysis of a "no project" alternative and CEQA Guidelines Section 15126.6(f)(2) requires an evaluation of alternative location(s) for the project, if feasible. Based on the alternatives analysis, an environmentally superior alternative is to be designated. If the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives.

2. Overview of Selected Alternatives to the Project

As indicated above, the intent of the alternatives analysis is to reduce the significant impacts of a project. Based on the analyses provided in **Section IV, Environmental Impact Analysis**, of the Draft EIR, implementation of the Project would result in a significant impact that cannot be feasibly mitigated to a less-than-significant level with respect to transportation/traffic.

Accordingly, based on the significant environmental impacts of the Project, the basic objectives established for the Project (refer to **Section II, Project Description**, of the Draft EIR), public input received during the scoping period, the existing zoning designation on the Project Site, and the feasibility of the alternatives considered, the alternatives to the Project listed below were selected for evaluation.

- Alternative 1: No Project Alternative
- Alternative 2: Existing Zoning Alternative
- Alternative 3: Reduced Density Alternative

Table VI-1 below provides a summary and comparison of each alternative analyzed. Each of these alternatives is also described in detail in the sections that follow.

Table VI-1
Summary of Alternatives

Land Use	Project	Alternative 1	Alternative 2	Alternative 3
Existing Uses to Remain	None	10 DU; 45,600 sf light industrial/arts production/ creative office	None	None
Total New Floor Area	370,340 sf	None	65,550 sf	257,795 sf
Parking Garage	5 subterranean levels	None	2 subterranean levels	3 subterranean levels
Live/Work	129 DU	10 DU	None	98 DU
Hotel	113 rooms	None	None	73 rooms
Restaurant	31,719 sf	None	None	20,590 sf
Retail	26,979 sf	None	26,979 sf	19,120 sf
Art Gallery	10,341 sf	None	None	8,070 sf
Artist CoLab/ Creative Office	3,430 sf	None	None	7,835 sf
Light Industrial/Arts Production/Creative Office	None	45,600 sf	38,571 sf	None
Maximum Height	12 stories 154 feet	2 stories 26 feet	3 stories 46 feet	10 stories 131 feet

DU = dwelling unit sf = square feet

3. Alternatives Considered and Rejected

As set forth in CEQA Guidelines Section 15126.6(c), an EIR should identify any alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection. According to CEQA Guidelines Section 15126.6(c), among the factors that may be used to eliminate an alternative from detailed consideration are the alternative's failure to meet most of the basic project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts. Alternatives to the Project that have been considered and rejected as infeasible include the following:

- **Preservation of Existing Structure:** Alternatives were considered to preserve either all or a portion of the existing structure on the Project Site. The existing building on-site is approximately 100 years old and would require a considerable amount of rehabilitation in order to be suited for incorporation into a redesigned

version of the Project. In light of the determination in this Draft EIR (see **Section IV.D, Cultural Resources**, of the Draft EIR) that the existing building on the Project Site is neither a historic structure nor a contributor to a larger historic district, an alternative that would retain either the entirety of the existing building or a portion of the exterior façade of the existing building was rejected from further consideration. Moreover, this alternative would fail to meet several of the basic Project objectives. It would not create an economically viable mixed-use project anchored by a hotel and focused on the arts or improve the aesthetic quality of the Project Site by removing older structures and developing efficient new buildings that are consistent in terms of mass, scale, and character with others within the Arts District. Therefore, alternatives to preserve the existing structure were rejected as infeasible.

- **Alternative Setbacks**: Alternatives were considered to increase the setbacks of the Project to reduce the construction vibration and cumulative construction noise impacts to a less-than-significant level with respect to the sensitive live/work use located within 60 feet, directly across Colyton Street to the east of the Project Site. Vibration from construction trucks accessing the Project Site would exceed applicable significance thresholds at this receptor. Applying a setback to the Project by pushing it away from Colyton Street and farther from the sensitive receptor would not reduce vibration associated with construction trucks below the applicable significance threshold as the trucks would still need to access the Project Site and would already be restricted in using Colyton Street per Mitigation Measure NOI-MM-3, which also reduces the Project's off-site construction noise levels. With respect to on-site sources of construction noise, applying a setback to the Project that moves it away from Colyton Street would reduce the level of general construction noise experienced at the off-site receptor across Colyton Street, but would not reduce the more substantial noise associated with building demolition and debris removal that would still occur at the Project Site's Colyton Street frontage. Therefore, an alternative incorporating setbacks was rejected from further consideration.

- **Reduced Construction Hours**: Alternatives were considered to reduce the significant construction vibration and cumulative construction noise impacts at the nearest residential use, located across Colyton Street from the Project Site. Reducing the hours of construction by utilizing a later start time (possibly after 10:00 A.M.) and an earlier finish time (3:00 P.M.) could provide some relief from all-day construction noise and vibration at this residential use. However, since the noise and vibration impacts are based on the distance from the vibration source to the sensitive receptor and not the duration of construction in a day, the significant and unavoidable impacts would remain. The reduction in construction

hours would not change the equipment mix or the total amount of time needed to build the Project. The reduced construction schedule would extend the overall construction period much longer resulting in more days of significant impacts at the residential use. This approach is also not practical for construction workers and contractors, who tend to have minimum requirements for hours worked per day. Therefore, an alternative with reduced construction hours was rejected from further consideration.

- **Alternative Project Site:** The Project Applicant already owns the Project Site, and its location is conducive to the development of a mixed-use project. The Project Site is located on the north side of 5th Street between Seaton Street and Colyton Street within the Arts District area of Downtown Los Angeles. The Hollywood Freeway (US-101) to the east and north of the Project Site and the Santa Monica Freeway (I-10) to the south and east of the Project site provide primary regional access to the Project Site. Similarly, major surface street arterials within the vicinity include Alameda Street, Santa Fe Avenue, 4th Street, 6th Street, and 7th Street. The Project Site is also in proximity to major transit facilities. The Project Site's location makes it particularly suitable for development as a mixed-use development that provides new market rate multi-family housing and neighborhood-serving retail and restaurant uses that serve the community and promote walkability. Furthermore, the Project Applicant cannot reasonably acquire, control, or access an alternative site in a timely fashion that would result in implementation of a project with similar uses and square footage in proximity to major transit facilities. If an alternative site in the Arts District area that could accommodate the Project could be found, it would likely result in a similar level of traffic and noise impacts. If the alternative site were to be located in the northeastern corner of the Community Plan's Arts District (near 1st Street and the Los Angeles River), it is possible that the Project's lone significant and unavoidable intersection impact at Alameda Street & 6th Street could be reduced to a less-than-significant level. However, it is equally possible that new significant and potentially unavoidable impacts could be created at intersections closer to the alternative site – intersections that the Project does not significantly impact (or which could be reduced to a less-than-significant level with mitigation). Additionally, development of the Project at an alternative site could potentially produce other environmental impacts in areas such as aesthetics, cultural resources, geology/soils, or hazards/hazardous materials (considering the mixes of uses in the Arts District) that would otherwise not occur at the current Project Site and result in greater environmental impacts when compared to the Project. Accordingly, an alternative site location is not considered feasible as the Project Applicant does not own another suitable site that would achieve the underlying purpose and objectives of the Project, and an alternative site could simply shift

the Project's significant and unavoidable impacts to a different location. Thus, this alternative was rejected from further consideration.

4. Analysis Format

In accordance with CEQA Guidelines Section 15126.6(d), each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less, similar, or greater than the corresponding impacts of the Project. Furthermore, each alternative is evaluated to determine whether the Project's basic objectives, identified in **Section II, Project Description**, of the Draft EIR, would be substantially attained by the alternative. The evaluation of each of the alternatives follows the process described below:

a. The net environmental impacts of the alternative, after implementation of the same project design features as the Project and mitigation measures are determined for each environmental issue area analyzed in this Draft EIR.

b. Post-mitigation significant and non-significant environmental impacts of the alternative and the Project are compared for each environmental issue area as follows:

    - Less: Where the net impact of the alternative would be clearly less adverse or more beneficial than the impact of the Project, the comparative impact is said to be "less."

    - Greater: Where the net impact of the alternative would clearly be more adverse or less beneficial than the Project, the comparative impact is said to be "greater."

    - Similar: Where the impact of the alternative and Project would be roughly equivalent, the comparative impact is said to be "similar."

c. The comparative analysis of the impacts is followed by a general discussion of whether the underlying purpose and basic Project objectives are feasibly and substantially attained by the alternative.

A summary matrix that compares the impacts associated with the Project with the impacts of each of the analyzed alternatives is provided below in Table VI-2.

Table VI-2
Summary Comparison of Impacts Associated with the Alternatives and Impacts of the Project

Environmental Issue Analyzed	Project Impact	Alternative 1: No Project	Alternative 2: Existing Zoning	Alternative 3: Reduced Density
Aesthetics				
Aesthetics – Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Aesthetics – Operation	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Views	LTS	Less (NI)	Less (LTS)	Similar (LTS)
Shading	LTS	Less (NI)	Less (LTS)	Less (LTS)
Light/Glare – Construction	LTS	Less (NI)	Less (LTS)	Similar (LTS)
Light/Glare - Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)
Air Quality				
Construction				
Regional Emissions	LTS	Less (NI)	Less (LTS)	Less (LTS)
Localized Emissions	LTS	Less (NI)	Less (LTS)	Less (LTS)
Toxic Air Contaminants	LTS	Less (NI)	Less (LTS)	Less (LTS)
Operation				
Regional Emissions	LTS	Less (NI)	Less (LTS)	Less (LTS)
Localized Emissions	LTS	Less (NI)	Less (LTS)	Less (LTS)
Toxic Air Contaminants	LTS	Less (NI)	Less (LTS)	Less (LTS)
Cultural Resources				
Historical Resources	LTS	Less (NI)	Less (LTS)	Similar (LTS)
Archaeological Resources	LTS-M	Less (NI)	Similar (LTS-M)	Similar (LTS-M)
Paleontological Resources	LTS-M	Less (NI)	Similar (LTS-M)	Similar (LTS-M)
Geology and Soils	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Greenhouse Gas Emissions				
Construction	LTS	Less (NI)	Less (LTS)	Less (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)
Hazards and Hazardous Materials				
Construction	LTS-M	Less (NI)	Less (LTS-M)	Less (LTS-M)
Operation	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Land Use and Planning				
Land Use Consistency	LTS	Less (LTS)	Greater (LTS)	Similar (LTS)
Land Use Compatibility	LTS	Less (LTS)	Similar (LTS)	Similar (LTS)
Noise				
Construction				
On-Site Noise	LTS-M	Less (NI)	Less (LTS-M)	Less (LTS-M)
Off-Site Noise	LTS-M [a]	Less (NI)	Less (LTS-M) [a]	Less (LTS-M) [a]
Vibration	**SU**	Less (NI)	**Less (SU)**	**Less (SU)**
Operation				
On-Site Noise	LTS	Less (NI)	Less (LTS)	Similar (LTS)
Off-Site Noise	LTS	Less (NI)	Less (LTS)	Less (LTS)
Vibration	LTS	Less (NI)	Less (LTS)	Less (LTS)
Population and Housing				
Population	LTS	Less (NI)	Less (LTS)	Similar (LTS)
Housing	LTS	Less (NI)	Greater (LTS)	Similar (LTS)
Employment	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Public Services				
Fire Protection				
Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)

Table VI-2
Summary Comparison of Impacts Associated with the Alterantives and Impacts of the Project

Environmental Issue Analyzed	Project Impact	Alternative 1: No Project	Alternative 2: Existing Zoning	Alternative 3: Reduced Density
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)
Police Protection				
Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)
Schools	LTS	Less (NI)	Less (LTS)	Less (LTS)
Parks and Recreation	LTS	Less (NI)	Less (LTS)	Less (LTS)
Libraries	LTS	Less (NI)	Less (LTS)	Less (LTS)
Transportation/Traffic				
Construction	LTS	Less (NI)	Less (LTS)	Less (LTS)
Operation				
Intersection Levels of Service	**SU**	Less (NI)	Less (LTS)	Less (LTS-M)
Regional Transportation System	LTS	Less (NI)	Less (LTS)	Less (LTS)
Access and Circulation	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Bicycle/Pedestrian/Vehicle Safety	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Parking	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Tribal Cultural Resources	LTS	Less (NI)	Less (LTS)	Less (LTS)
Utilities and Service Systems				
Wastewater				
Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)
Water Supply				
Construction	LTS	Less (NI)	Similar (LTS)	Similar (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)
Solid Waste				
Construction	LTS	Less (NI)	Less (LTS)	Less (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)
Energy Conservation				
Construction	LTS	Less (NI)	Less (LTS)	Less (LTS)
Operation	LTS	Less (NI)	Less (LTS)	Less (LTS)

Guide to Abbreviations:

NI = no impact
LTS = less-than-significant impact
LTS-M = less-than-significant impact with implementation of mitigation measures and/or project design features
SU = significant and unavoidable impact even with implementation of mitigation measures and/or project design features

[a] *Cumulative noise impacts during construction would be significant and unavoidable.*

VI. Alternatives

A. Alternative 1: No Project Alternative

1. Description of the Alternative

In accordance with the CEQA Guidelines, the No Project Alternative for a development project on an identifiable property consists of the circumstance under which the project does not proceed. Section 15126.6(e)(3)(B) of the CEQA Guidelines states in part that, "in certain instances, the No Project Alternative means 'no build' wherein the existing environmental setting is maintained." Accordingly, for purposes of this analysis, Alternative 1, the No Project Alternative, assumes that the Project would not be approved, no new permanent development would occur within the Project Site, and the existing environment would be maintained. Thus, the physical conditions of the Project Site would generally remain as they are today. Under Alternative 1, the Project Site would continue to be used as a light industrial/arts production commercial space with 10 live/work units. No changes would be made to the fully-developed Project Site. Future on-site activities would be limited to the continued operation and maintenance of the existing land uses. The site plan under Alternative 1 would be the same as existing conditions, as illustrated in Figure II-2 in **Section II, Project Description**, of the Draft EIR.

2. Environmental Impact Analysis

a) Aesthetics, Views, Shading, Light and Glare

1) Aesthetics

Alternative 1 would not remove the existing light industrial/arts production commercial spaces and 10 live/work units or construct a new building on the Project Site. Therefore, Alternative 1 would not change the existing visual character of the Project Site. Thus, no construction or operational impacts related to aesthetics would occur under Alternative 1, and impacts would be less than the Project. Pursuant to SB 743 and ZI 2452, Project impacts to aesthetics would not be considered significant.

2) Views

Because the existing building and uses would remain as is, Alternative 1 would not result in an increase in the height or massing of on-site structures, and existing views of and across the Project Site would remain. Therefore, no impacts related to views would occur under Alternative 1, and impacts would be less than the Project. Pursuant to SB 743 and ZI 2452, Project impacts to views would not be considered significant.

3) Shading

Alternative 1 would not create or cast new shadows on surrounding sensitive uses since a new building would not be constructed on the Project Site. Therefore, no shading impacts would occur under Alternative 1, and shading impacts would be less than the Project. Pursuant to SB 743 and ZI 2452, Project impacts to shading would not be considered significant.

4) Light and Glare

Alternative 1 would not involve the construction of any new development on-site. Therefore, Alternative 1 would not introduce any new sources of light or glare. As such, no impacts related to light and glare associated with construction activities or Project operation would occur under Alternative 1, and impacts would be less than the Project. Pursuant to SB 743 and ZI 2452, Project impacts to light and glare would not be considered significant.

b) Air Quality

1) Construction

Alternative 1 would not remove the existing light industrial/arts production commercial spaces and 10 live/work units or construct a new building on the Project Site. Therefore, Alternative 1 would not result in any construction emissions associated with construction worker and construction truck traffic, fugitive dust from demolition and excavation, or the use of heavy duty construction equipment, and construction-related regional and localized air quality impacts would not occur. Similarly, Alternative 1 would not result in diesel particulate emissions during construction that could generate substantial toxic air contaminants (TACs). As such, Alternative 1 would avoid the pollutant concentrations associated with construction activities, no conflict with applicable air quality plans and/or violation of any air quality standards would occur, and there would be no cumulatively considerable net increase in any criteria pollutant. Therefore, no construction-related regional and localized air quality impacts or TAC impacts would occur under Alternative 1, and impacts would be less than the Project.

2) Operation

Alternative 1 would not result in new development or increased operations that could generate additional operational emissions related to vehicular traffic or the consumption of electricity and natural gas on the Project Site. No operational air quality impacts associated with regional and localized emissions or TAC impacts would occur under Alternative 1. Therefore, no operational air quality impacts associated with regional and localized emissions or TAC contaminants would occur under Alternative 1, and impacts would be less than the Project.

c) Cultural Resources

1) Historical Resources

Alternative 1 would not remove the existing light industrial/arts production commercial spaces and 10 live/work units or construct a new building on the Project Site. No historic buildings are present on the Project Site, nor does the existing building on the Project Site contribute to the potential Downtown Los Angeles Industrial Historic District (Potential Historic District). Therefore, no impacts to historical resources would not occur under Alternative 1, and impacts would be less than the Project's less-than-significant impact.

2) Archaeological Resources

Alternative 1 would not remove the existing light industrial/arts production commercial spaces and 10 live/work units or construct a new building on the Project Site. No grading or earthwork activities would occur under Alternative 1. Therefore, there would be no potential for Alternative 1 to uncover subsurface archaeological resources that may be present beneath the Project Site. No impacts to archaeological resources would occur, and the Project's less-than-significant impact with mitigation associated with the potential discovery of archaeological resources, including zanja segments, would be avoided, and impacts would be less than the Project.

3) Paleontological Resources

Alternative 1 would not remove the existing light industrial/arts production commercial spaces and 10 live/work units or construct a new building on the Project Site. No grading or earthwork activities would occur under Alternative 1. Therefore, there would be no potential for Alternative 1 to uncover subsurface paleontological resources that may be present beneath the Project Site. No impacts to paleontological resources would occur and the Project's less-than-significant impact with mitigation associated with the potential discovery of paleontological resources would be avoided and impacts would be less than the Project.

d) Geology and Soils

Alternative 1 would not remove the existing light industrial/arts production commercial spaces and 10 live/work units or construct a new building on the Project Site. Since no construction activities would occur, no new construction impacts related to geology and soils would occur, and impacts would be less than the Project.

e) Greenhouse Gas Emissions

As there would be no new development or new operations on-site, no new greenhouse gas (GHG) emissions would occur under Alternative 1. Therefore, no impacts associated with global climate change would occur under Alternative 1. As such, no impacts associated with GHG emissions would occur under Alternative 1, and impacts would be less than the Project.

f) Hazards and Hazardous Materials

Alternative 1 would not remove the existing light industrial/arts production commercial spaces and 10 live/work units or construct a new building on the Project Site. Therefore, Alternative 1 would not result in construction-related impacts associated with the transport and use of hazardous materials, interference with an adopted emergency response plan, uncovering of subsurface soil contamination, or disturbance of asbestos or lead based paint on the Project Site, and impacts would be less as compared to the Project's less-than-significant impacts and less-than significant impacts with mitigation related to potential soil contamination. During operation, Alternative 1 would not increase the transport, use, storage, or disposal of hazardous materials and wastes to/from the Project Site when compared to the Project. Also, Alternative 1 would not interfere with an emergency response plan or evacuation plan as no new development would occur. In addition, the Project's less-than-significant impact with mitigation associated with the potential presence of contaminated soil would be avoided. Accordingly, no significant impacts related to hazards and hazardous materials would occur under Alternative 1, and impacts would be less than the Project.

g) Land Use and Planning

Under Alternative 1, there would be no changes to the physical or operational characteristics of the existing building on the Project Site. No land use approvals or permits would be required. No impacts associated with consistency with land use regulations and plans would occur. Moreover, because this Alternative would not result in new land uses, the relationship between the existing on-site and off-site land uses would not change. Unlike the Project, which results in a net increase of 119 units, including 15 Very Low Income units, Alternative 1 would not provide any housing units.

Unlike the Project, Alternative 1 would therefore not advance local and regional planning objectives that promote the development of new housing to meet housing demand, infill mixed-use developments in urban centers near public transit, and pedestrian-oriented improvements, inclusive of applicable policies and objectives included in the City's General Plan Framework Element, Health and Wellness Element, and Central City North Community Plan (see **Section IV.H, Land Use and Planning**, of the Draft EIR). As with the Project, Alternative 1 would result in a less-than-significant impact with respect to land use; however, because Alternative 1 would not alter the existing uses at the Project Site, impacts would be less than the Project's less-than-significant impacts.

h) Noise

No construction activities would occur under Alternative 1. Therefore, no construction-related noise or vibration would be generated on-site or off-site. As such, Alternative 1 would avoid the Project's significant and unavoidable impact related to on-site construction vibration (related to potential human annoyance). In addition, no construction-related noise impacts would occur under Alternative 1, and the Project's less-than-significant impact with mitigation associated with construction noise and significant and unavoidable cumulative impact associated with construction noise would be avoided.

Similarly, since no development would occur on the Project Site, no increase in traffic would occur, and no new noise sources would be introduced. As such, noise levels would remain at existing levels, and Alternative 1 would result in fewer operational noise impacts as compared to the Project's less-than-significant operational noise impacts. In addition, Alternative 1 would not result in any vibration impacts during operation, and, thus, vibration impacts would be less than the Project.

i) Population, Housing, and Employment

1) Population

Under Alternative 1, the Project Site would not be developed with new land uses. The Project Site is currently developed with light industrial/arts production and live/work uses, which house approximately 25 persons. Alternative 1 would not induce growth through the introduction of new and/or an extension of existing roadways and/or utility infrastructure. Therefore, Alternative 1 would have no impact with respect to population, and population impacts would be less than the Project.

2) Housing

Under Alternative 1, the Project Site would not be developed with new land uses. The Project Site is currently developed with light industrial/arts production and 10 live/work

units. Under Alternative 1, no housing units would be added to the Project Site. Therefore, Alternative 1 would have no impact with respect to housing. It should be noted, however, that, as compared to the Project, Alternative 1 would not contribute needed housing units toward the City's share of the regional housing needs assessment.

3) Employment

Under Alternative 1, the Project Site would not be developed with new land uses. The Project Site is currently developed with light industrial/arts production and live/work units that support approximately 50 employees. Under Alternative 1, no employment opportunities would be added to the Project Site. Therefore, Alternative 1 would have no impacts with respect to employment. It should be noted, however, Alternative 1 would result in a reduction of 239 jobs compared to the net increase in jobs created by the Project.

j) Public Services

1) Fire Protection

As Alternative 1 would not require any construction activities, this alternative would not have the potential for construction to expose additional people to the risk of fire or explosion related to the use of hazardous materials or to potentially impact the provision of fire protection and emergency services in the vicinity of the Project Site. Similarly, since no changes to existing land uses or operations on-site would occur, there would be no potential to increase the level of activity on the Project Site or increase the service population for the Los Angeles Fire Department (LAFD) stations that serve the Project Site. Therefore, Alternative 1 would not result in any fire protection impacts due to the continued operation of the existing uses, and impacts would be less than the Project.

2) Police Protection

As Alternative 1 would not require any construction activities, it would not have the potential for construction to create sources of nuisances and hazards or potentially impact police response in the vicinity of the Project Site. Similarly, since no changes to existing land uses or operations on-site would occur, there would be no potential to increase the service population on-site or have the potential to increase calls for police protection services from the Los Angeles Police Department (LAPD). Therefore, Alternative 1 would not result in any police protection impacts due to the continued operation of the existing uses, and impacts would be less than the Project.

3) Schools

As Alternative 1 would not require any construction activities, it would not have the potential for construction employment to result in an increase in the resident population or corresponding demand for schools in the vicinity of the Project Site. Similarly, since no changes to existing land uses or operations on-site would occur, there would be no potential to increase the population of school-aged children in the attendance boundaries of the schools that serve the Project Site. Therefore, Alternative 1 would not increase demand for school services or facilities due to continued operation of the existing uses, and impacts would be less than the Project.

4) Parks and Recreation

As Alternative 1 would not require any construction activities, it would not have the potential for construction employment to result in an increase in the resident population or corresponding permanent demand for parks and recreational facilities in the vicinity of the Project Site. Similarly, since no changes to existing land uses or operations on-site would occur, there would be no potential to generate additional demand for parks and recreational facilities in the Project vicinity. Therefore, Alternative 1 would not result in any impacts to parks and recreation due to the continued operation of the existing uses, and impacts would be less than the Project.

5) Libraries

As Alternative 1 would not require any construction activities, it would not have the potential for construction employment to result in an increase in the resident population or corresponding demand for libraries in the vicinity of the Project Site. Similarly, since no changes to existing land uses or operations on-site would occur, there would be no potential to generate additional demand for libraries in the Project vicinity. Therefore, Alternative 1 would not result in any library impacts due to the continued operation of the existing uses, and impacts would be less than the Project.

k) Transportation/Traffic

Since Alternative 1 would not have any construction activities on the Project Site, it would not generate vehicle trips, associated haul trucks or construction worker vehicles. As such, no construction-related traffic impacts would occur under Alternative 1. Further, there would be no potential for access and safety, bus/transit, and on-street parking impacts during construction. Alternative 1 would also not generate any additional vehicle trips or alter existing access or circulation around the Project Site during operation. In addition, Alternative 1 would not alter the existing approximately 34 on-street parking spaces along the Project Site's 5th Street and Seaton Street

frontages. Therefore, no impacts would occur with respect to operational traffic, including intersection levels of service; the regional transportation system; access and circulation; and bicycle, pedestrian, and vehicular safety. Alternative 1 would avoid the Project's significant and unavoidable intersection level of service impact at Alameda Street and 6th Street and would avoid the Project's other less-than-significant operational traffic impacts. Impacts under Alternative 1 would be less than the Project.

l) Tribal Cultural Resources

Grading and other earthwork activities would not occur under Alternative 1. Therefore, there would be no potential for Alternative 1 to uncover subsurface tribal cultural resources. As such, no impacts to tribal cultural resources would occur, and impacts would be less than the Project.

m) Utilities and Service Systems

1) Wastewater

Since Alternative 1 would not have any construction activities, it would not generate wastewater during construction, and construction-related impacts to wastewater conveyance and treatment infrastructure would not occur. In addition, Alternative 1 would not alter the existing land uses or operations on the Project Site. Therefore, Alternative 1 would not increase the wastewater flow on the Project Site, and impacts would be less than the Project.

2) Water Supply

Since Alternative 1 would not have any construction activities, it would not generate a short-term or long-term demand for water during construction or operation, and construction and operation-related impacts to water supply and infrastructure would not occur. Alternative 1's impacts would be less than the Project.

3) Solid Waste

The Project Site is currently developed with light industrial/arts production and live/work uses. Alternative 1 would not alter the existing land uses or operations on the Project Site. Therefore, Alternative 1 would not increase the construction or operational solid waste production on the Project Site. No construction or operational impacts to solid waste collection or disposal facilities would occur, and impacts would be less than the Project.

4) Energy Conservation

The Project Site is currently developed with light industrial/arts production and live/work uses. Alternative 1 would not alter the existing land uses or operations on the Project Site. In addition, construction activities would not occur under Alternative 1. Therefore, Alternative 1 would not increase the short-term or long-term energy (electricity, natural gas, petroleum-based fuel usage) demand on the Project Site. No construction or operational impacts related to energy would occur, and impacts would be less than the Project.

3. Comparison of Impacts

Alternative 1 would avoid the Project's significant and unavoidable vibration impact during construction and the Project's significant and unavoidable traffic impact on intersection level of service at Alameda Street and 6th Street during operation. Impacts under Alternative 1 would be less than all of the Project's remaining less-than-significant and less-than-significant with mitigation impacts as no changes to the existing conditions would occur. Alternative 1 would also eliminate all of the Project's less-than-significant impacts with mitigation.

4. Relationship of the Alternative to Project Objectives

No changes to existing land uses or operation would occur under Alternative 1. As such, Alternative 1 would not meet the underlying purpose of the Project or any of the Project's objectives. Specifically, Alternative 1 would not meet the following Project objectives:

- Maximize the density of an existing Transit Priority Site to increase access to local transit for local residents, employees, and visitors.
- To construct a mixed-use development that combines complementary uses, such as community serving retail, an Artist CoLab, and live/work uses.
- Create an economically viable mixed-use project including hotel, residential, and retail uses, focused on the arts that attracts residents and visitors to the Arts District community.
- Meet the demand for urban housing, including affordable housing, within the general Downtown area and specifically within the Arts District.
- Maximize the availability of market-rate and affordable housing in proximity to the Metro Gold Line Little Tokyo/Arts District Station.

- Improve the aesthetic quality of the Project Site by removing older structures and developing new efficient buildings that are consistent in terms of mass, scale, and character with others within the Arts District.
- Improve public safety by creating a development that provides the level of density and mix of uses necessary to activate the area both day and night.
- Create a range of construction and permanent jobs to support local workers.
- Maximize the contribution of the Project Site to the City's economic growth by developing commercial, residential, and hotel uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses.

Specifically, Alternative 1 would not maximize the density of an existing Transit Priority Area site. This would result in less density in close proximity to mass transit for employees and visitors. Alternative 1 also would not achieve the Project objective to improve public safety to the same extent as the Project since residents and hotel guests would not be on-site to activate the area on a 24-hour basis. Alternative 1 would not maximize the Project's contribution to the City's economic growth by developing land uses that generate additional tax revenues and provide construction jobs. Overall, Alternative 1 would not meet any of the Project objectives or the Project's underlying purpose of redeveloping a site within the Arts District with a new mixed-use development that includes a combination of complementary uses, such as live/work dwelling units and community-serving retail, hotel, and Artist CoLab uses.

VI. Alternatives

B. Alternative 2: Existing Zoning Alternative

1. Description of the Alternative

The Existing Zoning Alternative (Alternative 2) would redevelop the Project Site in a manner that is consistent with the existing M3-1-RIO zoning, a zoning classification that permits commercial and industrial land uses but does not allow residential units or guest rooms, as well as the existing General Plan land use designation (Heavy Industrial). Alternative 2 would remove the existing structure on-site and redevelop the Project Site with a 65,550-square-foot building that would be comprised of 26,979 square feet of retail space and 38,571 square feet of creative office space. The proposed building would consist of three levels above street level and two levels below grade for parking and storage. The retail development would consist of nine partitioned spaces on the ground floor accessible from the street. Creative office would be provided on the second and third floors.

Alternative 2 would reduce the overall Project square footage by 82 percent. As compared to the Project, Alternative 2 would eliminate the hotel, live/work, restaurant, art gallery, and Artist CoLab uses, would include the same amount of retail space, and would add two levels of creative office space. The proposed building height would be 46 feet above street grade level.

Table VI-3 provides a breakdown of floor area for the proposed uses for Alternative 2. Figure VI-1 provides a site plan for Alternative 2, while Figures VI-2 through VI-4 provide floor plans and a cross-section for Alternative 2.

As with the Project, public vehicular access would be provided from both 5th Street and Colyton Street, while driveway access from Seaton Street would be for loading only. Similar to the Project, an art plaza would be located at the building's southwestern corner. The driveway on the Colyton Street frontage would provide direct access to the two subterranean parking levels, which would extend approximately 20 feet below grade, or 30 feet less than the parking for the Project.

Table VI-3
Summary of Alternative 2 (Existing Zoning) Uses
and Comparison to the Project

Land Use	Alternative 2	Proposed Project	Difference
Creative Office	38,571 sf	0 sf	+38,571 sf
Retail	26,979 sf	26,979 sf	0 sf
Live/Work Residential	0 du	129 du	-129 du
Hotel	0 rooms	113 rooms	-113 rooms
Restaurant	0 sf	31,719 sf	-31,719 sf
Art Gallery	0 sf	10,341 sf	-10,341 sf
Artist CoLab	0 sf	3,430 sf	-3,430 sf
Total Proposed Floor Area	**65,550 sf**	**370,340 sf**	**-304,790 sf**

sf = square feet du = dwelling units

Unless otherwise noted, square footage is calculated as Floor Area, which is defined in Section 12.03 of the LAMC.

A total of 131 automobile spaces for the proposed uses would be required by the Los Angeles Municipal Code (LAMC) Sections 12.21-A,4(x)(3) and12.21-A,4(p)(1)-(2). Alternative 2 would provide 219 automobile parking spaces consisting of 59 valet spaces on level B1 and 160 automated system spaces on level B2. As with the Project, off-street automobile parking would be provided below grade and screened from view. In accordance with LAMC Section 12.21-A,16, Alternative 2 would provide, at a minimum, 17 short-term and 21 long-term bicycle spaces.

Alternative 2 would implement a similar architectural design to that of the lower three levels of the Project. Additionally, signage, lighting, vehicular and pedestrian access, setbacks, and sustainability features would be similar to those proposed for the Project's lower three levels.

Alternative 2 would be constructed in the same construction phases as the Project (see Table II-8 in **Section II, Project Description**, of the Draft EIR). However, construction would be expected to require a shorter overall duration (approximately 14 months) due to the smaller building and lesser amount of excavation required. As with the Project, a Construction Traffic Management Plan and Haul Route Program would be implemented during construction to minimize potential conflicts between construction activity and traffic in the immediate vicinity of Project Site. As with the Project, the Construction Traffic Management Plan and Haul Route Program would be subject to LADOT review and approval.

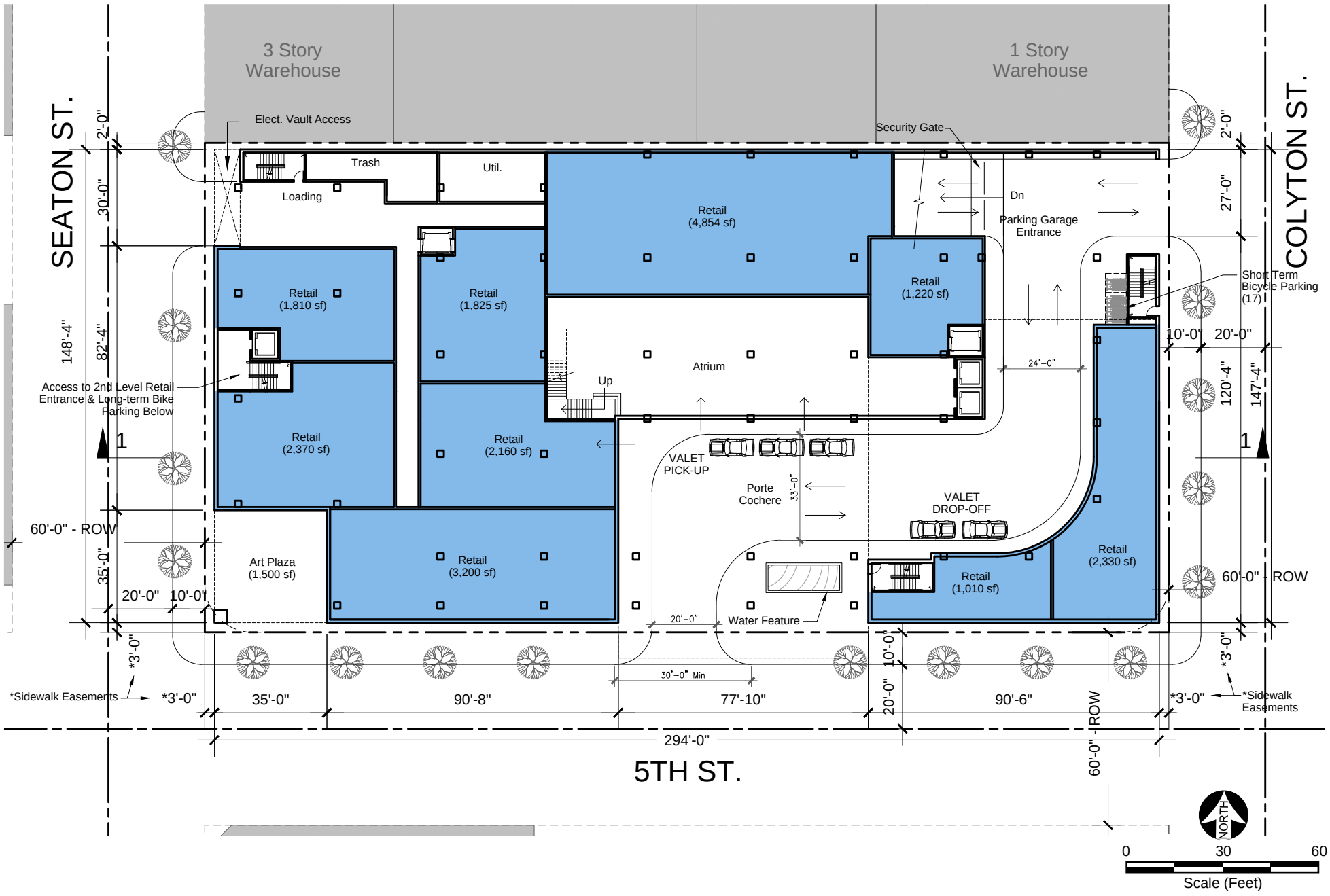


Figure VI-1
Alternative 2 Site Plan

Source: Togawa Smith Martin Inc, 2018.

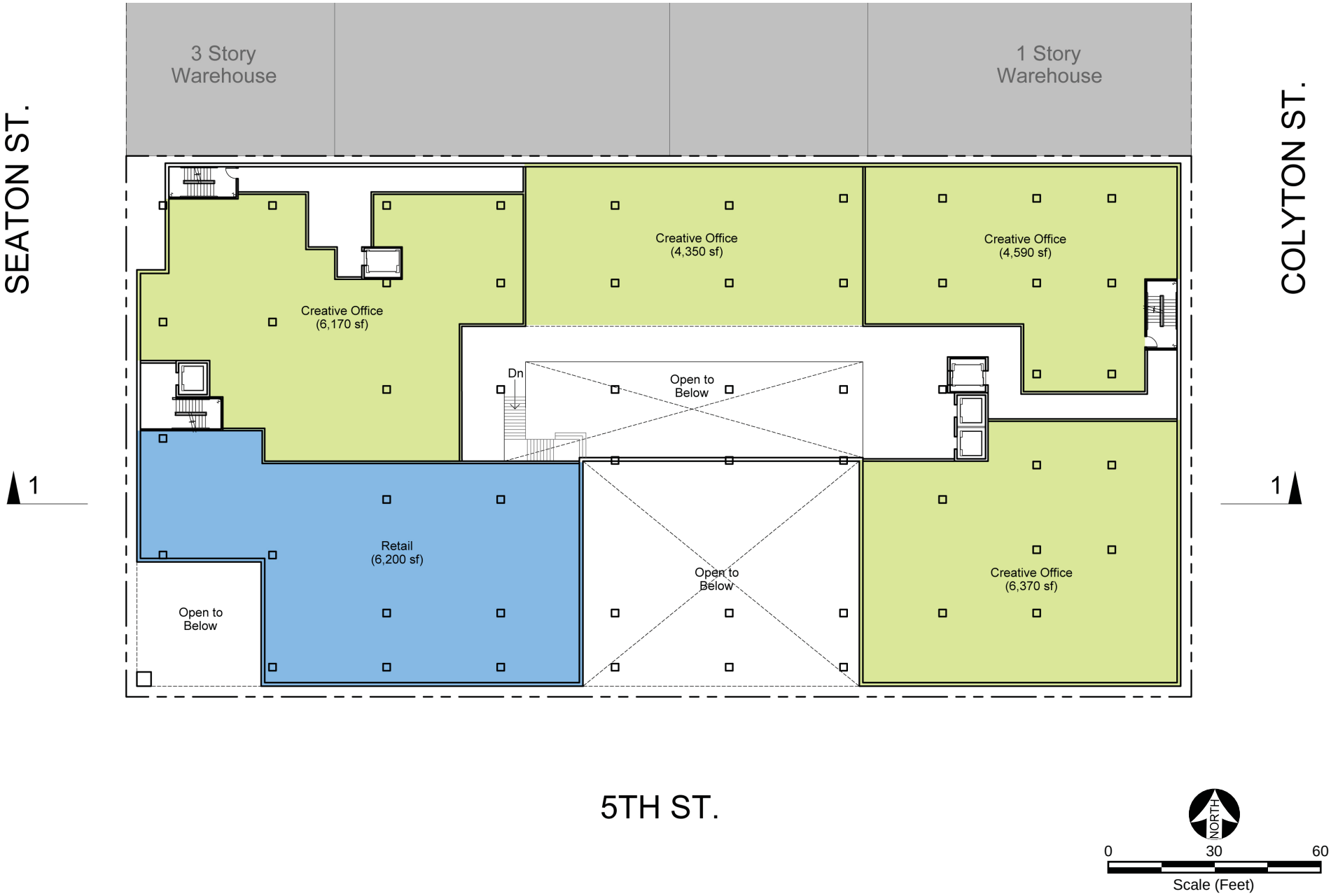


Figure IV-2
Alternative 2 Second Level Plan

Source: Togawa Smith Martin Inc, 2018.

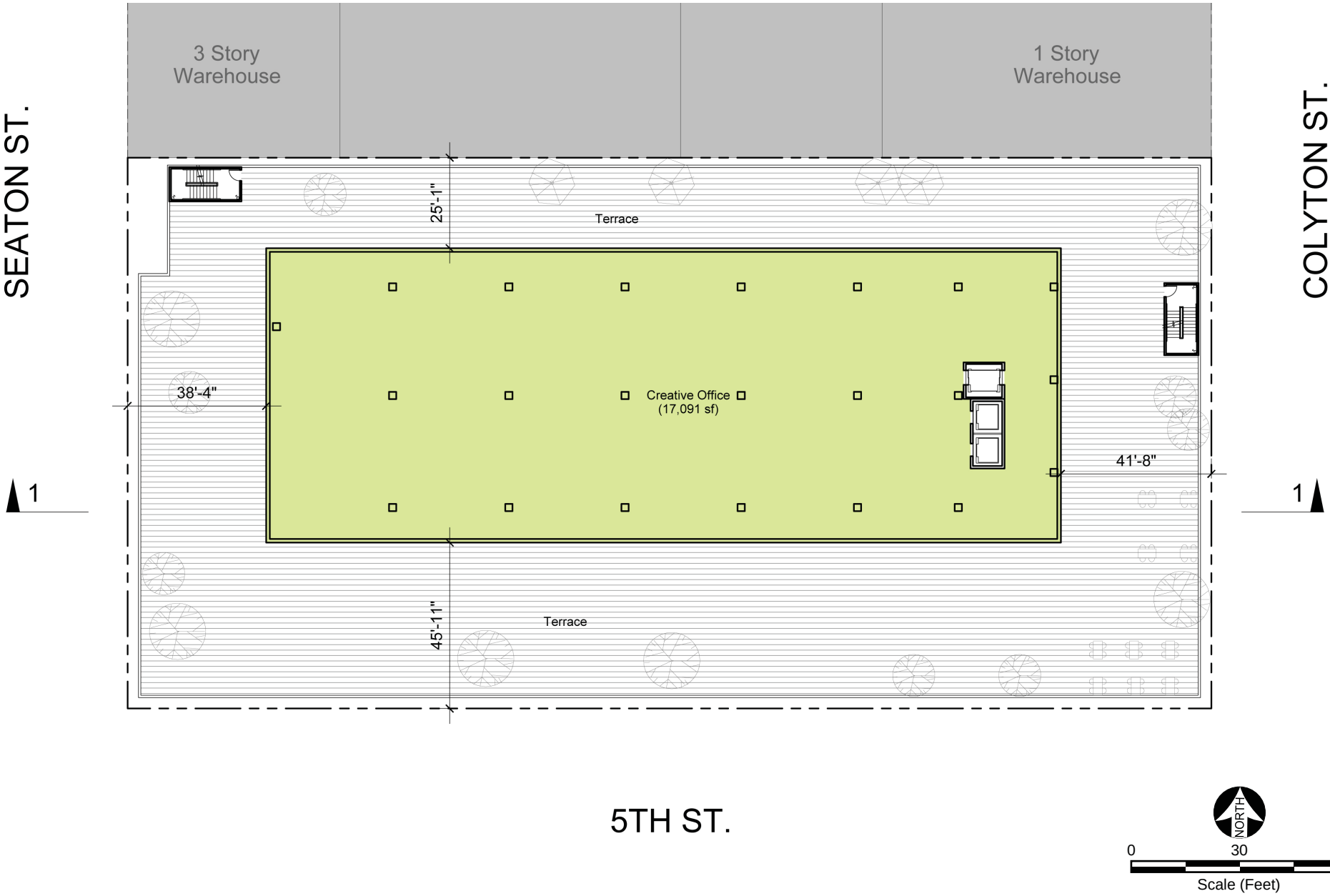


Figure IV-3
Alternative 2 Third Level Plan

Source: Togawa Smith Martin Inc, 2018.

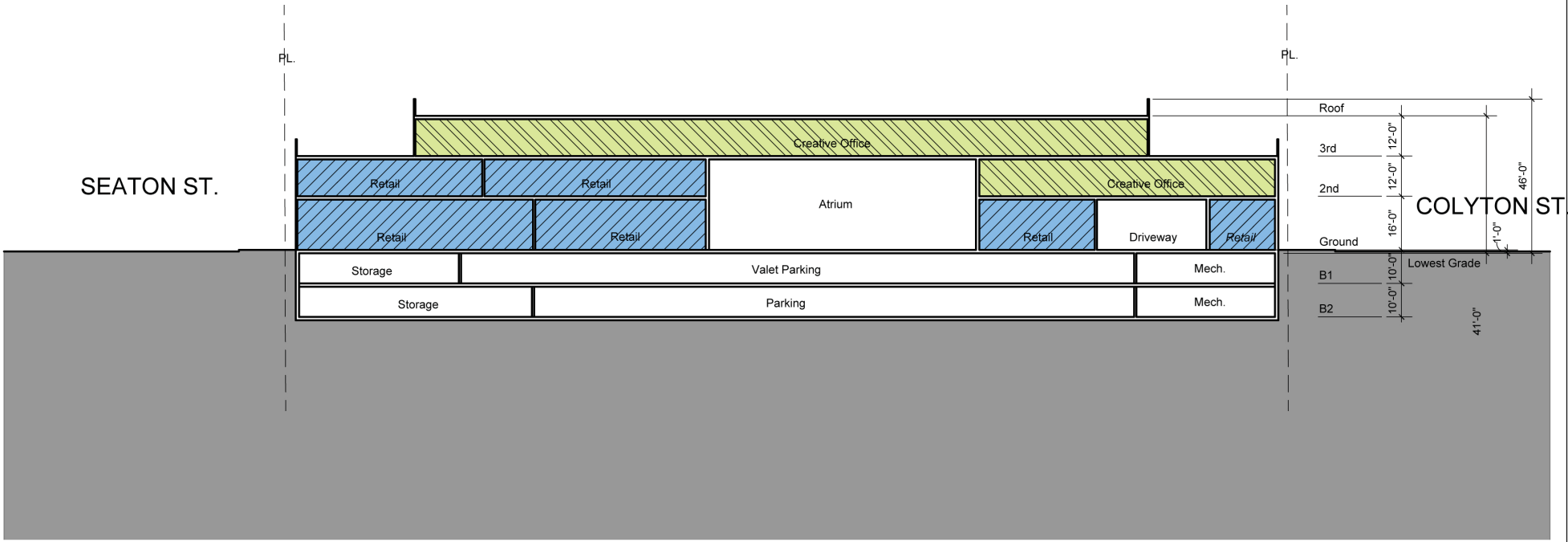


Figure IV-4
Alternative 2 Section

Source: Togawa Smith Martin Inc, 2018.

2. Environmental Impact Analysis

a) Aesthetics, Views, Light and Glare, and Shading

1) Aesthetics and Visual Quality

(a) Construction

As with the Project, the visual appearance of the Project Site would be altered during construction due to the removal of the existing building to the same extent as the Project. Other construction activities, including site preparation, grading, and excavation, the staging of construction equipment and materials, and the construction of the building foundation and proposed structure, would also alter the visual character and quality of the Project Site and adjacent roadways. Alternative 2's construction activities could be visible to pedestrians and motorists, as well as to viewers within nearby buildings. As with the Project, Alternative 2 would incorporate similar project design features as the Project, including the installation of temporary construction fencing that would screen much of the construction activity from view at street level. Overall, similar to the Project, while Alternative 2 would alter the visual character of the Project area on a short-term basis, construction activities would not substantially alter or degrade the existing visual character of the Project Site for the following reasons: (1) views of construction activities would be limited in duration and location; (2) the site appearance would be typical of construction sites in urban areas; (3) construction would occur within an urban setting with a high level of human activity and development; and (4) impacts would be reduced through standard best management practices (BMPs) implemented during the construction period. Therefore, aesthetic impacts during construction would be similar to the less-than-significant impacts of the Project.

(b) Operation

Under Alternative 2, the building architecture and style would be similar to that of the Project's lower three levels; however, the overall building height would be reduced from 148 feet to 46 feet. Areas of landscaping, an art plaza, and sidewalk amenities (such as seating areas and a water feature) would provide visual breaks in the view of Alternative 2 from the adjacent streets. Alternative 2 is designed to promote visual interest and pedestrian activity by offering retail storefronts at the ground level. At the third level above the street, Alternative 2 would provide a partially landscaped terrace surrounding the building, similar to the Project. Due to the reduced height of Alternative 2, the building would not offer the same type of opportunity for large-scale exterior art as the Project.

At 46 feet above street level, Alternative 2 would be of a similar height to adjacent developments to the north of the Project Site and would be lower in height than several other buildings within the vicinity. As with the Project, Alternative 2 would feature cohesive signage that would be consistent in shape, size, color, height, and lettering. Exterior building and tenant signage would consist of identity, wayfinding, and commercial signs in compliance with LAMC provisions. Also, as with the Project, the landscape design for Alternative 2 would create a pedestrian-friendly environment, including shade trees and landscaping along the street and trees in planters on the third-level terrace.

Therefore, similar to the Project, Alternative 2 would not degrade the existing visual character or quality of the Project Site or its surroundings due to changes in architecture or urban design. Thus, aesthetics impacts would be similar to the Project's less-than-significant impacts.

2) Views

As with the Project, existing views within the greater Project area are limited, mostly obscured due to the dense low- to mid-rise urban development in the Arts District and the mid- and high-rise urban development within the larger Downtown area and the relatively flat topography of the Project area.

While Alternative 2 would increase the building height on the Project Site by up to approximately 20 feet when compared to existing conditions, it would not substantially affect existing scenic vistas available from the 4th Street Bridge due to the presence of taller intervening structures that would largely screen Alternative 2 from view. Due to the existing buildings in the area, views toward the San Gabriel Mountains and Elysian Hills/Mount Washington to the north are currently largely obstructed. The Project Site is not visible from publicly accessible locations at ground level along the Los Angeles River due to intervening development, and development of Alternative 2 would not affect ground-level views from this locale. Similar to the Project, Alternative 2 would not obstruct an existing scenic vista. Therefore, Alternative 2 would not degrade the existing visual character or quality of the Project Site or its surroundings due to changes in views or viewsheds and impacts would be less than the Project.

3) Shade/Shadow

Alternative 2 would have a substantially reduced height (46 feet), which would produce shorter shadows when compared to the Project. Summer shadows cast by Alternative 2 would be minimal and would only affect adjacent properties for short periods of each day. At mid-afternoon on the summer solstice, Alternative 2 would cast shadows to the southeast, shading a portion of Colyton Street. A portion of 5th Street east of Colyton

Street would also be in Alternative 2's shadow during the late-afternoon period. Although most of the properties in this area consist of industrial or commercial uses, exterior portions of The Chairman Restaurant located on the southeast corner of Colyton Street and 5th Street could potentially be partially shaded by Alternative 2 during this mid- to late-afternoon period in summer. The duration of any potential shadow impact at this location, however, would be less than that of the Project and less than four hours between 9:00 AM and 5:00 PM. Overall, the summer shading impacts of Alternative 2 would affect neighboring shade-sensitive land uses to a lesser degree than the Project.

Alternative 2 would cast shorter shadows than the Project during the winter solstice. No shade-sensitive land uses are present in Alternative 2's wintertime shadow, and The Chairman Restaurant would not be affected. Therefore, shading impacts under Alternative 2 would be less than the Project's less-than-significant impacts.

4) Light and Glare

(a) Construction

As with the Project, lighting needed during construction of Alternative 2 has the potential to generate light spillover to off-site sensitive land uses. However, similar to the Project, construction activities would occur in accordance with the provision of LAMC Section 41.40, which limits construction hours of operation to between 7:00 A.M. and 9:00 P.M. on weekdays and between 8:00 A.M. and 6:00 P.M. on Saturdays and national holidays, with no construction permitted on Sundays. Therefore, construction activities for Alternative 2 would primarily occur during the daylight hours, and construction lighting would only be used for the duration needed if construction were to occur in the evening hours during the winter season when daylight is no longer sufficient. In addition, construction-related illumination would be used for safety and security purposes only, in compliance with LAMC light intensity requirements. Therefore, similar to the Project, Alternative 2 would not significantly impact off-site light-sensitive uses, substantially alter the character of off-site areas surrounding the Project Site, adversely impact day or nighttime views in the area, or substantially interfere with the performance of an off-site activity.

In addition, as with the Project, daytime and nighttime glare could potentially occur during construction activities if reflective construction materials were positioned in highly visible locations where the reflection of sunlight or nighttime light sources could occur. However, any glare generated within the Project Site during construction would be highly transitory and short-term given the movement of construction equipment and materials within the construction area and the temporary nature of construction activities. Furthermore, large, flat surfaces that are generally required to generate

substantial glare are typically not an element of construction activities. As a result, light and glare associated with the construction of Alternative 2 would not substantially alter the character of off-site areas surrounding the Project Site or adversely impact day or nighttime views in the area and impacts would be less than significant and similar to those of the Project. Therefore, impacts from sources of artificial light and glare during construction of Alternative 2 would be similar to the Project's less-than-significant impacts. Also, light impacts associated with construction would be less than significant under Alternative 2 and less than the Project.

(b) Operation

As with the Project during operation, Alternative 2 would increase light and glare levels within the Project Site and surrounding area compared to existing conditions through the introduction of new light and glare sources. Similar to the Project, Alternative 2 would include lighting designed to highlight architectural elements of the structure. Security lighting would be installed to deter criminal activity on the Project Site. The lights associated with Alternative 2 would be directed toward the interior of the Project Site so as not to create impacts to surrounding land uses or motorists traveling on surrounding roadways. All exterior lighting would be designed with internal and/or external glare control and would also be designed, arranged, directed, or shielded to contain direct illumination on-site, thereby preventing exceed illumination and light spillover onto adjacent land uses and/or roadways (see also Project Design Features AES-PDF-3 and AES-PDF-5). Blinking, flashing, or oscillating lights would be prohibited. As such, the potential impact resulting from lighting associated with architectural elements, interior building usage, security, and signage would be less than significant. Impacts would be less than the less-than-significant impact of the Project's due to the shorter height of Alternative 2.

Similar to the Project, the architectural features and facades of Alternative 2 would not be constructed of highly reflective materials. In accordance with Project Design Feature AES-PDF-4, the exterior of the proposed building would be articulated and constructed of materials, such as brick, metal, and glass with low reflectivity, which would not be expected to affect daytime views. The sources of glare that would be introduced into the area would not result in hazardous conditions to motorists or result in substantial glare due to the various features designed to minimize glare-related impacts. Therefore, impacts would be less than significant and less than those of the Project due to the lower height of Alternative 2.

b) Air Quality

1) Construction

(a) Regional and Localized Air Quality Impacts

Alternative 2 would involve the same amount of demolition and grading as the Project but would require approximately 50 percent less excavation and soil export due to the reduction in the number of subterranean levels from five to two. Construction activities would also be reduced due to the 82-percent reduction in proposed floor area. As with the Project, construction of this alternative would generate air emissions through the use of heavy-duty construction equipment and haul truck and construction worker trips. As such, over the entire duration of the construction period, the intensity of air emissions and fugitive dust from demolition, site preparation, grading, and other construction activities would be similar on days with maximum construction activities. However, due to the reduced size of Alternative 2, the number of such days would be fewer than with the Project.

Because maximum daily conditions are used for measuring significance, regional and localized impacts associated with any of the pollutants on these days would be similar to those of the Project and would be less than significant. Additionally, on an overall comparative basis, although impact levels would be the same under maximum activity days, the total amount of pollutants emitted during Project construction would be less under Alternative 2 due to the shorter duration of construction activities. Therefore, regional and localized air quality impacts would be less than significant and less than those of the Project.

(b) Toxic Air Contaminants

As with the Project, construction of Alternative 2 would result in TAC emissions, which are primarily associated with the combustion of diesel fuels that produce exhaust-related particulate matter. However, because of the relatively short period of time that diesel-fuel construction equipment would operate, and even a shorter period of time under this alternative than the Project, Alternative 2 would not result in a substantial, long-term source of TACs. Therefore, impacts due to TAC emissions and the corresponding individual cancer risk under Alternative 2 would be less than significant and less than those of the Project.

2) Operation

(a) Regional and Localized Air Quality Impacts

Alternative 2 would reduce the total square footage of uses on the Project Site. Operation of Alternative 2 would result in regional long-term air quality impacts, primarily from motor vehicle exhaust. However, Alternative 2 would have lower operational emissions than the Project based on the fact that Alternative 2 would generate far fewer net daily vehicle trips than the Project (approximately 265 daily drips for Alternative 2 versus approximately 4,713 for the Project) and a much smaller building to generate area and energy sources of emissions. (See Table VI-5 for Alternative 2 trip generation data.)

Long-term operation of Alternative 2 would generate regional emissions of pollutants that are less than the Project due to the reduction in daily vehicle trips and, as with the Project, would not exceed applicable SCAQMD regional thresholds of significance. Thus, as the Alternative 2 maximum regional totals would be lower than the Project's maximum regional totals, impacts under Alternative 2 would be less than significant and less than those of the Project.

Long-term operation of Alternative 2 would generate fewer localized emissions of pollutants than the Project because the building footprint of Alternative 2 is 82 percent smaller than the Project. Thus, as the Alternative 2 maximum localized totals would be lower than the Project's maximum localized totals, the Alternative 2 impact would be less than significant and less than those of the Project.

Accordingly, regional and localized air quality impacts under Alternative 2 would be less than significant and less than those of the Project.

(b) Toxic Air Contaminants

Similar to the Project, Alternative 2 would not include typical sources of acutely and chronically hazardous TACs, such as industrial manufacturing processes. As such, as with the Project, Alternative 2 would not create substantial concentrations of TACs during its normal operation. Due to Alternative 2's reduction in size compared to the Project, Alternative 2 would generated significantly less mobile source diesel emissions than those generated by the Project. Therefore, TAC impacts under Alternative 2 would be less than significant and less than those of the Project.

c) Cultural Resources

1) Historical Resources

As with the Project, Alternative 2 would demolish the existing building on the Project Site. The demolition of the building would not result in a substantial adverse change to the Potential Historic District, because it is neither individually eligible as a historical resource nor a contributor to the significance of the Potential Historic District. Alternative 2 would not result in the introduction of a new visual element to the area that would be incompatible in size, scale or design with the Potential Historic District. The proposed structure would be three stories, just one more than the existing structure on the Project Site, and building heights in the surrounding area generally range from one to eight stories. The new structure would not be visible from far distances. Alternative 2 would not result in a reduction in the integrity of the Potential Historic District. Therefore, Alternative 2 would have a less-than-significant impact with respect to historical resources that is less than the Project's less-than-significant impact.

2) Archaeological Resources

As with the Project, under Alternative 2, the existing Project Site development would be removed, and the Project Site would be redeveloped. Although no archaeological resources have been previously recorded within the Project Site, it is possible that historic-period archaeological resources could exist below the current ground surface, especially within the surface fill identified in the geotechnical borings taken at 12 feet below ground surface (bgs). Specifically, there is potential to encounter the remains of the known historic-period archaeological resource Zanja No. 2, in the form of a wooden flume box, domestic refuse or building materials associated with two 1890s residences, and construction material and building foundations associated with two warehouses demolished in the 1910s. Development of Alternative 2 would require a shallower excavation to construct the two subterranean parking levels versus the five levels for the Project. The potential presence of archaeological materials is limited to the first several feet below the ground surface and the disturbed area footprint would be identical to that of the Project. Therefore, there would be no change in the potential likelihood of encountering such materials during excavation work at the Project Site. Accordingly, similar to the Project, the excavation required to develop Alternative 2 has the potential to disturb archaeological resources that could be present beneath the surface of the Project Site. As with the Project, compliance with existing regulations and implementation of Mitigation Measures CUL-MM-1 through CUL-MM-4 would reduce these potential impacts to a less-than-significant level, and impacts would be similar to those of the Project.

3) Paleontological Resources

As with the Project, under Alternative 2, the existing Project Site development would be removed, and the Project Site would be redeveloped. Although no previously encountered fossil vertebrate localities have been located within the Project Site, the possibility exists that paleontological artifacts that were not recovered during prior construction or other human activity on the Project Site may be present. The shallower excavation needed to construct the two subterranean parking levels for Alternative 2 versus the five subterranean levels for the Project would not affect the likelihood of encountering paleontological resources beneath the Project Site. Otherwise, the disturbed area footprint would be identical under both the Project and Alternative 2. Similar to the Project, the excavation required to develop Alternative 2 has the potential to disturb unknown paleontological resources present beneath the surface of the Project Site. As with the Project, compliance with existing regulations and implementation of Mitigation Measure CUL-MM-5 would reduce these potential impacts to a less-than-significant level and impacts would be similar to those of the Project.

d) Geology and Soils

Alternative 2 would remove the existing light industrial/arts production commercial spaces and 10 live/work units and construct a new building on the Project Site. Development of Alternative 2 at the Project Site would require the same amount of Project Site clearing and demolition as the development of the Project; however, a lesser amount of excavation, grading, and construction would be necessary because the building would be shorter above ground and shallower below ground. Similar to the Project, Alternative 2 would not exacerbate existing environmental conditions related to seismic ground shaking, ground failure, landslides, unstable soils, and expansive soils and would have a less-than-significant impact on geology and soils.

e) Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions from a development project are determined in large part by the number of daily trips generated and energy consumption from proposed land uses. Under Alternative 2, the land use change from residential and hotel to creative office uses would reduce the number of net new daily trips compared to the Project. Alternative 2 would generate approximately 94 percent fewer net new daily trips than the Project. Additionally, with regard to energy uses, the reduced building floor area of Alternative 2 would reduce the amount of electricity, water, and natural gas used in comparison to the Project. Thus, associated GHG emissions would be reduced as compared to the Project.

As with the Project, Alternative 2 would be generally consistent with the AB 32 Scoping Plan's statewide objectives to reduce GHG emissions (see Table IV.F-8 in **Section IV.F, Greenhouse Gas Emissions**, of the Draft EIR), as well as with applicable state, regional, and local regulatory plans and policies to reduce GHG emissions.

Alternative 2 would incorporate the same design features as the Project to reduce GHG emissions, including Project Design Features GHG-PDF-2 and GHG-PDF-3. In addition, Alternative 2 would be designed to comply with the goals of CARB's *Climate Change Scoping Plan*, SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the City of Los Angeles' Green LA Plan, and the City's Sustainability pLAn, and implement sustainability features that are comparable to the ones proposed for the Project. Unlike the Project, Alternative 2 would not be consistent with RTP/SCS policies intended to promote the development of residential mixed uses at urban infill locations that are proximate to public transit. Even so, Alternative 2 would still intensify a complementary mix of uses in an infill location near transit and would therefore be generally consistent with the GHG reduction goals and objectives set forth in state, regional, and local regulatory plans. Impacts related to GHG emissions under Alternative 2 would be less than significant and less than those of the Project.

f) Hazards and Hazardous Materials

1) Construction

Alternative 2 would remove the existing light industrial/arts production commercial spaces and 10 live/work units and construct a new building on the Project Site. Similar to the Project, construction of Alternative 2 would involve the temporary transport, use, or disposal of potentially hazardous materials, including paints, adhesives, surface coatings, cleaning agents, fuels, and oils. All of these materials would be used short-term during construction activities. Additionally, all potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, which would ensure that impacts are less than significant. Furthermore, any emissions from the use of such materials would be minimal and localized to the Project Site.

As with the Project, excavation and grading at the Project Site for Alternative 2 could potentially uncover unknown contaminants associated with past uses of the property. Thus, Alternative 2 would also implement Mitigation Measure HAZ-MM-1 to reduce this potential impact to a less-than-significant level. Since construction of Alternative 2 would comply with applicable regulations and would not expose persons to substantial risk resulting from the release of hazardous materials, exposure to health hazards in excess of regulatory standards, or exacerbate existing environmental conditions, potential

impacts associated with the potential release of hazardous substances during construction of this alternative would be less than significant. Overall, based on the reduced size and duration of construction for Alternative 2, impacts would be less than significant and less than those of the Project.

2) Operation

Operation of Alternative 2 would result in the use, storage, disposal, and transport of similar types of hazardous materials as the Project though to a lesser extent. All potentially hazardous material, transported, stored, offered for sale, or used on site for daily upkeep would be contained, stored, used and disposed in accordance with the manufacturers' instructions and handled in compliance with applicable standards and regulations.

Similar to the Project, as Alternative 2 would be developed on the existing Project Site, there would be no impacts to existing schools located within a quarter mile of the Project Site. The Project Site is not located on any governmental databases listing hazardous materials sites. Thus, similar to the Project, no impacts would occur. The Project Site is not located within the vicinity of a public airport or private airstrip. Thus, similar to the Project, no impacts would occur.

Similar to the Project, under Alternative 2, the Project Applicant would be required to establish, implement, and maintain on file an emergency response plan, which would be inspected annually by the LAFD. Thus, operation of Alternative 2 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, operational impacts would be less than significant. Therefore, operation of Alternative 2 would result in impacts that are similar to the Project's less-than-significant impacts.

As the Project Site is not located within a Very High Fire Hazard Severity Zone, similar to the Project, Alternative 2 would not expose people and/or structures to significant risk of loss, injury, or death involving wildland fires. Thus, there would be no impacts associated with exposing people and/or structures to significant risk of loss, injury, or death involving wildland fires.

g) Land Use and Planning

1) Land Use Consistency

Under Alternative 2, the development of a three-story retail and creative office project would be consistent with the existing zoning designation, height limit, and FAR within the Project Site.

Alternative 2 would require discretionary and ministerial approvals (e.g. Site Plan Review, Haul Route Permit, and construction permits) similar to the Project. With implementation of the required discretionary approvals and the project design features, Alternative 2 would be generally consistent with the applicable policies and objectives included in the City's General Plan Framework Element, Health and Wellness Element, Central City North Community Plan, and Zoning Code. However, Alternative 2 would be less consistent than the Project with the applicable policies and objectives related to the provision of housing included in the City's General Plan Framework Element, Health and Wellness Element, and Central City North Community Plan (see **Section IV.H, Land Use and Planning**, of the Draft EIR) because no residences would be developed. Unlike the Project, which results in a net increase of 119 units, including 15 Very Low-Income units, Alternative 2 would result in a net reduction of 10 units and would not support applicable policies related to the provision of housing. Similar to the Project, Alternative 2 would be consistent with the pedestrian-related policies included as part of the Walkability Checklist and would be consistent with the Citywide Design Guidelines.

Therefore, as with the Project, Alternative 2 would result in a less-than-significant impact with respect to land use but would be less consistent than the Project with adopted policies encouraging the location of mixed-use residential developments in high density, transit-proximate areas.

2) Land Use Compatibility

Similar to the Project, Alternative 2 would not create a physical barrier in an established community but would instead convert the Project Site currently developed with an 91,200-square-foot, two-story light industrial/arts-oriented commercial building containing 10 live/work units into a development containing retail and creative office uses. Alternative 2 would result in the loss of 10 live/work units without replacement. The retail and creative office uses of Alternative 2 would be compatible with the existing surrounding uses. As such, impacts associated with land use compatibility would be similar to the Project's less-than-significant impact.

h) Noise

1) Construction

Alternative 2 would result in an overall reduction in the construction duration when compared to the Project due to its reduced size. However, while the overall duration of the construction period would be reduced compared to the Project, construction activities during the maximum activity days would be similar in scale to the Project. Similar to the Project, Alternative 2 would require demolition of the 91,200 square feet of light industrial and production space and 10 live/work units. Construction activities for

the Project and Alternative 2 would be similar in that heavy equipment, hand held equipment, and motor vehicles, all of which generate temporary noise and, in some cases, vibration impacts, would be used during construction.

As with the Project, Alternative 2's construction noise impacts would be temporary, and construction activities would not be permitted between 9:00 P.M. through 7:00 A.M., Monday through Friday, before 8:00 A.M. and after 6:00 P.M. on Saturdays, or at all on Sundays. To avoid noise increases that exceed City noise regulations, as with the Project, Alternative 2 would implement Mitigation Measure NOI-MM-1 requiring powered construction equipment to be equipped with noise mufflers. In addition, Alternative 2 would implement Mitigation Measures NOI-MM-2 requiring the erection of temporary sound barriers along the Project's eastern boundary, and NOI-MM-3 restricting construction truck usage of Colyton Street. As with the Project, construction noise impacts would be less than significant with mitigation. As with the Project, ground-borne vibration impacts of Alternative 2 could be significant for structures abutting the Project Site to the north. However, with the implementation of Mitigation Measures NOI-MM-4 and NOI-MM-5, vibration impacts at the structures abutting the Project Site to the north (a three-story brick building at 440 Seaton Street and a single-story warehouse building at 441 S. Colyton Street) would be reduced to a less-than-significant level and similar to that of the Project. However, as with the Project, the vibration impact of Alternative 2 would exceed the human annoyance threshold at the nearest residential use on Colyton Street and would be considered significant and unavoidable.

Thus, implementation of Alternative 2 would result in construction noise and vibration impacts that are similar to the Project's less-than-significant impacts with mitigation and significant and unavoidable (vibration) impacts due to the proximity of the Project Site to the nearest residential use. However, these impacts would occur for a shorter duration under Alternative 2 as compared to the Project due to the shorter construction duration. Therefore, the impacts of Alternative 2 would be less than those of the Project.

2) Operation

As with the Project, operation of Alternative 2 would result in both direct on-site noise impacts associated with commercial-related activities and indirect off-site noise impacts from vehicles traveling on local roads to access the Project Site. Direct on-site noise sources include HVAC systems, intermittent landscape maintenance, commercial activities (i.e., voices, music), and auto-related activities. On-site noise sources would not be expected to individually or collectively elevate ambient noise levels substantially at nearby sensitive receptors. The potential noise impacts from these on-site operational sources would be considered less than those of the Project due to the smaller development size and the lack of 24-hour residential or hotel uses. Off-site

noise from traffic generated by Alternative 2 would be reduced as compared to the Project due to the reduction in the number of net new daily trips from 4,713 to 265.

During operation of Alternative 2, there would be no significant stationary sources of ground-borne vibration, such as heavy equipment or industrial operations. Operational ground-borne vibration in the Project Site vicinity would be generated by vehicular travel on the local roadways. However, passenger vehicles rarely create enough ground-borne vibration to be perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps, which is not the case in the vicinity of the Project Site. Due to the reduction in the number of daily vehicle trips and fewer truck deliveries (due to the absence of the hotel) associated with Alternative 2, operational vibration impacts would be less than those of the Project.

The potential on-site and off-site operational noise and vibration impacts generated by Alternative 2 would be less than significant and less than those of the Project.

i) Population, Housing, and Employment

1) Population

The construction of Alternative 2 would result in increased employment opportunities in the construction field in the vicinity of the Project Site. However, as is the case with the Project, construction workers would not likely relocate their place of residence as a consequence of working on Alternative 2. The construction-related employment for Alternative 2 would not represent a permanent or substantial new employment generator that would cause growth, and there would be no significant housing or population impacts from construction of Alternative 2. Therefore, similar to the Project, no impact related to construction-related indirect population growth would occur.

The proposed creative office and retail land uses within Alternative 2 would generate a net increase of approximately 145 employees after the existing uses on-site are removed. Compared to the anticipated employment growth in the City between the 2017 baseline year and the anticipated Alternative 2 buildout year of 2021, Alternative 2's employment would represent 0.21 percent of the forecasted employment growth in the City. Compared to the anticipated employment growth in the City between 2017 and 2040, as projected by SCAG in its 2016-2040 RTP/SCS, Alternative 2's employment would represent 0.04 percent of the forecasted employment growth. It is likely that the existing availability of employees in the area would fill the jobs generated by Alternative 2. Thus, operation of Alternative 2 would not cause an increase in employment to induce population growth indirectly in the Project area. Therefore, similar to the Project, impacts related to operation-related indirect population growth would be less than significant.

Because no residential units would be included within Alternative 2, the direct population growth of the Project would be eliminated. Thus, compared to the Project, Alternative 2 would result in a reduction of 289 permanent residents at the Project Site. Additionally, by removing the 10 existing live/work units at the Project Site, Alternative 2 would reduce the Project Site's existing population by approximately 25 persons. Thus, Alternative 2 would produce an impact that is less than significant and less than those of the Project with respect to direct population growth at the Project Site.

As with the Project, Alternative 2 would not induce substantial growth that exceeds growth forecasted for the area or introduce unplanned infrastructure or accelerate development in an undeveloped area that would result in an adverse physical change in the environment. The Project Site is currently developed with an industrial/residential building and is located within an urbanized area in the City. Thus, the construction of a potential growth-inducing roadway or other infrastructure extensions would not be required. Similar to the Project, as development of Alternative 2 would not induce substantial indirect population growth and would be supported by the existing infrastructure, such as roadways, impacts would be less than significant.

2) Housing

Alternative 2 would not develop any housing at the Project Site and would remove the 10 existing live/work units on-site. Alternative 2 would not replace these units on-site. Based on a persons-per-household rate of 2.43, approximately 25 residents would be displaced due to Alternative 2, the same as with the Project. Existing and projected available dwelling units in the Project area could absorb the need for housing created by the loss of 10 units at the Project Site and the need to house the approximately 25 residents that currently live on-site who would be displaced due to Alternative 2. Cumulative development in the Project area includes approximately 31,334 new dwelling units. For these reasons, Alternative 2 would not displace a substantial number of existing housing units or people, necessitating the construction of replacement housing elsewhere. The impact of Alternative 2 on housing would, therefore, be greater than the Project's less-than-significant impact, although still less than significant, due to the loss of existing housing without replacement on-site.

3) Employment

Operation of Alternative 2 would result in an increase of approximately 145 permanent jobs upon completion as compared to existing conditions and reduction of 94 jobs as compared to the Project. This increase would be consistent with the SCAG forecast of 388,300 additional jobs within the City by 2040. The impact of Alternative 2 on employment would, therefore, be less than significant and similar to that of the Project.

j) Public Services

1) Fire Protection

(a) Construction

As discussed in **Section IV.K.1, Public Services - Fire Protection**, of the Draft EIR, and similar to the Project, construction activities associated with Alternative 2 may temporarily increase demand for fire protection and emergency medical services and may cause the occasional exposure of combustible materials, such as wood, plastics, sawdust, coverings and coatings, to heat sources, including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, in compliance with Occupational Safety and Health Administration (OSHA) requirements, construction managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction that meets OSHA standards would be maintained on-site. Additionally, construction would comply with applicable OSHA requirements related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Therefore, in light of OSHA regulations that would, in part, require training of personnel in fire prevention and emergency response, maintenance of fire suppression equipment, and implementation of proper procedures for storage and handling of flammable materials on the Project Site, construction impacts on fire protection and emergency medical services would be less than significant and similar to those of the Project.

Construction activities also have the potential to affect fire protection services by adding construction traffic to the street network and by necessitating partial lane closures during street improvements and utility installations. These impacts would be similar to those of the Project and would be considered less than significant because construction activities are temporary in nature and do not create continuing risks. General “good housekeeping” procedures would be employed by the construction contractors and the work crews (e.g., maintaining mechanical equipment, proper storage of flammable materials, cleanup of spills of flammable liquid) would minimize these hazards. In addition, partial lane closures would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to California Vehicle Code (CVC) Section 21806. Additionally, if there are partial closures to streets surrounding the Project Site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete under the Construction Traffic Management Plan (refer to TR-PDF-2).

Overall, construction is not considered to be a high-risk activity. Construction of Alternative 2 would not be expected to tax fire-fighting and emergency services to the extent that there would be a need for new or expanded fire facilities in order to maintain acceptable service ratios or other performance objectives of the LAFD, due to the limited duration of construction activities and compliance with applicable codes. Therefore, impacts associated with construction of Alternative 2 on fire protection services would be less than significant and similar to those of the Project.

(b) Operation

As discussed in **Section IV.K.1, Public Services - Fire Protection**, of the Draft EIR, with respect to fire flows, fire protection services for the Project would be considered adequate by LAFD standards. Since Alternative 2 would be a substantially smaller development than the Project, fire protection services related to fire flows would also be considered adequate by LAFD standards. Therefore, the impact of this alternative regarding fire flow would be less than significant and less than that of the Project.

Similar to the Project, with regard to fire services during operation of Alternative 2, the Project Site is expected to continue to be served by Fire Station No. 4, which is the nearest fire station to the Project Site. As with the Project, all uses under Alternative 2 would fall within the LAFD's maximum prescribed response distances of 1.5 miles and 2.0 miles from a fire station with an engine company and truck company, respectively (Fire Station No. 4). Based on the LAMC criteria regarding response distances, as with the Project, Alternative 2 would be adequately located within the prescribed distances from Fire Station No. 4.

Based on the elimination of the live/work and hotel uses on the Project Site, the number of fire protection service calls is expected to be reduced with implementation of Alternative 2 as compared to the Project due to the fewer number of people present on-site at any given time. Similar to the Project, Alternative 2 would comply with Los Angeles Building and Fire Code requirements, which include, but are not limited to, the installation of an automatic fire sprinkler system; the creation and filing of an emergency response plan; and LAFD approval of emergency plans, procedures, and evacuation routes and signs. Compliance with applicable regulatory requirements that are enforced through the City's building permitting process would ensure that adequate fire prevention features would be provided to reduce the demand on LAFD facilities and equipment, thereby ensuring that Alternative 2 would not create any undue fire hazard.

As with the Project, emergency vehicles would access the Project Site directly from the surrounding roadways, including 5th Street, Colyton Street, and Seaton Street. Emergency access to the Project Site and surrounding uses would be maintained at all times. Alternative 2-related traffic would have the potential to increase emergency

vehicle response times to the Project Site and surrounding properties due to travel time delays caused by traffic. However, the area surrounding the Project Site includes an established street system which provides regional, sub-regional, and local access and circulation within the Project's traffic study area. In addition, the drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to CVC Section 21806. Therefore, the increase in traffic generated by Alternative 2 would not significantly impact emergency vehicle response times to the Project Site and surrounding area and impacts would be similar to those of the Project.

As with the Project, domestic and fire water service to the Project Site under Alternative 2 would continue to be supplied by Los Angeles Department of Water and Power (LADWP). Similar to the Project, Alternative 2 would install fire suppression infrastructure as necessary to comply with applicable City requirements of the LAMC. Therefore, Alternative 2 would meet the fire flow requirement for the Project Site.

Based on the above, operation of Alternative 2 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility in order to maintain service. Therefore, impacts to fire protection services during operation of Alternative 2 would be less than significant and less than those of the Project.

2) Police Protection

(a) Construction

Similar to the Project, construction of Alternative 2 could result in an increase in demand for police protection services. However, as with the Project, Alternative 2 would incorporate Project Design Features POL-PDF-2 and POL-PDF-3 to implement temporary security measures, including security fencing, lighting, and locked entry to secure the Project Site during construction. Similar to the Project, with implementation of these Project Design Features, the potential need for police protection during the construction phase of Alternative 2 would be minimized.

With regard to emergency vehicle access, as with the Project, although minor traffic delays due to temporary lane closures needed to facilitate specific construction activities could occur, particularly during the construction of utilities and street improvements, impacts to police protection services would be considered less than significant as (1) emergency access to the Project Site would be maintained through marked emergency access points approved by the LAPD; (2) construction impacts are temporary in nature; and (3) the ability of emergency vehicles to have a variety of options for avoiding traffic and partial street closures. Accordingly, similar to the Project, construction-related impacts of Alternative 2 would not be expected to affect the LAPD's ability to respond to emergencies to the extent that there would be a need for any additional new or

expanded police facilities, in order to maintain acceptable service ratios, response times, or other performance objectives of the LAPD.

Therefore, similar to the Project, impacts on police protection services during construction of Alternative 2 would be less than significant.

(b) Operation

As compared to the Project, Alternative 2 would not introduce any residents to the Project Site and would remove the 10 existing residential units from the Project Site. Alternative 2 would introduce additional employment and visitor populations to the Project Site, although to a lesser degree than the Project. As a result, Alternative 2 would not have an impact on the existing officer-to-resident ratio.

Similar to the Project, Alternative 2 would implement Project Design Features POL-PDF-4 and POL-PDF-5, which are related to a security program, provision of sufficient lighting, and Project design that increases open views and reduces areas of concealment. These Project Design Features would help offset the increase in demand for police services under Alternative 2. Furthermore, although traffic generated by Alternative 2 would have the potential to affect emergency vehicle response to the Project Site and surrounding properties due to additional traffic, emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens and flashing lights to clear a path of travel. As such, operation of Alternative 2, including traffic generated by Alternative 2, would not substantially affect emergency response as a result of increased traffic congestion. Based on the analysis above, Alternative 2 would not necessitate the provision of new or physically altered facilities in order to maintain the LAPD's capability to serve the Project Site. Accordingly, Alternative 2 would not result in adverse physical impacts associated with the construction of new or altered facilities. Therefore, Alternative 2's impacts related to police protection services would be less than the less-than-significant impacts of the Project.

3) Schools

(a) Construction

Similar to the Project, Alternative 2 would generate part-time and full-time jobs associated with its construction between the start of construction and full buildout. However, due to the employment patterns of construction workers in Southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction job opportunities. Therefore, construction employment generated by Alternative 2 would not result in a notable increase in the resident population or a corresponding demand for schools from construction workers in the vicinity of the Project Site. Similar to the

Project, impacts on school facilities during construction of Alternative 2 would be less than significant.

(b) Operation

As shown in Table VI-4, based on the application of Los Angeles Unified School District (LAUSD) demographic analysis, Alternative 2 would result in approximately 39 additional LAUSD students (22 elementary students, 6 middle school students, and 11 high school students), compared to the Project's 141 students (80 elementary, 20 middle, and 41 high school students). Thus, Alternative 2 would generate 102 fewer students than the Project. Under Alternative 2 and using future enrollment projections for each school, 9th Street Elementary School would operate over capacity by 79 students, Hollenbeck Middle School would operate under capacity by 75 students, and the Boyle Heights Zone of Choice High Schools would operate over capacity by 407 students.

As with the Project, the number of students generated by Alternative 2 who could attend LAUSD schools serving the Project Site would likely be less than the above estimate because this analysis does not include LAUSD options that would allow students generated by Alternative 2 to enroll at other LAUSD schools (i.e., Magnet Schools, Charter Schools, and Pilot Schools) located away from their home attendance area, or students who may enroll in private schools or participate in home-schooling. In addition, this analysis does not account for students who may already reside in the school attendance boundaries. Furthermore, as with the Project, pursuant to the California Government Code, the Project Applicant's payment of the school fees established by the LAUSD in accordance with existing rules and regulations regarding the calculation and payment of such fees would, by law, provide full and complete mitigation for this alternative's direct and indirect impacts to schools. Therefore, due to a reduction in the number of students generated under Alternative 2, impacts related to schools under Alternative 2 would be less than significant and less than those of the Project.

Table VI-4
Alternative 2: Estimated Student Generation

Land Use	Project Amount	Student Generation			
		Elementary	Middle	High	Total
Creative Office/Retail	145 net new employees[1]	22	6	11	**39**

[1] *Estimated new employment at Project Site over the existing employment. See Table IV.J-2 for calculation. A net increase of 145 employees generates 39 students, using 0.2691 students per employee student generation rate for office/retail land uses, including creative office space, from the 2012 LAUSD Developer Fee Justification Study. Office/retail rates are for total number of students, not broken down by elementary, middle, or high school. Thus, the total is broken down by the same relative rate as households: 4:1:2.*

4) Parks and Recreation

(a) Construction

Construction of Alternative 2 would result in a temporary increase in the number of construction workers at the Project Site. As described above, due to the employment patterns of construction workers in Southern California, and the operation of the market for construction labor, the likelihood that construction workers would relocate their households as a consequence of working on Alternative 2 is negligible. Therefore, the construction workers associated with Alternative 2 would not result in a notable increase in the residential population of the Project vicinity, or a corresponding permanent demand for parks and recreational facilities in the vicinity of the Project Site. As such, similar to the Project, construction of Alternative 2 would not generate a demand for park or recreational facilities that cannot be adequately accommodated by existing or planned facilities and services, increase the use of existing parks such that substantial physical deterioration of the facility would occur, or interfere with existing park usage. Therefore, similar to the Project, impacts on parks and recreational facilities during construction of Alternative 2 would be less than significant.

(b) Operation

Alternative 2 would provide 20,000 square feet of open space and recreational amenities. By eliminating residential units from the Project Site, Alternative 2 would eliminate approximately 314 residents at the Project Site that would be generated by the Project and would also reduce the current residential population on-site by 25 residents. Thus, Alternative 2 would reduce the Project Site's demand for parks and recreational facilities in the Project area.

Similar to the Project, Alternative 2 would not be expected to cause or accelerate substantial physical deterioration of off-site public parks or recreational facilities given the provision of on-site public and private open space described above. As with the Project, employees generated by Alternative 2 would not utilize parks and recreational facilities beyond a 0.5-mile radius from the Project Site as lunch breaks typically are not long enough for workers to take advantage of such facilities and return to work within the allotted time (e.g., 30 to 60 minutes). Instead, as with the Project, it is anticipated that employees under Alternative 2 would utilize on-site open space as it would be more easily accessible and convenient, resulting in a negligible demand for surrounding parks and recreational facilities. Thus, Alternative 2 would not substantially increase the demand for off-site public parks and recreational facilities. Therefore, impacts on parks and recreational facilities during operation of Alternative 2 would be less than significant and less than those of the Project due to the removal of residents.

5) Libraries

(a) Construction

Similar to the Project, construction of Alternative 2 would result in a temporary increase in the number of construction workers on the Project Site. However, due to the employment patterns of construction workers in Southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction of Alternative 2. Therefore, construction employment generated by Alternative 2 would not result in a notable increase in the resident population or a corresponding demand for library services in the vicinity of the Project Site. As such, similar to the Project, impacts to library facilities during construction of Alternative 2 would be less than significant.

(b) Operation

Alternative 2 would not add any residents and would add a fewer number of employees to the Project Site when compared to the Project. Alternative 2 would also remove the existing 25 residents from the Project Site. As a result, Alternative 2 would reduce the demand for library services at the Project Site as compared to both the Project and to existing conditions.

Similar to the Project, it is anticipated that new jobs generated by Alternative 2 would typically be filled by persons who already reside in the vicinity of the workplace and already generate a demand for the libraries in the vicinity of the Project Site. Furthermore, as with the Project, employees of the creative office space would have internet access, which results in a reduced demand at physical library locations. Therefore, any indirect or direct new demand for library services generated by employees under Alternative 2 would already be taken into account in library services provisions.

Furthermore, as with the Project, operation of Alternative 2 would not exacerbate existing capacity issues at the two local libraries (Little Tokyo and Ben Franklin Branch Libraries) that have been determined by the LAPL to be undersized based on existing service populations as it would remove, rather than increase, the number of residents and associated library service demand at the Project Site. As such, Alternative 2 would not result in the need for new or altered library facilities. Therefore, impacts related to libraries under Alternative 2 would be less than significant and less than those of the Project.

k) Transportation/Traffic

1) Construction

Alternative 2 would involve less excavation with three fewer subterranean levels than the Project, resulting in reduced export of existing soil materials compared to that of the Project. As with the Project, no temporary full street closures are anticipated, access to adjacent buildings and land uses would remain open, no bus stops or transit lines would be affected, and approximately 34 on-street parking spaces along the Project Site's 5th Street and Seaton Street frontages would be removed. As determined in **Section IV.L, Transportation/Traffic**, of the Draft EIR, construction trips generated by the Project would not cause significant traffic impacts. As the maximum daily truck trips generated during excavation activities under Alternative 2 would be no greater than those of the Project, construction trips generated by this Alternative also would not cause significant traffic impacts. Therefore, Alternative 2 would result in a construction traffic impact that is less than the less-than-significant impacts of the Project due to the reduction in the number of haul trips required for export of soil materials from the Project Site.

2) Operation

(a) Intersection Levels of Service

Alternative 2 would reduce traffic generation compared to the Project. Table VI-5 provides the trip generation rates and trip adjustments that were utilized in this analysis. As detailed in Table VI-5, Alternative 2 would generate a total of 265 net new daily trips, with 29 net new AM peak hour trips (29 inbound, 0 outbound) and 34 net new PM peak hour trips (6 inbound, 28 outbound).

Alternative 2's trip generation would be 244 trips less than that of the Project during the AM peak hour and 195 fewer trips during the PM peak hour, with 4,448 fewer daily trips than the Project.

As shown in Table VI-6, under the Baseline Plus Alternative 2 scenario, Alternative 2's intersection impacts would be less than the less-than-significant impacts of the Project due to the fewer number of trips generated by the uses at the Project Site.

Table VI-5
Alternative 2: Trip Generation Estimates

Land Use	ITE Land Use Code	Size		Trip Generation Rates [a]							Estimated Trip Generation						
					AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour		
				Daily	Rate	In%	Out%	Rate	In%	Out%	Daily	In	Out	Total	In	Out	Total
Alternative 2																	
Shopping Center	820	26.979	ksf	42.7	0.96	62%	38%	3.71	48%	52%	1,152	16	10	26	48	52	100
Less: Internal Capture [b]				*3%*		*7%*	*12%*		*9%*	*2%*	*(35)*	*(1)*	*(1)*	*(2)*	*(4)*	*(1)*	*(5)*
Total Driveway Trips											1,117	15	9	24	44	51	95
Less: Pass-by [c]				*50%*	*50%*			*50%*			*(558)*	*(7)*	*(4)*	*(11)*	*(22)*	*(25)*	*(47)*
Net External Vehicle Trips											559	7	5	12	22	46	48
Creative Office	710	38.571	ksf	11.03	1.56	88%	12%	1.49	17%	83%	425	53	7	60	10	47	57
Less: Internal Capture [b]				*5%*		*3%*	*25%*		*18%*	*13%*	*(21)*	*(2)*	*(2)*	*(4)*	*(2)*	*(6)*	*(8)*
Net External Vehicle Trips											404	51	5	56	8	41	49
Total Driveway Trips											1,521	66	14	80	52	92	144
Total Project External Vehicle Trips											963	59	10	69	30	67	97
Existing Use Credit																	
Shopping Center	820	22	ksf	42.7	0.96	62%	38%	3.71	48%	52%	939	13	8	21	39	43	82
Less: Internal Capture [b]				*4%*		*5%*	*7%*		*8%*	*5%*	*(38)*	*(1)*	*(1)*	*(2)*	*(3)*	*(2)*	*(5)*
Total Driveway Trips											901	12	7	19	36	41	77
Less: Pass-by [c]				*50%*	*50%*			*50%*			*(450)*	*(6)*	*(3)*	*(9)*	*(18)*	*(20)*	*(38)*
Net External Vehicle Trips											451	6	4	10	18	21	39

Table VI-5
Alternative 2: Trip Generation Estimates

Land Use	ITE Land Use Code	Size		Trip Generation Rates [a]							Estimated Trip Generation						
					AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour		
				Daily	Rate	In%	Out%	Rate	In%	Out%	Daily	In	Out	Total	In	Out	Total
Creative Office	710	16	ksf	11.03	1.56	88%	12%	1.49	17%	83%	176	22	3	25	4	20	24
Less: Internal Capture [b]				7%		4%	33%		25%	18%	*(12)*	*(1)*	*(1)*	*(2)*	*(1)*	*(4)*	*(5)*
Net External Vehicle Trips											164	21	2	23	3	16	19
Warehousing	150	7	ksf	3.56	0.3	79%	21%	0.32	25%	75%	25	2	0	2	1	1	2
Net External Vehicle Trips											25	2	0	2	1	1	2
Residential	220	10	DU	6.65	0.51	20%	80%	0.62	65%	35%	67	1	4	5	4	2	6
Less: Internal Capture [b]				*13%*		*0%*	*0%*		*50%*	*33%*	(9)	0	0	0	(2)	(1)	(3)
Net External Vehicle Trips											58	1	4	5	2	1	3
Total Existing Use Credit											698	30	10	40	24	39	63
Net Incremental External Trips											**265**	**29**	**0**	**29**	**6**	**28**	**34**

[a] Source: Institute of Transportation Engineers [ITE}, Trip Generation, 9th Edition, 2012.
[b] 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.
[c] The pass-by credit is based on Attachment 1 of LADOT's Traffic Study Policies and Procedures, December 2016.
[d] Trip generation rates for community college used for arts school.
[e] Trip generation rates for museum used for Art Gallery. Since ITE does not provide a daily trip rate for this use, the peak hour rate was multiplied by 10 to develop a daily trip estimate.

Source: Fehr & Peers, 2018.

Table VI-6
Alternative 2: Baseline Plus Project Intersection Impact Analysis

No.	Intersection	Peak Hour	Baseline		Baseline Plus Alternative 2			
			V/C	LOS	V/C	LOS	V/C Increase	Significant Impact
1.	San Pedro St &	AM	0.274	A	0.274	A	0.000	No
	E 4th St	PM	0.759	C	0.759	C	0.000	No
2.	San Pedro St &	AM	0.235	A	0.235	A	0.000	No
	E 6th St	PM	0.407	A	0.407	A	0.000	No
3.	Central Ave &	AM	0.176	A	0.176	A	0.001	No
	E 4th St	PM	0.598	A	0.598	A	0.000	No
4.	Central Ave &	AM	0.440	A	0.440	A	0.001	No
	E 6th St	PM	0.701	C	0.701	C	0.001	No
5.	N Alameda St &	AM	0.474	A	0.591	A	0.117	No
	Arcadia St	PM	0.659	B	0.659	B	0.001	No
6.	N Alameda St &	AM	0.378	A	0.378	A	0.000	No
	E Commercial St	PM	0.648	B	0.649	B	0.001	No
7.	N Alameda St &	AM	0.561	A	0.562	A	0.001	No
	E 1st St	PM	0.574	A	0.574	A	0.000	No
8.	S Alameda St &	AM	0.703	C	0.705	C	0.002	No
	E 4th Pl/3rd St	PM	0.420	A	0.422	A	0.002	No
9.	S Alameda St &	AM	0.308	A	0.309	A	0.001	No
	E 4th St	PM	0.623	B	0.624	B	0.001	No
10.	S Alameda St &	AM	0.591	A	0.593	A	0.003	No
	E 6th St	PM	0.624	B	0.624	B	0.001	No
11.	S Alameda St &	AM	0.658	B	0.659	B	0.001	No
	E 7th St	PM	0.631	B	0.631	B	0.000	No
12.	S Alameda St &	AM	0.458	A	0.458	A	0.000	No
	E 8th St	PM	0.457	A	0.459	A	0.001	No
13.	S Alameda St &	AM	0.603	B	0.603	B	0.001	No
	Olympic Blvd	PM	0.747	C	0.748	C	0.001	No
14.	S Alameda St &	AM	0.652	B	0.652	B	0.001	No
	I-10 EB On-Ramp	PM	0.694	B	0.694	B	0.000	No
15.	Merrick St/Molino St &	AM	0.551	A	0.552	A	0.001	No
	E 4th St	PM	0.562	A	0.562	A	0.001	No
16.	Mateo St	AM	0.367	A	0.367	A	0.000	No
	E 6th St	PM	0.368	A	0.370	A	0.002	No
17.	Mateo St	AM	0.366	A	0.367	A	0.001	No
	E 7th St	PM	0.357	A	0.358	A	0.001	No
18.	Pecan St	AM	0.553	A	0.553	A	0.001	No
	E 4th St	PM	0.490	A	0.490	A	0.000	No
19.	US-101 SB Ramp &	AM	0.542	A	0.543	A	0.001	No
	E 4th St	PM	0.345	A	0.345	A	0.000	No
20.	US-101 NB Ramp &	AM	0.737	C	0.737	C	0.001	No
	E 4th St	PM	0.323	A	0.324	A	0.001	No
21.	I-5 NB Ramp &	AM	0.579	A	0.579	A	0.001	No
	E 4th St	PM	0.633	B	0.634	B	0.001	No

Source: Fehr & Peers, 2018.

As shown in Table VI-7, under the Future Plus Project scenario, Alternative 2 would not result in any significant impacts with respect to intersection capacity. The Project would result in six significantly impacted intersections, all but one of which would be mitigated to less-than-significant levels. Accordingly, as Alternative 2 would eliminate impacts at all six significantly impacted intersections, including the five intersections that are mitigated to less-than-significant levels and the intersection of Alameda Street and 6th Street (significant and unavoidable impact under the Project), Alternative 2 would result in impacts that would be less than those of the Project.

(b) Regional Transportation System

Alternative 2 would generate approximately 90 percent fewer trips than the Project. As identified in **Section IV.L, Transportation/Traffic**, of the Draft EIR, the Project's impacts to the CMP locations would be less than significant without mitigation. Therefore, similar to the Project, it may be assumed that Alternative 2 would also have less-than-significant impacts at CMP locations. Similarly, Alternative 2 would generate fewer transit trips than the Project due to its smaller scale. Given that the Project's impact on regional transit has been concluded to be less than significant in Section IV.L, the impact of Alternative 2 on regional transit would be less than the Project's less-than-significant impact.

(c) Access and Circulation

Similar to the Project, Alternative 2 would provide on-site parking within the subterranean parking levels. All driveways proposed under Alternative 2 would be the same as those proposed for the Project and designed in accordance with LADOT standards. Similar to the Project, Alternative 2 would provide sufficient valet staff to effectively manage the valet curbside space, to ensure the flow of vehicles to the garage is streamlined, and to minimize spillback queues onto 5th Street. Therefore, Alternative 2 would not result in inadequate access.

In addition, as with the Project, Alternative 2 does not include any sharp curves, dangerous intersections, or incompatible uses. No hazardous sight distance situations would result from Alternative 2 development in accordance with City specifications for sidewalks and building setbacks. Therefore, similar to the Project, Alternative 2's impacts related to hazardous roadway features would be less than significant.

Table VI-7
Alternative 2: Future Base Plus Project Intersection Impact Analysis

No.	Intersection	Peak Hour	Future Base		Future Plus Alternative 2 Conditions			
			V/C	LOS	V/C	LOS	V/C Increase	Significant Impact
1.	San Pedro St & E 4th St	AM	0.485	A	0.485	A	0.000	No
		PM	1.023	F	1.023	F	0.000	No
2.	San Pedro St & E 6th St	AM	0.348	A	0.348	A	0.000	No
		PM	0.537	A	0.537	A	0.000	No
3.	Central Ave & E 4th St	AM	0.299	A	0.299	A	0.001	No
		PM	0.765	C	0.765	C	0.000	No
4.	Central Ave & E 6th St	AM	0.757	C	0.758	C	0.001	No
		PM	1.130	F	1.130	F	0.000	No
5.	N Alameda St & Arcadia St	AM	0.907	E	0.908	E	0.001	No
		PM	1.101	F	1.101	F	0.001	No
6.	N Alameda St & E Commercial St	AM	0.647	B	0.647	B	0.000	No
		PM	1.079	F	1.080	F	0.001	No
7.	N Alameda St & E 1st St	AM	1.171	F	1.172	F	0.001	No
		PM	1.190	F	1.191	F	0.001	No
8.	S Alameda St & E 4th Pl/3rd St	AM	1.151	F	1.152	F	0.001	No
		PM	0.932	E	0.934	E	0.002	No
9.	S Alameda St & E 4th St	AM	0.927	B	0.673	B	0.001	No
		PM	1.036	F	1.067	F	0.001	No
10.	S Alameda St & E 6th St	AM	0.673	F	1.059	F	0.005	No
		PM	1.066	F	1.216	F	0.001	No
11.	S Alameda St & E 7th St	AM	1.254	F	1.254	F	0.001	No
		PM	1.344	F	1.344	F	0.000	No
12.	S Alameda St & E 8th St	AM	0.651	B	0.651	B	0.000	No
		PM	0.655	B	0.656	B	0.001	No
13.	S Alameda St & Olympic Blvd	AM	0.836	D	0.837	D	0.001	No
		PM	1.049	F	1.050	F	0.001	No
14.	S Alameda St & I-10 EB On-Ramp	AM	0.885	D	0.885	D	0.001	No
		PM	0.950	E	0.951	E	0.001	No
15.	Merrick St/Molino St & E 4th St	AM	0.828	D	0.829	D	0.001	No
		PM	1.073	F	1.074	F	0.001	No
16.	Mateo St E 6th St	AM	0.941	E	0.942	E	0.001	No
		PM	0.985	E	0.987	E	0.003	No
17.	Mateo St E 7th St	AM	0.807	D	0.809	D	0.002	No
		PM	0.897	D	0.898	D	0.001	No
18.	Pecan St E 4th St	AM	0.641	B	0.642	B	0.001	No
		PM	0.556	A	0.556	A	0.000	No
19.	US-101 SB Ramp & E 4th St	AM	0.633	B	0.633	B	0.001	No
		PM	0.449	A	0.450	A	0.001	No
20.	US-101 NB Ramp & E 4th St	AM	0.861	D	0.861	D	0.001	No
		PM	0.437	A	0.438	A	0.001	No
21.	I-5 NB Ramp & E 4th St	AM	0.711	C	0.712	C	0.001	No
		PM	0.787	C	0.788	C	0.001	No

Source: Fehr & Peers, 2018.

(d) Bicycle, Pedestrian, and Vehicular Safety

Bicycle, pedestrian, and vehicular access to the Project Site under Alternative 2 would be the same as the Project and designed in accordance with LADOT and other applicable standards to provide adequate sight distance, sidewalks, and/or pedestrian movement controls that would meet the City's requirements to protect pedestrian safety. As with the Project, Alternative 2 would improve the Project Site-adjacent sidewalks and circulation system and would not disrupt bicycle flow along local streets. Similar to the Project, visitors, patrons, and employees arriving by bicycle would have the same access options as pedestrian visitors, and to facilitate bicycle use, bicycle parking spaces and amenities would be provided within the Project Site under Alternative 2. Therefore, as with the Project, Alternative 2 would not substantially increase hazards to bicyclists, pedestrians, or vehicles. Similar to the Project, impacts related to bicycle, pedestrian and vehicular safety under Alternative 2 would be less than significant.

(*e) Parking*

In compliance with the parking requirements for commercial uses set forth in the State Enterprise Zone, Alternative 2 would provide a total of 219 parking spaces. Similar to the Project, impacts related to parking under Alternative 2 would be less than significant.

l) Tribal Cultural Resources

Alternative 2 proposes two levels of subterranean parking (three fewer than the Project) and would require excavation and grading. As discussed in **Section IV.N, Tribal Cultural Resources**, of the Draft EIR, no tribal cultural resources have been identified for the Project Site. As with the Project, in the event that tribal cultural resources are inadvertently encountered, Alternative 2 would be subject to the City's standard condition of approval regarding inadvertent discoveries to ensure that the resources are properly assessed and addressed. Therefore, due to the reduction in grading, impacts related to tribal cultural resources under Alternative 2 would be less than significant and less than those of the Project.

m) Utilities and Service Systems

1) Wastewater

(a) Construction

Similar to the Project, during construction of Alternative 2, a negligible amount of wastewater would be generated by construction workers. Temporary on-site sanitation facilities (e.g., portable toilets and hand wash areas) would be provided by a private company, and the wastewater would be properly disposed of off-site.

No new connections to the public sewer system would be required during the construction period. As such, wastewater generated during Project construction activities would not enter the local conveyance system and, thus, would not affect sewer line capacities in the area. In addition, with the implementation of the Construction Management Plan (discussed in **Section IV.L, Transportation/Traffic**, of the Draft EIR), Alternative 2 would not significantly impact traffic or emergency access in the surrounding area during the installation of new utilities infrastructure. Similar to the Project, construction-related impacts to the existing wastewater infrastructure and facilities would be less than significant.

(b) Operation

As shown in Table VI-8, operation of Alternative 2 would result in a net decrease of 1,957 gpd, as compared to existing conditions. This is a reduction of approximately 37,386 gpd as compared to the Project's net wastewater generation of 35,429 gpd. Thus, Alternative 2 would generate less wastewater than the Project and would result in less-than-significant impacts to wastewater treatment capacity. Similar to the Project, Alternative 2 would be subject to standard regulatory measures. Given the excess capacity at Hyperion Treatment Plant (HTP), impacts would be less than significant. Overall, impacts associated with Alternative 2 would be less than those of the Project.

Table VI-8
Alternative 2: Estimated Wastewater Generation and Water Demand

Land Use	Size	Wastewater Generation/Water Demand Rates	Total (gpd)
Retail	26,979 sf	25 gallons /1,000 sf[1]	674
Creative Office	38,571 sf	50 gallons /1,000 sf[2]	1,929
		Gross Proposed	**2,603**
		Less Existing	**4,560**
		Net Proposed	**-1,957**

gpd = gallons per day *sf = square feet*

[1] *City of Los Angeles Department of Sanitation, November 27, 2018. See **Appendix K-2** of the Draft EIR.*
[2] *Los Angeles Department of Water and Power, 2012 Sewerage Generation Factors.*

2) Water Supply

(a) Construction

Similar to the Project, water consumption would be required to accommodate construction activities, such as soil watering (i.e. for fugitive dust control), clean up, masonry, painting, and other related activities. As with the Project, construction activities requiring water would occur intermittently and would be temporary in nature. Further, the activities requiring water would not create substantial water demand. Typically, fugitive dust watering is provided by private purveyors and not provided by on-site water sources. Reclaimed water can be used for dust control. Overall, similar to the Project, construction activities under Alternative 2 would require minimal water consumption and would not be expected to have an adverse impact on available water supplies or existing water distribution systems**.**

Prior to the issuance of grading/building permits, the City would determine if the existing water supply infrastructure maintains sufficient capacity to accommodate the projected water demands. If a deficiency or service problem is discovered during the permitting process, the Project Applicant shall fund the required upgrades to adequately serve the uses proposed under Alternative 2. Water main and related infrastructure upgrades would not be expected to create a significant impact to the physical environment because: (1) any disruption of service would be of a short-term nature; (2) replacement of the water mains would be within public and private rights-of-way; and (3) the existing infrastructure would be replaced with new infrastructure in areas that have already been significantly disturbed.

While the potential replacement or expansion of the existing infrastructure could result in temporary partial public street closures, a Construction Management Plan would be implemented (see **Section IV.L, Transportation/Traffic**, of the Draft EIR) to direct traffic flow during construction activities, including during the potential water upgrade activities near the Project Site. Similar to the Project, impacts under Alternative 2 would be less than significant.

(b) Operation

As shown in Table VI-8, Alternative 2 would result in a net decrease of 1,957 gpd as compared to existing uses at the Project Site. This is also a reduction of approximately 37,386 gpd as compared to the Project's 35,429 gpd net demand. Thus, operation of Alternative 2 would consume less water than the Project and would result in less-than-significant impacts with respect to long-term water supplies. Similar to the Project, Alternative 2 would be subject to standard regulatory measures to ensure that impacts to the water conveyance system would be less than significant. Overall, the impacts of Alternative 2 would be less than significant and less than those of the Project.

3) Solid Waste

(a) Construction

Construction and debris (C&D) waste generated by demolition of the existing uses would be the same for Alternative 2 and the Project (approximately 7,889 tons). Construction waste generated during the construction of Alternative 2 would be reduced as compared to the Project (approximately 132 tons versus 780 tons for the Project).[1] Landfills that serve the Los Angeles region have an existing daily available capacity of 14,920 tons per day (tpd), which would be adequate to accommodate Alternative 2s C&D waste as with the Project. Thus, as the construction waste generated by Alternative 2 would be approximately 17 percent of the construction waste generated by the Project and existing landfills and waste facilities have sufficient capacity to handle the projected amount of construction waste, the construction-related solid waste impacts of Alternative 2 would be less than significant and less than those of the Project.

[1] *Based on 4.02 lbs for non-residential construction per square foot. (Source: U.S. Environmental Protection Agency Report No. EPA530-98-010. Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, Tables A-1 and A-2, page A-1: http://www.epa.gov/osw/hazard/generation/sqg/cd-rpt.pdf).*

(b) Operation

As shown in Table VI-9, Alternative 2 would result in a net decrease of approximately 0.07 tpd of solid waste generation at the Project Site due to a smaller development than existing conditions (65,550 square feet proposed vs. 91,200 square feet existing) and the elimination of residential units from the Project Site. This is a reduction of approximately 0.95 tpd as compared to the Project's net increase of 0.88 net tpd. Thus, Alternative 2 would generate substantially less solid waste than the Project and would result in less-than-significant impacts to solid waste landfill capacity (with compliance with existing regulations). Overall, the impacts of Alternative 2 would be less significant and less than those of the Project.

Table VI-9
Alternative 2: Estimated Solid Waste Generation

Land Use	Size	Solid Waste Generation Rates	Total (tons per day)
Existing Subtotal (to be removed) from Table IV.M.3-2			**0.23**
Proposed			
Non-Residential	65,550 sf	5 pounds / 1,000 square feet	0.16
		Net Total (Proposed – Existing)	**(0.07)**

1 ton = 2,000 pounds sf = square feet

[1] *CalRecycle Estimated Solid Waste Generation Rates: http://www.calrecycle.ca.gov/LGcentral/GoalMeasure/DisposalRate/MostRecent/default.htm.*

4) Energy Conservation

(a) Construction

Alternative 2 would involve the same amount of site clearance/demolition as the Project but less new construction, excavation, and soil export. As with the Project, construction activities associated with Alternative 2 would consume electricity associated with conveyance of water that would be used during construction, powering lights, electronic equipment, or other construction activities necessitating electrical power, and petroleum-based fuels. Total construction trips would be reduced under Alternative 2. Furthermore, Alternative 2 construction would require less electricity consumption and would not be expected to have any adverse impact on available electricity supplies and infrastructure. As with the Project, construction activities typically do not involve use of natural gas; thus, Alternative 2 would not generate demand for natural gas during construction activities. As evaluated in **Section IV.M.4, Utilities and Service Systems**

-- Energy Conservation, of the Draft EIR, Project construction activities would result in an energy demand that would not be wasteful, inefficient, or unnecessary and would not be expected to have an adverse impact on available energy supplies or the existing infrastructure. As the consumption of energy resources for construction activities would be reduced under Alternative 2 as compared to the Project, Alternative 2 would similarly not be expected to have an adverse impact on available energy resources. Therefore, impacts on energy resources associated with short-term construction activities under Alternative 2 would be less than significant and less than those of the Project.

(b) Operation

Due to the smaller size of Alternative 2 as compared to the existing building at the Project Site, operation of Alternative 2 would likely result in a decrease in both electricity and natural gas usage on-site. However, due to the increased number of vehicle trips generated by Alternative 2, the consumption of petroleum-based fuels would increase as compared to existing conditions. Alternative 2 would reduce the amount of electricity, natural gas, and fuel consumed as compared to the Project due to the substantial reduction in floor area. It is anticipated that the existing distribution facilities in the Project area would have the capability to serve a reduced project under Alternative 2 given the fact that existing service lines in the Project area would have sufficient capacity to serve the Project. Furthermore, Alternative 2 would comply with the same regulations as the Project to reduce energy usage. In terms of petroleum-based fuel usage, the number of daily trips generated by Alternative 2 would be lower in comparison to the Project due to the reduction in square footage. Like the Project, the consumption of electricity, natural gas, and petroleum-based fuels under Alternative 2 would not be wasteful, inefficient, or unnecessary. Therefore, operational impacts to energy resources under Alternative 2 would be less than significant and less than those of the Project.

3. Comparison of Impacts

As evaluated above, Alternative 2 would reduce the duration of the Project's significant and unavoidable construction-period vibration impact; however the impact would remain significant and unavoidable. Alternative 2 would also, with respect to traffic and circulation impacts, reduce all six of the Project's pre-mitigation significant intersection level of service impacts to a less-than-significant level, including the Project's one significant unavoidable impact at the intersection of Alameda Street and 6th Street. All other impacts would be similar or less under Alternative 2 when compared to the Project.

4. Relationship of the Alternative to Project Objectives

Overall, Alternative 2 represents a reduced scope of development containing the same retail uses as the Project and creative office space. However, this alternative would not fully achieve the Project objectives to the same extent as the Project. Alternative 2 would generally meet the following Project objective to the same extent as the Project:

- Improve the aesthetic quality of the Project Site by removing older structures and developing new efficient buildings that are consistent in terms of mass, scale, and character with others within the Arts District.

However, Alternative 2 would fail to meet several of the Project's objectives, which are re-stated below:

- Maximize the density of an existing Transit Priority Site to increase access to local transit for local residents, employees, and visitors.
- Meet the demand for urban housing, including affordable housing, within the general Downtown area and specifically within the Arts District.
- Maximize the availability of market-rate and affordable housing in proximity to the Metro Gold Line Little Tokyo/Arts District Station.
- Improve public safety by creating a development that provides the level of density and mix of uses necessary to activate the area both day and night.

In addition, Alternative 2 would either partially meet or only meet the following Project objectives to a lesser extent than the Project:

- Create a range of construction and permanent jobs to support local workers.
- Create an economically viable mixed-use project, including hotel, residential and retail uses, focused on the arts that attracts residents and visitors to the Arts District community.
- To construct a mixed-use development that combines complementary uses, such as community serving retail, an Artist CoLab, and live/work uses.
- Maximize the contribution of the Project Site to the City's economic growth by developing commercial, residential, and hotel uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses.

Specifically, Alternative 2 would be 82 percent smaller and would not maximize the density of an existing Transit Priority Area site to the same extent as the Project. This would result in less density in proximity to mass transit for employees and visitors. Furthermore, by excluding residential and hotel uses, Alternative 2 would not create the range of uses within a mixed-use project, including hotel and residential, called for in the Project objectives, nor would some of the complementary uses defined in the Project objectives (Artist CoLab, and live/work units) be achieved at the Project Site with Alternative 2.

Alternative 2 would result in a reduction of 94 jobs compared to the jobs created by the Project and, thus, would not create as many permanent jobs to support local workers as the Project. Additionally, Alternative 2 would not achieve the Project objective to improve public safety to the same extent as the Project since residents and hotel guests would not be on-site to activate the area on a 24-hour basis. Alternative 2 would contribute to the City's economic growth by developing land uses that generate tax revenues and provide construction jobs, but it would do so to a lesser degree than the Project as it would not have hotel rooms or residential units and would create fewer jobs than the Project. Overall, Alternative 2 would be either inconsistent or partially consistent with eight of the nine Project objectives.

VI. Alternatives

C. Alternative 3: Reduced Density Alternative

1. Description of the Alternative

The Reduced Density Alternative (Alternative 3) would redevelop the Project Site in a manner that is similar to the Project but would reduce the overall density by approximately 27 percent. This reduction percentage would eliminate most of the significant traffic intersection impacts that would occur with the Project (pre-mitigation). Alternative 3 would develop a total of 98 live/work units (including 11 percent designated as affordable [Very Low Income]), 73 hotel rooms, 19,120 square feet of retail space, 20,590 square feet of restaurant space, and 15,905 square feet of art gallery/Artist CoLab/creative office space. The resulting building would be 10 stories above grade (including the rooftop), which would be two levels less than the Project, with three levels below grade for mechanical parking and storage, which would be two less than the Project.

As compared to the Project, Alternative 3 would reduce the overall building size by approximately 30 percent. The individual live/work, hotel, restaurant, and retail uses would be reduced by between 25 and 35 percent. Alternative 3 would reduce the art gallery space but would add a creative office component to the Artist CoLab space, resulting in a larger combined square footage devoted to these uses (15,905 versus 13,771 square feet in the Project). Similar to the Project, Alternative 3 would provide ground- and second-floor retail and restaurant spaces and would place the art gallery/Artist CoLab/creative office space on the third level. The hotel and live/work units would occupy the 4th through 9th levels, with a roof garden, pool, spa, clubhouse, and restaurant occupying the building rooftop. The proposed maximum building height would be 131 feet above street grade level as compared to a height of 148 feet for the Project.

Table VI-10 provides a breakdown of the proposed uses for Alternative 3. Figure VI-5 provides a site plan for Alternative 3, while Figures VI-6 through VI-12 provide floor plans and a cross-section for Alternative 3.

Table VI-10
Summary of Alternative 3 (Reduced Density) Uses
and Comparison to the Project

Land Use	Alternative 3	Proposed Project	Difference
Creative Office	5,395 sf[1]	0 sf	+5,395 sf
Retail	19,120 sf	26,979 sf	-7,859 sf
Live/Work Residential	98 du	129 du	-31 du
Hotel	73 rooms	113 rooms	-40 rooms
Restaurant	20,590 sf	31,719 sf	-11,129 sf
Art Gallery	8,070 sf	10,341 sf	-2,271 sf
Artist CoLab	2,440 sf[1]	3,430 sf	-990 sf
Total Proposed Floor Area	**257,795 sf**	**370,340 sf**	**-112,545 sf**

sf = square feet du = dwelling unit

[1] *For Alternative 3, a total of 7,835 square feet of combined creative office/Artist CoLab space is proposed.*

Unless otherwise noted, square footage is calculated as Floor Area, which term is defined in section 12.03 of the LAMC.

As with the Project, public vehicular access would be provided from both 5th Street and Colyton Street. Similar to the Project, an art plaza would be located at the building's southwestern corner. An additional plaza would be located at the building's southeastern corner. The driveway on the Colyton Street frontage would provide direct access to the three subterranean parking levels, which would extend approximately 30 feet below grade, or 20 feet less than the subterranean parking for the Project. A driveway access from Seaton Street would be provided for loading only.

A total of 234 automobile spaces for the proposed uses would be required by the LAMC. Alternative 3 would provide 379 automobile parking spaces consisting of 59 valet spaces on level B2 and 320 automated system spaces on levels B2 and B3. As with the Project, off-street automobile parking would be provided below grade and screened from view. In accordance with LAMC Section 12.21-A,16, Alternative 3 would provide, at a minimum, 36 short-term and 125 long-term bicycle spaces.

Alternative 3 would implement a similar architectural design to that of the Project and would feature similar building materials, setbacks, exterior treatments, and landscaping. The large-scale exterior artwork proposed as part of the Project would also be a component of Alternative 3, reduced in size in accordance with the shorter building height. Additionally, signage, lighting, vehicular and pedestrian access, setbacks, and sustainability features would be similar to those proposed for the Project.

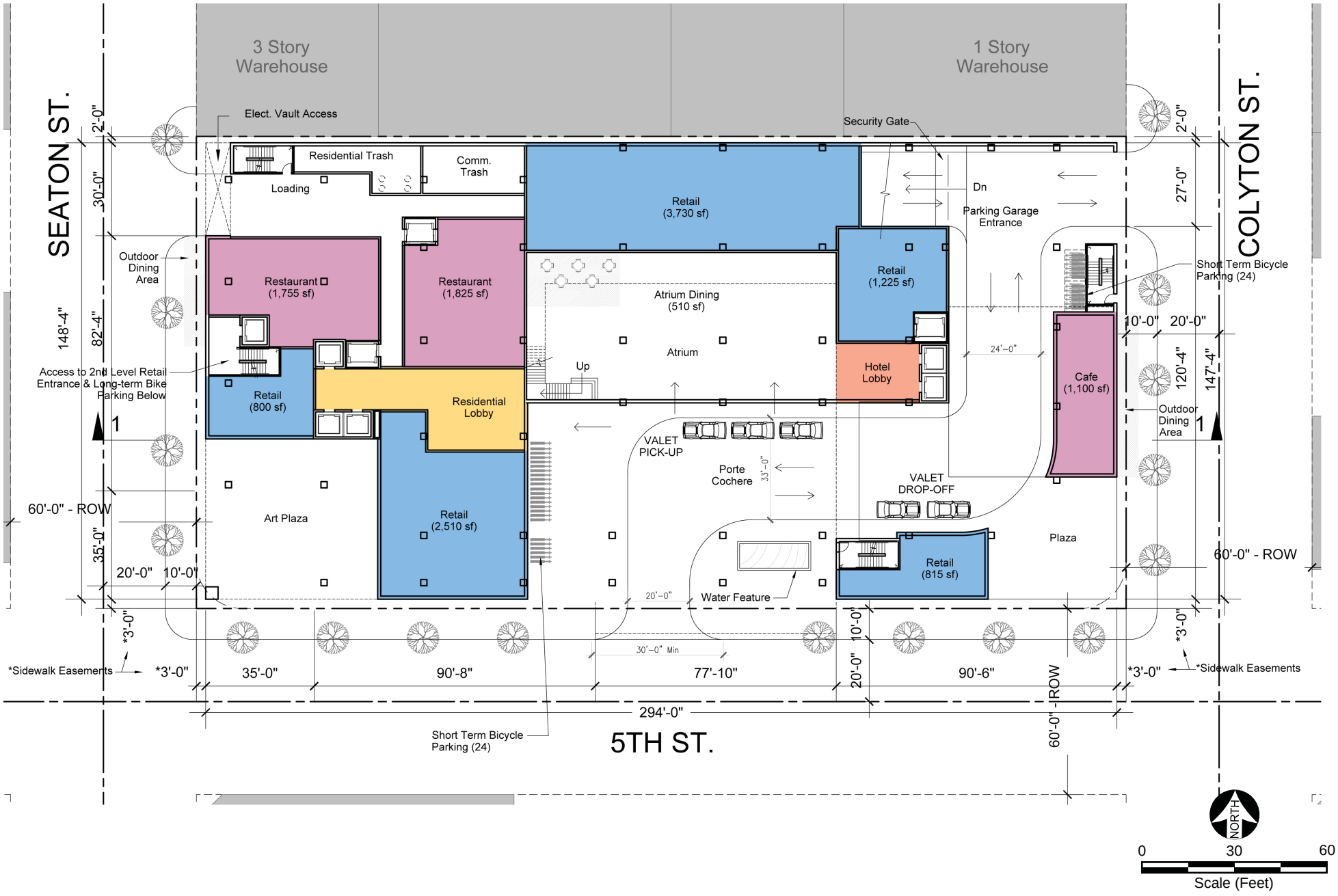


Figure IV-5
Alternative 3 Site Plan

Source: Togawa Smith Martin Inc, 2018.

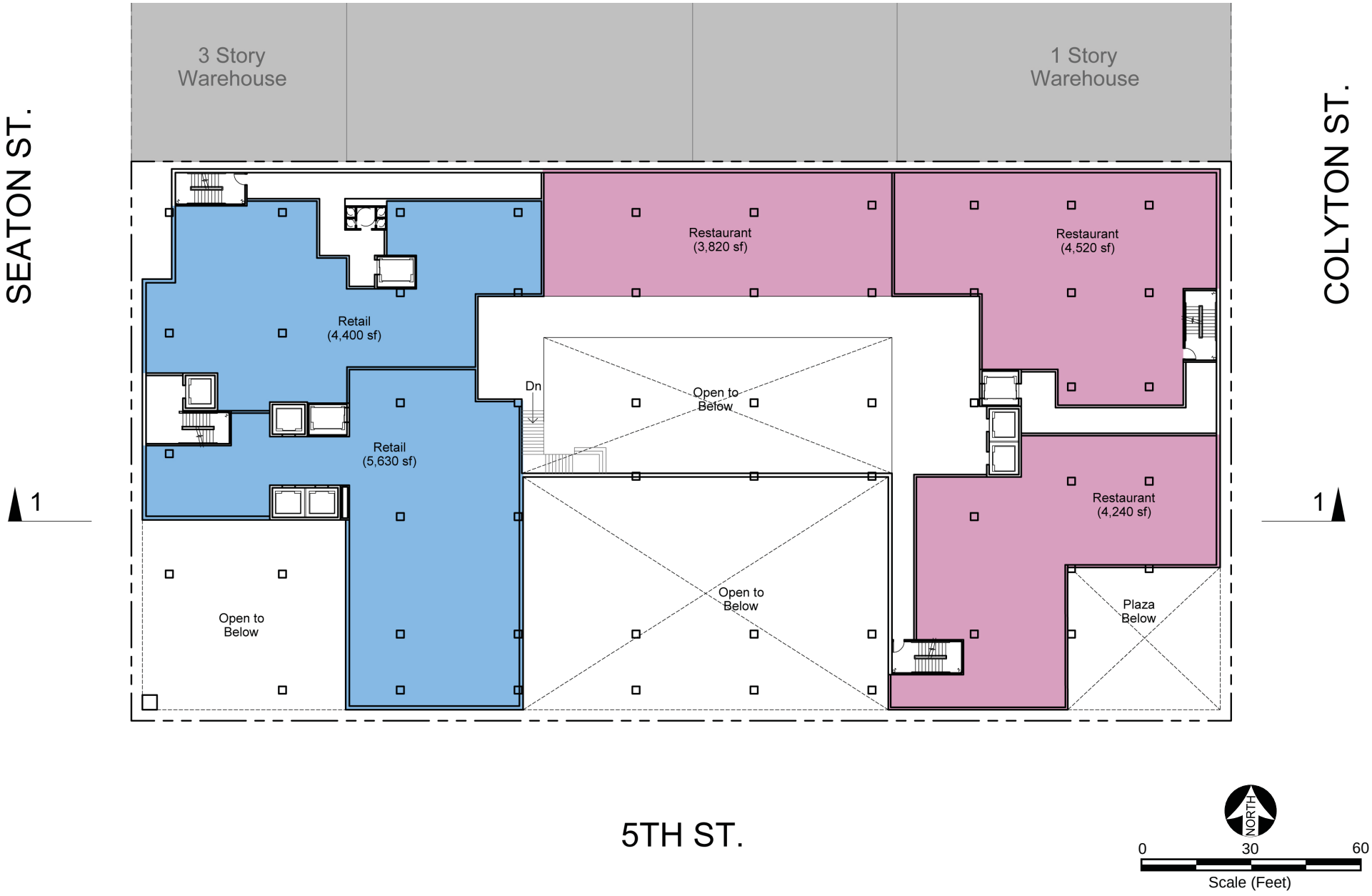


Figure IV-6
Alternative 3 Second Level Plan

Source: Togawa Smith Martin Inc, 2018.

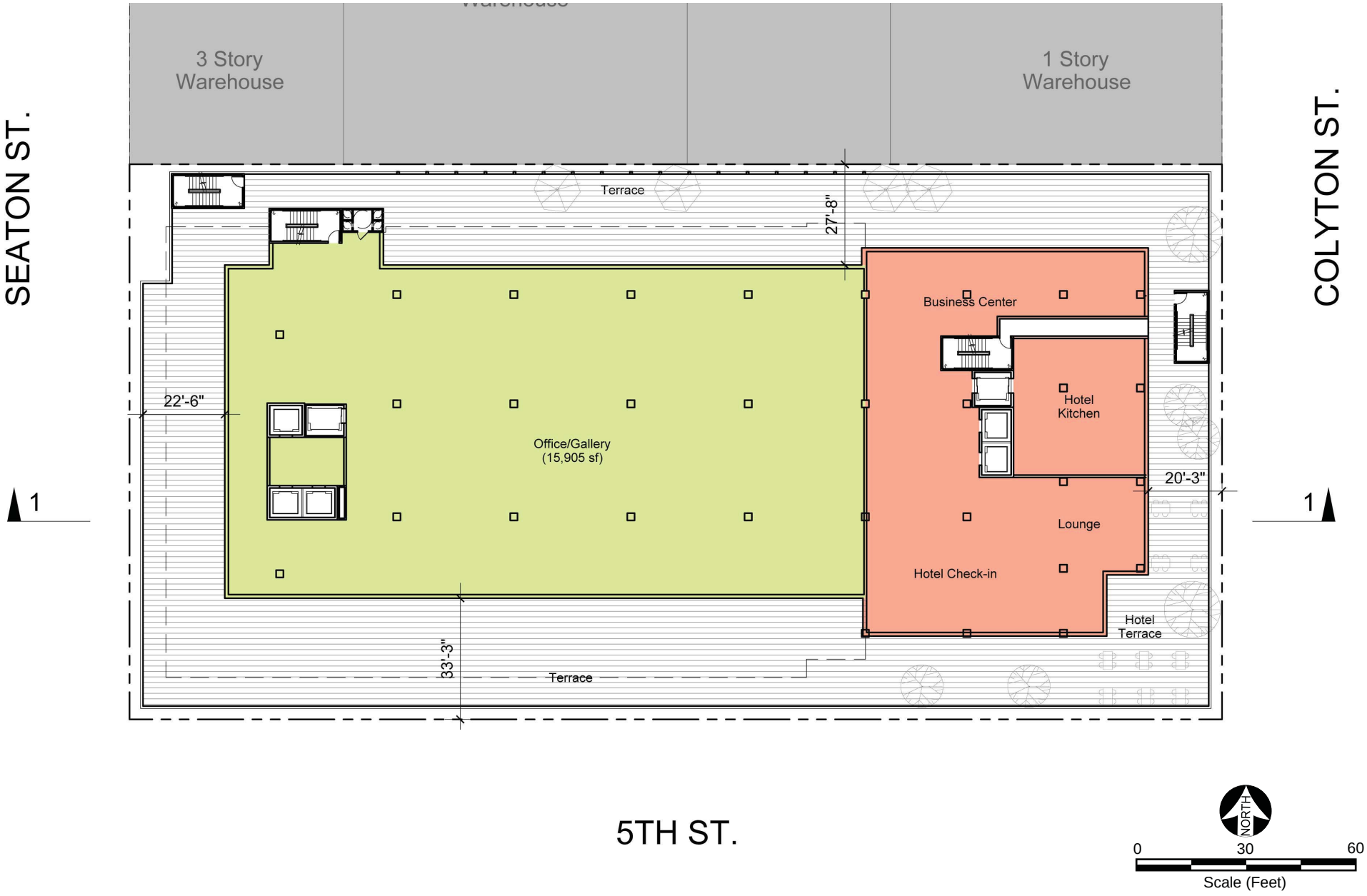
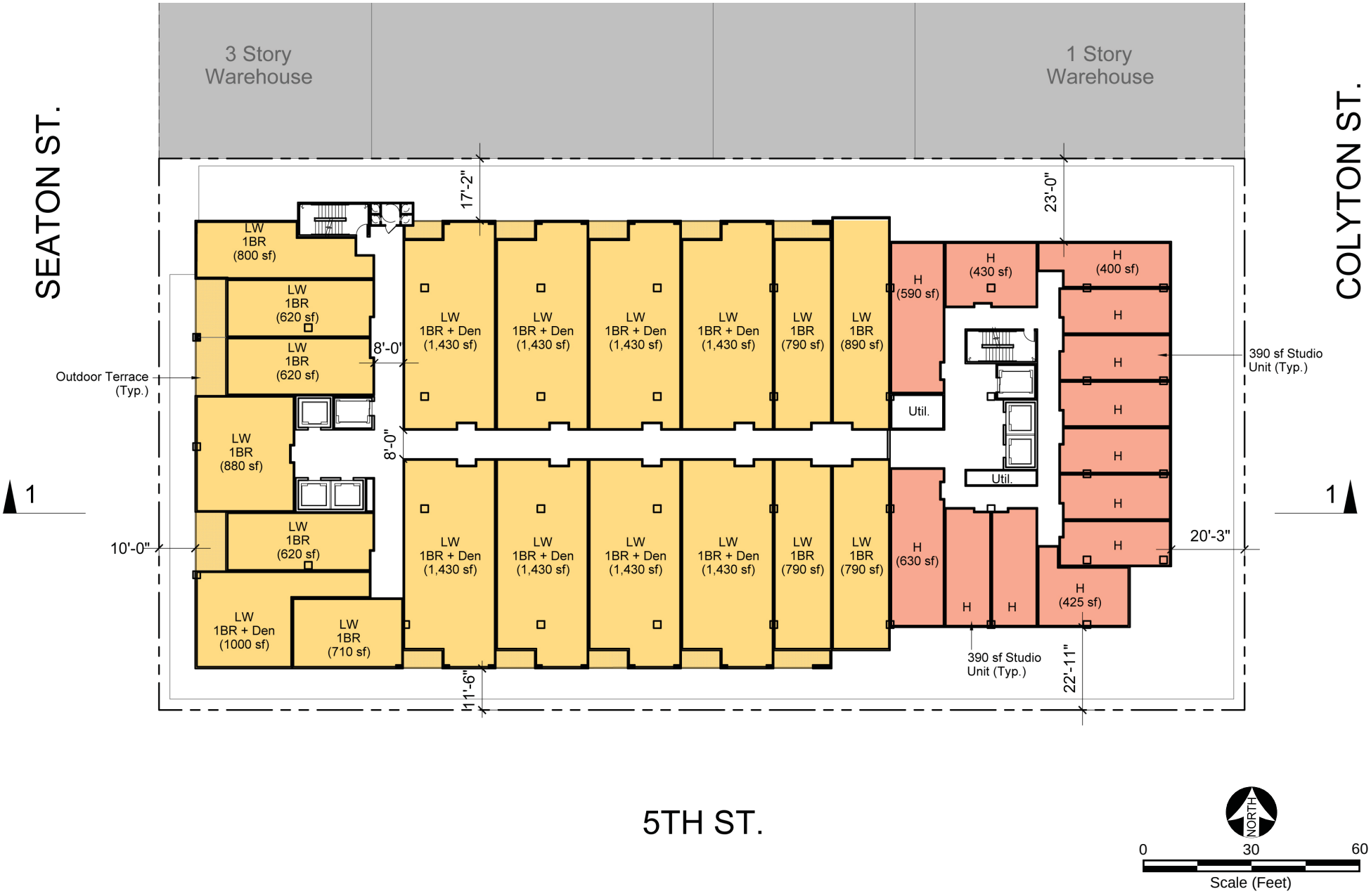


Figure IV-7
Alternative 3 Third Level Plan

Source: Togawa Smith Martin Inc, 2018.



Source: Togawa Smith Martin Inc, 2018.

Figure IV-8
Alternative 3 4th-7th Level Plan

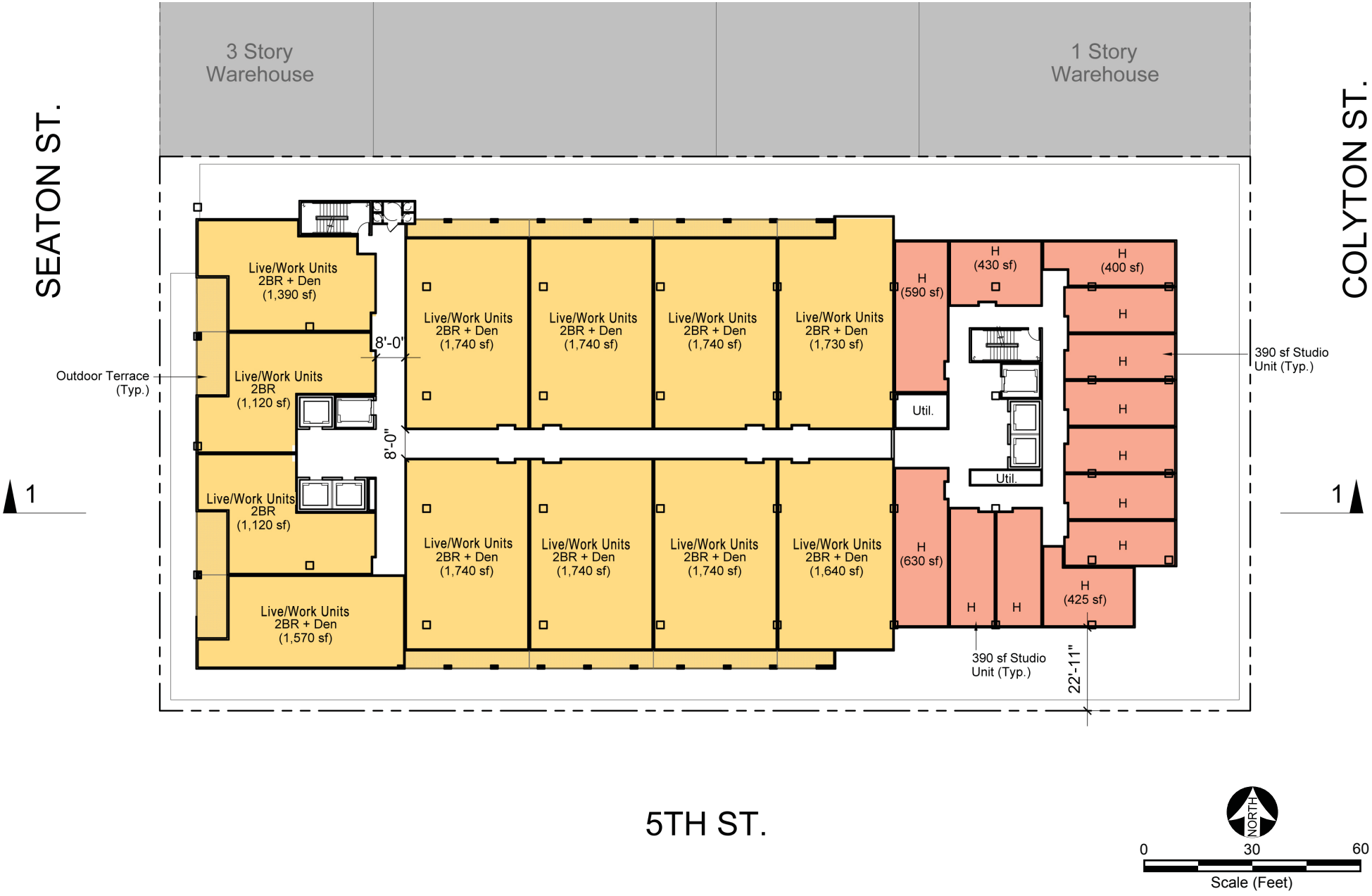


Figure IV-9
Alternative 3 8th Level Plan

Source: Togawa Smith Martin Inc, 2018.

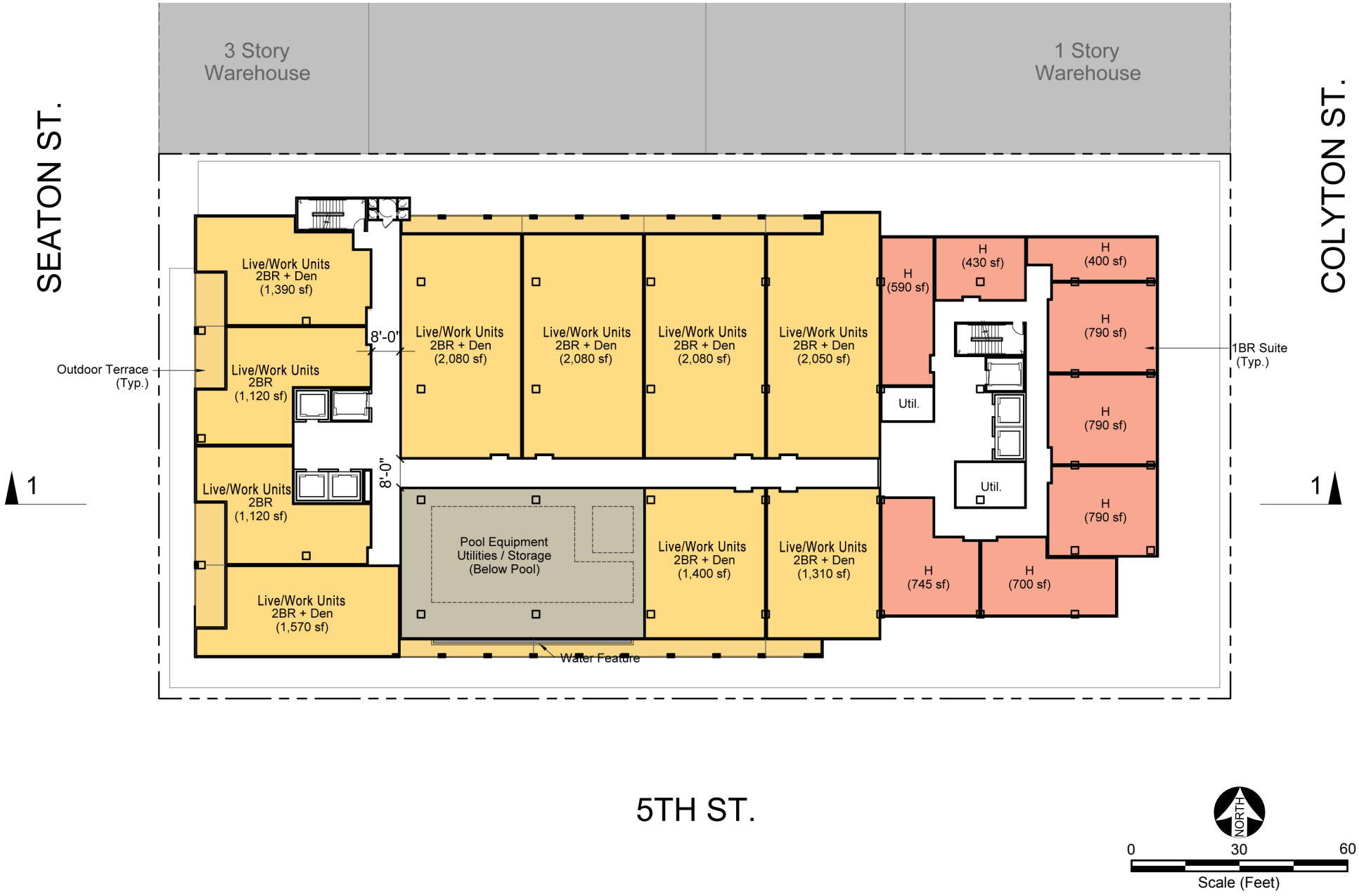


Figure IV-10
Alternative 3 9th Level Plan

Source: Togawa Smith Martin Inc, 2018.

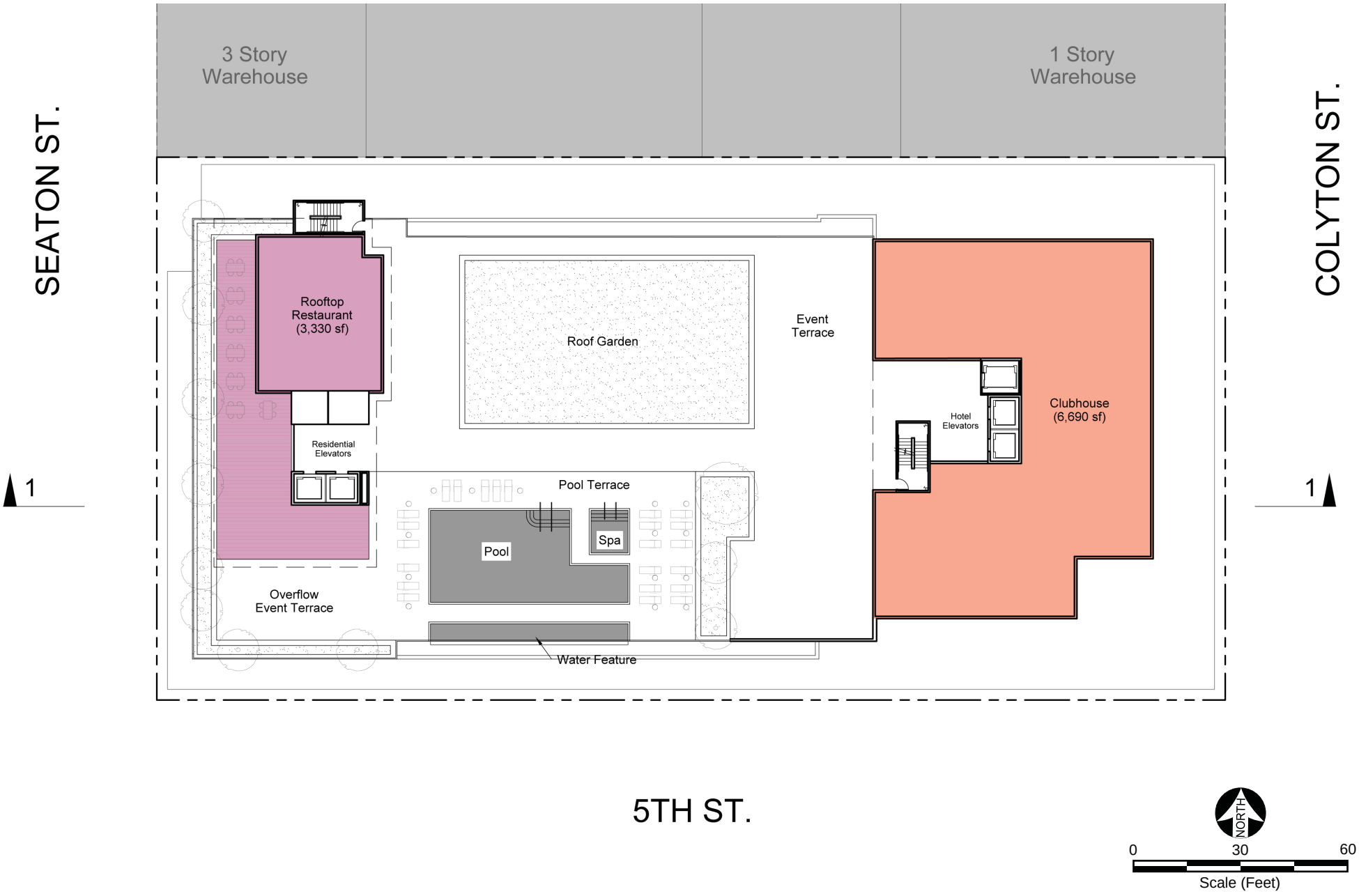
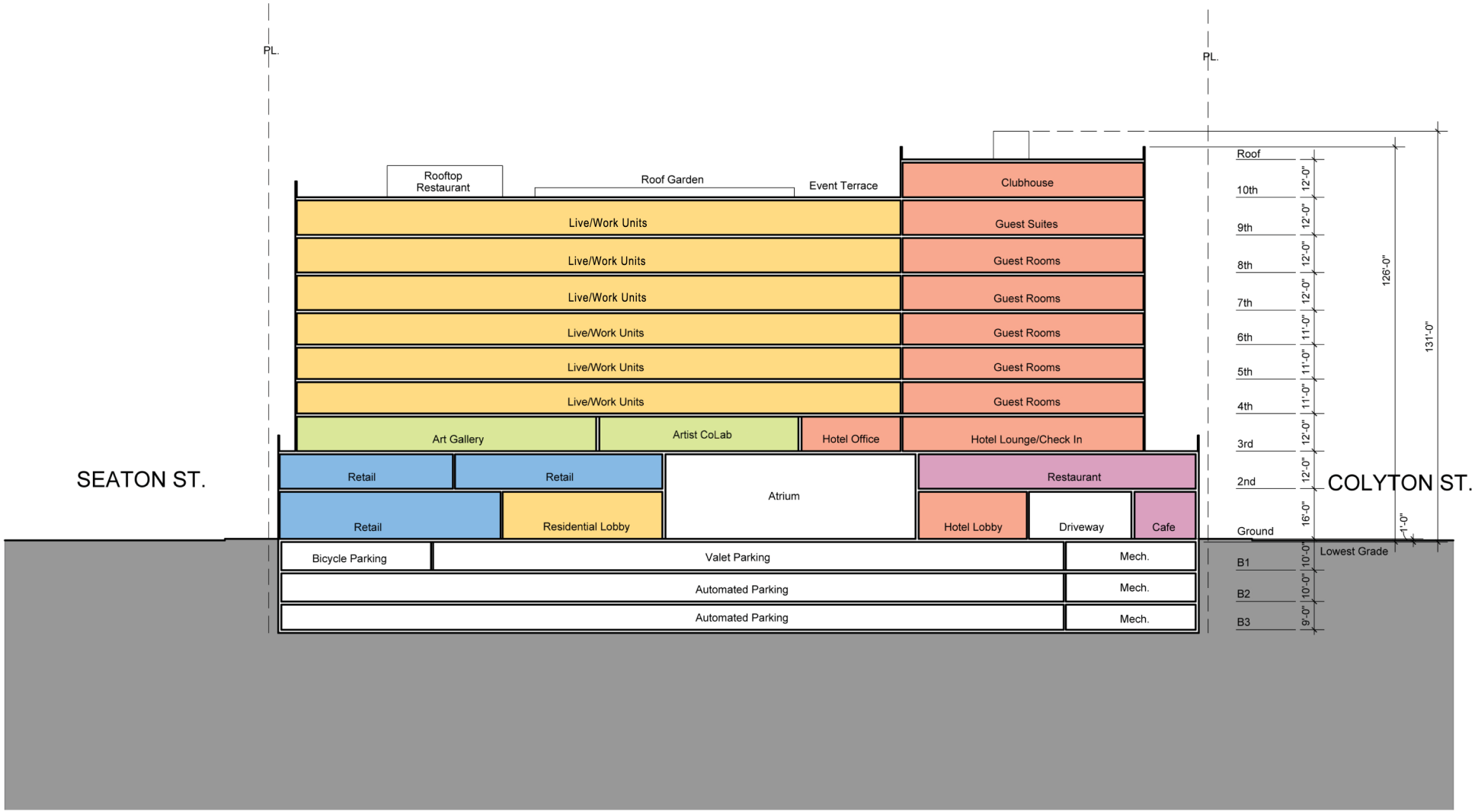


Figure IV-11
Alternative 3 10th Level Plan

Source: Togawa Smith Martin Inc, 2018.



Source: Togawa Smith Martin Inc, 2018.

Figure IV-12
Alternative 3 Section

Alternative 3 would be constructed in the same construction phases as the Project (see Table II-8 in **Section II, Project Description**, of the Draft EIR). However, construction would be expected to require a shorter overall duration (approximately 24 months) due to the smaller building and lesser amount of excavation required. As with the Project, a Construction Traffic Management Plan and Haul Route Program would be implemented during construction to minimize potential conflicts between construction activity and traffic in the immediate vicinity of the Project Site. As with the Project, the Construction Traffic Management Plan and Haul Route Program would be subject to LADOT review and approval.

2. Environmental Impact Analysis

a) Aesthetics, Views, Light and Glare, and Shading

SB 743 [PRC Section 21099(d)] sets forth new guidelines for evaluating project transportation impacts under CEQA, as follows: "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area (TPA) shall not be considered significant impacts on the environment." PRC Section 21099(a) defines a "transit priority area" as an area within 0.5 miles of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." PRC Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." PRC Section 21099(a) defines an "employment center project" as "a project located on property zoned for commercial uses with a FAR of no less than 0.75 and that is located within a transit priority area." PRC Section 21099(a) defines an "infill site" as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses. This state law supersedes the aesthetic impact thresholds in the *2006 L.A. CEQA Thresholds Guide*, including those established for aesthetics, obstruction of views, shading, and nighttime illumination.

The related City ZI File (ZI No. 2452) provides further instruction concerning the definition of transit priority projects and that "visual resources, aesthetic character, shade and shadow, light and glare, and scenic vistas or any other aesthetic impact as

defined in the *L.A. CEQA Threshold Guide* shall not be considered an impact for infill projects within TPAs pursuant to CEQA."[2]

As with the Project, PRC Section 21099 also applies to Alternative 3. Therefore, Alternative 3 is also exempt from aesthetics impacts analyses. The following analysis regarding aesthetics, visual character, views, light and glare, and shading is provided for informational purposes only. Any aesthetic impact analysis in this section is included to discuss what aesthetic impacts would occur from Alternative 3 if PRC Section 21099(d) was not in effect.

1) Aesthetics and Visual Quality

(a) Construction

As with the Project, the visual appearance of the Project Site would be altered during construction due to the removal of the existing building to the same extent as the Project. Other construction activities, including site preparation, grading, and excavation, the staging of construction equipment and materials, and the construction of the building foundation and proposed structure, would also alter the visual character and quality of the Project Site and adjacent roadways. Alternative 3's construction activities could be visible to pedestrians and motorists on adjacent streets, as well as to viewers within nearby buildings. As with the Project, Alternative 3 would incorporate similar project design features as the Project, including the installation of temporary construction fencing that would screen much of the construction activity from view at street level. Overall, similar to the Project, while Alternative 3 would alter the visual character of the Project area on a short-term basis, construction activities would not substantially alter or degrade the existing visual character of the Project Site. for the following reasons: (1) views of construction activities would be limited in duration and location; (2) the site appearance would be typical of construction sites in urban areas; (3) construction would occur within an urban setting with a high level of human activity and development; and (4) impacts would be reduced through standard BMPs implemented during the construction period. Therefore, aesthetic impacts during construction would be similar to the Project's less-than-significant impacts. Moreover, pursuant to SB 743 and ZI 2452, Alternative 3's aesthetics impacts would not be considered significant.

[2] *City of Los Angeles Department of City Planning, Zoning Information File ZI No. 2452, Transit Priority Areas (TPAs)/Exemptions to Aesthetics and Parking Within TPAs Pursuant to CEQA.*

(b) Operation

As with the Project, Alternative 3 would be replacing the existing aged industrial building. Under Alternative 3, the building architecture and style would be similar to that of the Project, except with a lower height from 148 feet to 131 feet. More specifically, similar to the Project, Alternative 3 would feature a similar "urban canvas" for large-scale works of art on the outside of the building. Areas of landscaping, an art plaza, and sidewalk amenities (such as seating areas and a water feature) would provide visual breaks in the view of Alternative 3 from the adjacent streets. Alternative 3 is designed to promote visual interest and pedestrian activity by offering restaurant and retail storefronts at the ground level. At the third level above the street, Alternative 3 would step back, allowing space for a partially landscaped terrace surrounding the building, similar to the Project.

As stated above, the maximum height of Alternative 3 would be 131 feet above street level. As with the Project, while the height of Alternative 3 would be greater than the current conditions (i.e., two-story brick building), the architectural details and art mural wrapping would provide façade relief and would include landscaping to provide visual variety and relief. As with the Project, the proposed building height and massing under Alternative 3 would represent a change in the visual character of the Project Site as compared to existing conditions. However, considering the existing visual character of the Project Site and the continuing transformation of the surrounding Arts District, the architectural detail, building configuration, and design that would be constructed with development of Alternative 3, the height and massing of the proposed development under Alternative 3 would not be considered as detracting from the existing eclectic, creative style or image of the area. As with the Project, Alternative 3 would feature cohesive signage that would be consistent in shape, size, color, height, and lettering. Exterior building and tenant signage would consist of identity, wayfinding, and commercial signs in compliance with LAMC provisions.

As with the Project, the landscape design for Alternative 3 would create a pedestrian-friendly environment, including shade trees and landscaping along the street and trees in planters on the third-level terrace and the rooftop.

Therefore, similar to the Project, Alternative 3 would not degrade the existing visual character or quality of the Project Site or its surroundings due to changes in architecture or urban design. Moreover, pursuant to SB 743 and ZI 2452, Alternative 3's aesthetics impacts would not be considered significant. Thus, similar to the Project, aesthetics impacts would be less than significant.

2) Views

As with the Project, existing views within the greater Project area are limited, mostly obscured due to the dense low- to mid-rise urban development in the Arts District and the mid- and high-rise urban development within the larger Downtown area and the relatively flat topography of the Project area.

While Alternative 3 would increase the building height on the Project Site by up to approximately 87 feet when compared to existing conditions, it would not substantially affect existing scenic vistas available from the only nearby public viewpoint, the elevated 4th Street Bridge over the Los Angeles River, due to the fact that there are no dominant visual features that would be obscured by development of Alternative 3 when viewed from this location. Similar to the Project, due to its taller profile, Alternative 3 would be visible from the western end of the bridge, which offers elevated vantage points from which to view the surrounding area. However, due to its distance from the bridge and the existence of intervening structures, it would not represent a dominant visual feature when viewed from any point along the bridge.

Due to existing buildings in the area, views toward the San Gabriel Mountains and Elysian Hills/Mount Washington to the north are currently largely obstructed. The Project Site is not visible from publicly accessible locations at ground level along the Los Angeles River due to intervening development, and development of Alternative 3 would not affect ground-level views from this locale. Similar to the Project, Alternative 3 would not obstruct an existing scenic vista. Therefore, Alternative 3 would not degrade the existing visual character or quality of the Project Site or its surroundings due to changes in views or viewsheds and impacts would be similar to those of the Project. Moreover, pursuant to SB 743 and ZI 2452, Alternative 3's aesthetics impacts would not be considered significant.

3) Shade/Shadow

Alternative 3 would have a reduced height of 131 feet. Summer shadows cast by Alternative 3 would be less extensive and would affect nearby properties for shorter periods of each day as compared to the Project. By mid-afternoon on the summer solstice, Alternative 3 would cast shadows to the southeast, shading the portion of Colyton Street from the Project's north edge south across the 5th Street intersection and into a small portion of the block south of 5th Street. Most of 5th Street between Colyton and Hewitt Streets would also be shaded by Alternative 3 during the late-afternoon period. These shadows would be similar to but slightly less extensive than those that would be cast by the Project.

Although most of the properties in the Project area consist of industrial or commercial uses, portions of identified shadow-sensitive uses, namely outdoor dining area of The Chairman Restaurant (southeast corner of 5th and Colyton Streets), the Arts District Park (southwest corner of 5th and Hewitt Streets), and the exterior sidewalk dining spaces at Urth Caffe (northwest corner of 5th/Hewitt Streets), could potentially be partially shaded by Alternative 3 during this mid- to late-afternoon period, as would be the case with the Project. Although these are shade-sensitive uses, the duration of Alternative 3's shadow impact at each location would be less than four hours between 9:00 AM and 5:00 PM. Overall, the summer shading impacts of Alternative 3 would affect neighboring shade-sensitive land uses to a lesser degree than the Project.

Alternative 3 would cast slightly shorter shadows than the Project during the winter solstice. No shade-sensitive land uses are present in Alternative 3's wintertime shadow. Moreover, pursuant to SB 743 and ZI 2452, Alternative 3's aesthetics impacts would not be considered significant. Therefore, shading impacts under Alternative 3 would be less than significant and less than those of the Project.

4) Light and Glare

(a) Construction

As with the Project, lighting needed during construction of Alternative 3 has the potential to generate light spillover to off-site sensitive land uses. However, similar to the Project, construction activities would occur in accordance with the provision of LAMC Section 41.40, which limits construction hours of operation to between 7:00 AM and 9:00 PM on weekdays and between 8:00 AM and 6:00 PM on Saturdays and national holidays, with no construction permitted on Sundays. Therefore, construction activities for Alternative 3 would primarily occur during the daylight hours, and construction lighting would only be used for the duration needed if construction were to occur in the evening hours during the winter season when daylight is no longer sufficient. In addition, construction-related illumination would be used for safety and security purposes only, in compliance with LAMC light intensity requirements. Therefore, similar to the Project, Alternative 3 would not significantly impact off-site light-sensitive uses, substantially alter the character of off-site areas surrounding the Project Site, adversely impact day or nighttime views in the area, or substantially interfere with the performance of an off-site activity. Light impacts associated with construction would be less than significant and less than those of the Project due to the shorter building height and construction duration.

In addition, as with the Project, daytime and nighttime glare could potentially occur during construction activities if reflective construction materials were positioned in highly visible locations where the reflection of sunlight or nighttime light sources could occur.

However, any glare generated within the Project Site during construction would be highly transitory and short-term given the movement of construction equipment and materials within the construction area and the temporary nature of construction activities. Therefore, light and glare associated with the construction of Alternative 3 would not substantially alter the character of off-site areas surrounding the Project Site or adversely impact day or nighttime views in the area. As such, similar to the Project, glare impacts would be less than significant. Moreover, similar to the Project, pursuant to SB 743 and ZI 2452, Alternative 3's aesthetics impacts would not be considered significant.

(b) Operation

As with the Project during operation, Alternative 3 would increase light and glare levels within the Project Site and surrounding area compared to existing conditions through the introduction of new light and glare sources. Similar to the Project, Alternative 3 would include exterior lighting designed to highlight architectural elements of the structure. In accordance with Project Design Features AES-PDF-3 and AES-PDF-5, security lighting would be installed to deter criminal activity on the Project Site, and all lighting for Alternative 3 would be shielded to contain direct illumination on-site. Blinking, flashing, or oscillating lights would be prohibited. As such, the potential impact resulting from lighting associated with architectural elements, interior building usage, security, and signage would be less than significant. Alternative 3's light impacts would be less than significant and slightly less than those of the Project due to the overall smaller size of Alternative 3.

Similar to the Project, the architectural features and facades of Alternative 3 would not be constructed of highly reflective materials. In accordance with Project Design Features AES-PDF-4, the exterior of the proposed building would be articulated and constructed of materials, such as brick, metal, and glass with low reflectivity, which would not be expected to affect daytime views. The sources of glare that would be introduced into the area would not result in hazardous conditions to motorists or result in substantial glare due to the various features designed to minimize glare-related impacts. Therefore, impacts would be less than significant and slightly less than those of the Project due to the lower height of Alternative 3. Moreover, pursuant to SB 743 and ZI 2452, Alternative 3's aesthetics impacts would not be considered significant.

b) Air Quality

1) Construction

(a) Regional and Localized Air Quality Impacts

Alternative 3 would involve the same amount of demolition and grading as the Project but would require approximately 40 percent less excavation and soil export due to the reduction in the number of subterranean levels from five to three. Construction activities would also be reduced due to the 30-percent reduction in proposed floor area. As with the Project, construction of this alternative would generate air emissions through the use of heavy-duty construction equipment and haul truck and construction worker trips. As such, over the entire duration of the construction period, the intensity of air emissions and fugitive dust from demolition, site preparation, grading, and other construction activities would be similar on days with maximum construction activities. However, due to the reduced size of Alternative 3, the number of such days would be fewer than the Project.

Because maximum daily conditions are used for measuring significance, regional and localized impacts associated with any of the pollutants on these days would be similar to those of the Project and would be less than significant. Additionally, on an overall comparative basis, although impact levels would be the same under maximum activity days, the total amount of pollutants emitted during Project construction would be less under Alternative 3 due to the shorter duration of construction activities. Therefore, regional and localized air quality impacts would be less than significant and less than those of the Project.

(b) Toxic Air Contaminants

As with the Project, construction of Alternative 3 would result in TAC emissions, which are primarily associated with the combustion of diesel fuels that produce exhaust-related particulate matter. However, because of the relatively short period of time that diesel-fuel construction equipment would operate, and even a shorter period of time under this alternative than the Project, Alternative 3 would not result in a substantial, long-term source of TACs. Therefore, impacts due to TAC emissions and the corresponding individual cancer risk under Alternative 3 would be less than significant and less than those of the Project.

2) Operation

(a) Regional and Localized Air Quality Impacts

Alternative 3 would reduce the total square footage of uses on the Project Site. Operation of Alternative 3 would result in regional long-term air quality impacts, primarily from motor vehicle exhaust. Alternative 3 would add 2,788 net daily vehicle trips to and from the Project Site on a weekday, compared to existing conditions.[3] This would be a 40-percent reduction in net daily trips when compared to the Project. As with the Project, regional pollutant emissions generated by Alternative 3 would not exceed applicable SCAQMD regional thresholds of significance. Therefore, Alternative 3's maximum regional totals would be less than significant and less than those of the Project.

With regard to localized air quality impacts, operation of Alternative 3 would emit minimal emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ from area and energy sources on-site, which would generally be 30 percent less than the Project, consistent with the reduction in overall building floor area. These localized emissions would not exceed the SCAQMD's localized thresholds that signal when there could be human health impacts at nearby sensitive receptors during long-term operations. Therefore, Alternative 3's operational impacts on localized air quality would be less than significant and less than those of the Project.

(b) Toxic Air Contaminants

Similar to the Project, Alternative 3 would not include typical sources of acutely and chronically hazardous TACs, such as industrial manufacturing processes. As such, as with the Project, Alternative 3 would not create substantial concentrations of TACs during its normal operation. Due to Alternative 3's reduction in size compared to the Project, Alternative 3 would generate less mobile source emissions than those generated by the Project. Therefore, TAC impacts would be less than significant and less than those of the Project.

c) Cultural Resources

1) Historical Resources

As with the Project, Alternative 3 would demolish the existing building on the Project Site. The demolition of the building would not result in a substantial adverse change to the Potential Historic District, because it is neither individually eligible as a historical

[3] *Fehr & Peers, Traffic Impact Alternatives Analysis, 2018.*

resource nor a contributor to the significance of the Potential Historic District. However, it would result in the introduction of a new visual element to the area that would not be compatible in size, scale, or design with the Potential Historic District. Thus, as with the Project, Alternative 3 would slightly diminish the integrity of setting and feeling within the Potential Historic District. However, similar to the Project, Alternative 3 would not impair the integrity of the Potential Historic District as a whole to the degree that the historical resource would no longer be eligible for listing under national, state, and local landmark designation programs. Overall, similar to the Project, the relationships among the Potential Historic District's components, including its contributing buildings, would not be substantially changed from the period of significance as a result of Alternative 3. Therefore, similar to the Project, impacts to historical resources under Alternative 3 would be less than significant.

2) Archaeological Resources

As with the Project, under Alternative 3, the existing Project Site development would be removed, and the Project Site would be redeveloped. Although no archaeological resources have been previously recorded within the Project Site, it is possible that historic-period archaeological resources could exist below the current ground surface, especially within the surface fill identified in the geotechnical borings taken at 12 feet bgs. Specifically, there is potential to encounter the remains of the known historic-period archaeological resource Zanja No. 2, in the form of a wooden flume box, domestic refuse or building materials associated with two 1890s residences, and construction material and building foundations associated with two warehouses demolished in the 1910s. Development of Alternative 3 would require a shallower excavation to construct the three subterranean parking levels versus the five levels for the Project. The potential presence of archaeological materials is limited to the first several feet below the ground surface and the disturbed area footprint would be identical. Therefore, there would be no change in the potential likelihood of encountering such materials during excavation work at the Project Site. Accordingly, similar to the Project, the excavation required to develop Alternative 3 has the potential to disturb unknown archaeological resources present beneath the surface of the Project Site. As with the Project, compliance with existing regulations and implementation of Mitigation Measures CUL-MM-1 through CUL-MM-4 would reduce these potential impacts to a less-than-significant level, and impacts would be similar to those of the Project.

3) Paleontological Resources

As with the Project, under Alternative 3, the existing Project Site development would be removed and the Project Site redeveloped. Although no previously encountered fossil vertebrate localities have been located within the Project Site, the possibility exists that paleontological artifacts that were not recovered during prior construction or other

human activity on the Project Site may be present. The shallower excavation needed to construct the three subterranean parking levels for Alternative 3 versus the five subterranean levels for the Project would not affect the likelihood of encountering paleontological resources beneath the Project Site. Otherwise, the disturbed area footprint would be identical under both the Project and Alternative 3. Similar to the Project, the excavation required to develop Alternative 3 has the potential to disturb unknown paleontological resources present beneath the surface of the Project Site. As with the Project, compliance with existing regulations and implementation of Mitigation Measure CUL-MM-5 would reduce these potential impacts to a less-than-significant level and impacts would be similar to those of the Project.

d) Geology and Soils

Alternative 3 would remove the existing light industrial/arts production commercial spaces and 10 live/work units and construct a new building on the Project Site. Development of Alternative 3 at the Project Site would require the same amount of site clearing and demolition as the development of the Project; however, a lesser amount of excavation and grading, and construction would be necessary. Similar to the Project, Alternative 3 would not exacerbate existing environmental conditions related to seismic ground shaking, ground failure, landslides, unstable soils, and expansive soils and would have a less-than-significant impact to geology and soils.

e) Greenhouse Gas Emissions

GHG emissions from a development project are determined in large part by the number of daily trips generated and energy consumption from proposed land uses. Under Alternative 3, the reduction in the building floor area devoted to each of the proposed uses would reduce the number of net new daily trips compared to the Project. Alternative 3 would generate approximately 40 percent fewer net new daily trips than the Project. Additionally, with regard to energy uses, the reduced building floor area of Alternative 3 would reduce the amount of electricity, water, and natural gas used in comparison to the Project. Thus, associated GHG emissions would be reduced as compared to the Project.

Alternative 3 would produce less CO_2e per year as compared to the Project due to the 40 percent reduction in vehicle trips compared to the Project. As with the Project, Alternative 3 represents an infill development within an existing urbanized area that would concentrate new residential and commercial retail and restaurant uses within an

HQTA.[4] The Project Site is located approximately 0.5 mile south of the Metro Little Tokyo/Arts District Station. In addition, the Project Site is currently served by local bus service on Alameda Street, 4th Street, and other local arterials. Additional transit lines include LADOT DASH bus lines. As with the Project, Alternative 3 would provide bicycle storage areas for residents and visitors and also incorporate characteristics that would reduce trips and vehicle miles travelled (VMT) as compared to standard ITE trip generation rates. As with the Project, Alternative 3 would implement transportation-related design techniques that would reduce vehicle trips and VMT associated with Alternative 3 relative to the standard ITE trip generation rates. As such, Alternative 3 would be consistent with the AB 32 Scoping Plan statewide objectives (see Table IV.F-8 in **Section IV.F, Greenhouse Gas Emissions**, of the Draft EIR), as well as other applicable state, regional, and local regulatory plans and policies, which aim to reduce GHG emissions.

Alternative 3 would incorporate the same design features as the Project to reduce GHG emissions, including Project Design Features GHG-PDF-1 through GHG-PDF-3. In addition, Alternative 3 would be designed to comply with the goals of CARB's *Climate Change Scoping Plan*, SCAG's 2016–2040 RTP/SCS, the City of Los Angeles' Green LA Plan, and the City's Sustainability pLAn, and implement sustainability features that are comparable to the ones proposed for the Project. Therefore, Alternative 3 would be consistent with the GHG reduction goals and objectives set forth in state, regional, and local regulatory plans. As such, impacts related to GHG emissions under Alternative 3 would be less than significant and less than those of the Project.

f) Hazards and Hazardous Materials

1) Construction

Alternative 3 would remove the existing light industrial/arts production commercial spaces and 10 live/work units and construct a new building on the Project Site. Similar to the Project, construction of Alternative 3 would involve the temporary transport, use, storage and disposal of potentially hazardous materials, including paints, adhesives,

[4] *The Project Site is also located in Transit Priority Area as defined by Public Resources Code Section 20199. Public Resources Code Section 21099 defines a "transit priority area" as an area within 0.5 mile of a major transit stop that is "existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." Public Resources Code Section 21064.3 defines "major transit stop" as "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Also refer to the City's ZIMAS System regarding the location of the Project Site within a Transit Priority Area. www.zimas.lacity.org, accessed December 12, 2016.*

surface coatings, cleaning agents, fuels, and oils. All of these materials would be used in a short-term nature during construction activities. Additionally, all potentially hazardous materials would be used and stored in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, which would ensure that impacts are less than significant. Furthermore, any emissions from the use of such materials would be minimal and localized to the Project Site.

As with the Project, excavation and grading at the Project Site for Alternative 3 could potentially uncover unknown contaminants associated with past uses of the property. Thus, Alternative 3 would also implement Mitigation Measure HAZ-MM-1 to reduce this potential impact to a less-than-significant level. Since construction of Alternative 3 would comply with applicable regulations and would not expose persons to substantial risk resulting from the release of hazardous materials, exposure to health hazards in excess of regulatory standards, or exacerbate existing environmental conditions, a less-than-significant impact associated with the potential release of hazardous substances during construction of this alternative would occur. Overall, based on the reduced size and duration of construction for Alternative 3, impacts would be less than significant and less than those of the Project.

2) Operation

Operation of Alternative 3 would result in the use, storage, disposal, and transport of similar types of hazardous materials to the Project though to a lesser extent. All potentially hazardous material, transported, stored, disposed of, offered for sale, or used on the Project Site for daily upkeep would be contained, stored, and used in accordance with the manufacturers' instructions and handled in compliance with applicable standards and regulations.

Similar to the Project, as Alternative 3 would be developed on the existing Project Site, there would be no impacts to existing schools located within a quarter mile of the Project Site. The Project Site is not located on any governmental databases listing of hazardous materials sites. Thus, similar to the Project, no impacts would occur. The Project Site is not located within the vicinity of a public airport or private airstrip. Thus, similar to the Project, no impacts would occur.

Similar to the Project, under Alternative 3, the Project Applicant would be required to establish, implement, and maintain on file an emergency response plan, which would be inspected annually by the LAFD. Thus, operation of Alternative 3 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts in this regard would be less than significant. Therefore, operation of Alternative 3 would result in impacts that are similar to the Project's less-than-significant impacts.

As the Project Site is not located within a Very High Fire Hazard Severity Zone, similar to the Project, Alternative 3 would not expose people and/or structures to significant risk of loss, injury, or death involving wildland fires. Thus, there would be no impacts associated with exposing people and/or structures to significant risk of loss, injury, or death involving wildland fires.

g) Land Use and Planning

1) Land Use Consistency

As previously discussed, Alternative 3 would develop the same uses as the Project at a reduced density. Accordingly, the floor area ratio, density, and building height would be reduced as compared to the Project. However, Alternative 3 would require the same discretionary approvals as the Project. Similar to the Project, with approval of the requested discretionary approvals and implementation of the project design features discussed throughout the DEIR (which would also be implemented as part of Alternative 3), Alternative 3 would also be generally consistent with the overall intent of the applicable goals, policies, and objectives in local and regional plans that govern development on the Project Site, including SCAG's regional plans, the General Plan Framework Element, Housing Element, Health and Wellness Element, the Central City North Community Plan, Zoning Code, Walkability Checklist, and Citywide Design Guidelines. Thus, impacts related to land use consistency would be less than significant and similar to the less-than-significant impacts of the Project.

2) Land Use Compatibility

Similar to the Project, Alternative 3 would not create a physical barrier in an established community but would instead convert a Project Site currently developed with a 91,200-square-foot, two-story light industrial/arts-oriented commercial building containing 10 live/work units into a mixed-use development. Alternative 3 would result in the loss of 10 existing live/work units, but would provide 98 new live/work units (including 11 percent dedicated to Very Low Income households). Land uses under Alternative 3 would be the same as with the Project and would be similarly compatible with existing surrounding land uses. As such, impacts associated with land use compatibility would be similar to the Project's less-than-significant impacts.

h) Noise

1) Construction

Alternative 3 would result in a reduction in the construction duration of approximately six months (24 months vs. 30 months) when compared to the Project due to its reduced

size. However, while the overall duration of the construction period would be reduced compared to the Project, construction activities during the maximum activity days would be similar in scale to the Project. Similar to the Project, Alternative 3 would require demolition of the 91,200 square feet existing structure containing light industrial and production space and 10 live/work units. As such, it would generally involve a similar level of demolition and ground clearance as the Project. Construction activities for the Project and Alternative 3 would be similar in that heavy equipment, hand held equipment, and motor vehicles, all of which generate temporary noise and in some cases vibration impacts, would be used during construction of the proposed uses.

As with the Project, construction noise impacts would be temporary, and construction activities would not be permitted between 9:00 P.M. through 7:00 A.M., Monday through Friday, before 8:00 A.M. and after 6:00 P.M. on Saturdays, or at all on Sundays. To avoid noise increases that would exceed City's noise regulations, as with the Project, Alternative 3 would implement Mitigation Measure NOI-MM-1 requiring powered construction equipment to be equipped with noise mufflers. In addition, Alternative 3 would implement Mitigation Measure NOI-MM-2 requiring the erection of a temporary sound barrier along the Project Site's eastern boundary, and Mitigation Measure NOI-MM-3 restricting the usage of Colyton Street by construction trucks. As with the Project, construction noise impacts would be less than significant with mitigation.

As with the Project, ground-borne vibration impacts of Alternative 3 could be significant for structures abutting the Project Site to the north. However, with the implementation of Mitigation Measures NOI-MM-4 and NOI-MM-5, vibration impacts at the structures abutting the Project Site to the north (a three-story brick building at 440 Seaton Street and a single-story warehouse building at 441 S. Colyton Street) would be reduced to a less-than-significant level and similar to that of the Project. However, as with the Project, the vibration impact of Alternative 3 would exceed the human annoyance threshold at the nearest residential use on Colyton Street and would be considered significant and unavoidable.

Thus, implementation of Alternative 3 would result in construction noise and vibration impacts that are similar to the Project's significant but mitigable (noise) and significant and unavoidable (vibration and cumulative construction noise) impacts due to the proximity of the Project Site to the nearest residential use. However, these impacts would occur for a shorter duration under Alternative 3 as compared to the Project due to the shorter construction period. Therefore, the impacts of Alternative 3 would be less than those of the Project.

2) Operation

As with the Project, operation of Alternative 3 would result in both direct on-site noise impacts associated with residential and commercial-related activities and indirect off-site noise impacts from vehicles traveling on local roads to access the Project Site. Direct on-site noise sources include HVAC systems, intermittent landscape maintenance, residential and hotel activities (i.e., voices, music), and auto-related activities. On-site noise sources would not be expected to individually or collectively elevate ambient noise levels substantially at nearby sensitive receptors. Similar to the Project, the potential noise impact from these on-site operational sources would be considered less than significant. Off-site noise from traffic generated by Alternative 3 would be reduced as compared to the Project due to the reduction in the number of net new daily trips from 4,713 to 2,788.

During operation of Alternative 3, there would be no significant stationary sources of ground-borne vibration, such as heavy equipment or industrial operations. Operational ground-borne vibration in the Project Site vicinity would be generated by vehicular travel on the local roadways. However, passenger vehicles rarely create enough ground-borne vibration to be perceptible to humans unless road surfaces are poorly maintained and have potholes or bumps, which is not the case in the vicinity of the Project Site. Due to the reduction in the number of daily vehicle trips associated with Alternative 3, operational vibration impacts would be less than those of the Project.

The potential off-site operational noise and vibration impacts generated by Alternative 3 would be less than significant and less than those of the Project. The potential on-site operational noise and vibration impacts generated by Alternative 3 would be less than significant and similar to those of the Project.

i) Population, Housing, and Employment

1) Population

The construction of Alternative 3 would result in increased employment opportunities in the construction field in the vicinity of the Project Site. However, as is the case with the Project, construction workers would not likely relocate their households as a consequence of working on Alternative 3. The construction-related employment for Alternative 3 would not represent a permanent or substantial new employment generator that would cause growth, and there would be no significant housing or population impacts from construction of Alternative 3. Therefore, similar to the Project, no impact related to construction-related indirect population growth would occur.

The proposed land uses within Alternative 3 would generate a net increase of approximately 130 employees after the existing uses on-site are removed. Compared to the anticipated employment growth in the City between the 2017 baseline year and the anticipated Alternative 3 buildout year of 2021, Alternative 3's employment would represent 0.19 percent of the forecasted employment growth in the City. Compared to the anticipated employment growth in the City between 2017 and 2040, as projected by SCAG in its 2016-2040 RTP/SCS, Alternative 3's employment would represent 0.03 percent of the forecasted employment growth. It is likely that the existing availability of employees in the Project area would fill the jobs generated by the Alternative 3. Thus, operation of Alternative 3 would not cause an increase in population to induce population growth indirectly within the Project area. Therefore, similar to the Project, impacts related to operation-related indirect population growth would be less than significant.

Because fewer residential units would be included within Alternative 3, the direct population growth of the Project would be reduced. Thus, Alternative 3's 213 net resident increase would represent a reduction of 76 permanent residents as compared to the Project's net increase of 289 residents. As discussed in **Section IV.J, Population, Housing, and Employment**, of the Draft EIR, 289 net new residents would constitute only a small portion of the City's 2016-2040 RTP/SCS forecasted growth and would represent a less-than-significant impact. Therefore, because it would generate fewer net new residents than the Project, Alternative 3 would have an impact that is less than significant and less than that of the Project with respect to direct population growth at the Project Site.

As with the Project, Alternative 3 would not induce substantial growth that exceeds growth forecasted for the area or introduce unplanned infrastructure or accelerate development in an undeveloped area that would result in an adverse physical change in the environment. The Project Site is currently developed with a light industrial/residential building and is located within an urbanized area in the City. Thus, the construction of a potential growth-inducing roadway or other infrastructure extensions would not be required. Similar to the Project, as development of Alternative 3 would not induce substantial indirect population growth and would be supported by the existing infrastructure, such as roadways, impacts would be less than significant.

2) Housing

Alternative 3 would develop 98 live/work units and would remove the 10 existing live/work units on-site.[5] Compared to the anticipated housing growth in the City between

[5] *Calculation of residents per household based on: Los Angeles Department of City Planning Demographic Research Unit, Census 2010 Population by Housing Type, Central City North*

the 2017 baseline year and its anticipated buildout year of the 2021, Alternative 3's residential housing would represent 0.17 percent of the forecasted housing growth in the City. Compared to the anticipated housing growth in the City between 2017 and 2040, as projected by SCAG in its 2016-2040 RTP/SCS, Alternative 3's housing would represent 0.03 percent of the forecasted housing growth. In addition to being consistent with population and household growth forecasts for the City, Alternative 3 would be consistent with of the applicable residential policies set forth in Community Plan.

Similar to the Project, Alternative 3 responds to the unmet housing demand in the City and would help achieve a portion of the household growth forecast for the City, while also being consistent with regional policies to reduce urban sprawl, efficiently utilize existing infrastructure, reduce regional congestion, and improve air quality through the anticipated reduction of VMT associated with the co-location of complementary land uses within the same development and within walking distance of a variety of commercial and retail establishments. Thus, while Alternative 3 would generate a residential population at the Project Site through the development of new housing, it would not substantially induce housing growth beyond forecasted levels. As such, impacts related to housing would be less than significant and similar to those of the Project.

3) Employment

Operation of Alternative 3 would result in an increase of approximately 130 permanent jobs upon completion as compared to existing conditions, and a reduction of 109 jobs as compared to the Project. This increase in jobs would be consistent with the SCAG forecast of 388,300 additional jobs within the City by 2040. The impact of Alternative 3 on employment would, therefore, be less than significant and similar to that of the Project.

j) Public Services

1) Fire Protection

(a) Construction

As discussed in **Section IV.K.1, Public Services - Fire Protection**, of the Draft EIR and similar to the Project, construction activities associated with Alternative 3 may temporarily increase demand for fire protection and emergency medical services and may cause the occasional exposure of combustible materials, such as wood, plastics,

Community Plan Area, website: http://www.cityplanning.lacity.org/DRU/HOMEDRU.cfm, accessed August 9, 2018

sawdust, coverings and coatings, to heat sources, including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, in compliance with OSHA requirements, construction managers and personnel would be trained in fire prevention and emergency response. Fire suppression equipment specific to construction that meets OSHA standards would be maintained on-site. Additionally, construction would comply with applicable OSHA requirements related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Therefore, in light of OSHA regulations that would, in part, require training of personnel in fire prevention and emergency response, maintenance of fire suppression equipment, and implementation of proper procedures for storage and handling of flammable materials on the Project Site, construction impacts on fire protection and emergency medical services would be less than significant and similar to those of the Project.

Construction activities also have the potential to affect fire protection services by adding construction traffic to the street network and by necessitating partial lane closures during street improvements and utility installations. These impacts would be similar to those of the Project and would be considered less than significant because construction activities are temporary in nature and do not create continuing risks; general "good housekeeping" procedures would be employed by the construction contractors and the work crews (e.g., maintaining mechanical equipment, proper storage of flammable materials, cleanup of spills of flammable liquid) to minimize these hazards; and partial lane closures would not significantly affect emergency vehicles, the drivers of which normally have a variety of options for dealing with traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to CVC Section 21806. Additionally, if there are partial closures to streets surrounding the Project Site, flagmen would be used to facilitate the traffic flow until such temporary street closures are complete under the Construction Traffic Management Plan (refer to TR-PDF-2).

Overall, construction is not considered to be a high-risk activity. Construction of Alternative 3 would not be expected to tax fire-fighting and emergency services to the extent that there would be a need for new or expanded fire facilities in order to maintain acceptable service ratios or other performance objectives of the LAFD, due to the limited duration of construction activities and compliance with applicable codes. Therefore, impacts associated with construction of Alternative 3 on fire protection services would be less than significant and similar to those of the Project.

(b) Operation

As discussed in **Section IV.K.1, Public Services - Fire Protection**, of the Draft EIR, with respect to fire flows, fire protection services for the Project would be considered

adequate by LAFD standards. Since Alternative 3 would be a smaller development than the Project, fire protection services related to fire flows would also be considered adequate by LAFD standards. Therefore, the impact of this alternative regarding fire flow would be less than significant and less than that of the Project.

Similar to the Project, with regard to fire services during operation of Alternative 3, the Project Site is expected to continue to be served by Fire Station No. 4, which is the nearest fire station to the Project Site. As with the Project, all uses under Alternative 3 would fall within the LAFD's maximum prescribed response distances of 1.5 miles and 2.0 miles from a fire station with an engine company and truck company, respectively (Fire Station No. 4). Based on the LAMC criteria regarding response distances, as with the Project, Alternative 3 would be adequately located within the prescribed distances from Fire Station No. 4.

Based on the reduction in the number of live/work units and hotel rooms on the Project Site, the number of fire protection service calls is expected to be slightly reduced with implementation of Alternative 3 as compared to the Project due to the fewer number of people present on-site at any given time. Similar to the Project, Alternative 3 would comply with Los Angeles Building and Fire Code requirements, which include, but are not limited to, the installation of an automatic fire sprinkler system; the creation and filing of an emergency response plan; and LAFD approval of emergency plans, procedures, and evacuation routes and signs. Compliance with applicable regulatory requirements that are enforced through the City's building permitting process would ensure that adequate fire prevention features would be provided to reduce the demand on LAFD facilities and equipment, thereby ensuring that Alternative 3 would not create any undue fire hazard.

As with the Project, emergency vehicles would access the Project Site directly from the surrounding roadways, including 5th Street, Colyton Street, and Seaton Street. Emergency access to the Project Site and surrounding uses would be maintained at all times. Alternative 3-related traffic would have the potential to increase emergency vehicle response times to the Project Site and surrounding properties due to travel time delays caused by traffic. However, the area surrounding the Project Site includes an established street system which provides regional, sub-regional, and local access and circulation within the Project's traffic study area. In addition, the drivers of emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens to clear a path of travel or driving in the lanes of opposing traffic, pursuant to CVC Section 21806. Therefore, the increase in traffic generated by Alternative 3 would not significantly impact emergency vehicle response times to the Project Site and surrounding area and impacts would be similar to those of the Project.

As with the Project, domestic and fire water service to the Project Site under Alternative 3 would continue to be supplied by LADWP. Similar to the Project, Alternative 3 would install fire suppression infrastructure as necessary to comply with applicable City requirements set forth in Section 57.507-3,1 of the LAMC. Therefore, Alternative 3 would meet the fire flow requirement for the Project Site.

Based on the above, operation of Alternative 3 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility in order to maintain service. Therefore, impacts to fire protection services during operation of Alternative 3 would be less than significant and less than those of the Project.

2) Police Protection

(a) Construction

Similar to the Project, construction of Alternative 3 could result in an increase in demand for police protection services. However, as with the Project, Alternative 3 would incorporate Project Design Features POL-PDF-2 and POL-PDF-3 to implement temporary security measures, including security fencing, lighting, and locked entry to secure the Project Site during construction. Similar to the Project, with implementation of these Project Design Features, the potential need for police protection during the construction phase of Alternative 3 would be minimized.

With regard to emergency vehicle access, as with the Project, although minor traffic delays due to temporary lane closures needed to facilitate specific construction activities could occur, particularly during the construction of utilities and street improvements, impacts to police protection services would be considered less than significant as (1) emergency access to the Project Site would be maintained through marked emergency access points approved by the LAPD; (2) construction impacts are temporary in nature; and (3) the ability of emergency vehicles to have a variety of options for avoiding traffic and partial street closures. Accordingly, similar to the Project, construction-related impacts of Alternative 3 would not be expected to affect the LAPD's ability to respond to emergencies to the extent that there would be a need for any additional new or expanded police facilities, order to maintain acceptable service ratios, response times, or other performance objectives of the LAPD.

Therefore, similar to the Project, impacts on police protection services during construction of Alternative 3 would be less than significant.

(b) Operation

As with the Project, Alternative 3 would introduce additional resident, employment, and visitor populations to the Project Site and increase the service population of the Central

Community Police Station service area. Alternative 3 would generate a net service population increase of approximately 343 persons at the Project Site, consisting of employees and residents, 157 persons fewer than the Project. As a result, Alternative 3 would result in a smaller increase to the existing LAPD service population at the Project Site than would the Project and would have a smaller impact on the existing officer-to-resident ratio than the Project.

In addition, similar to the Project, Alternative 3 would implement Project Design Features POL-PDF-4 and POL-PDF-5, which are related to a security program, provision of sufficient lighting, and Project design that increases open views and reduces areas of concealment. These Project Design Features would help offset the increase in demand for police services under Alternative 3. Furthermore, although traffic generated by Alternative 3 would have the potential to affect emergency vehicle response to the Project Site and surrounding properties due to additional traffic, emergency vehicles normally have a variety of options for avoiding traffic, such as using sirens and flashing lights to clear a path of travel. As such, operation of Alternative 3, including traffic generated by Alternative 3, would not substantially affect emergency response as a result of increased traffic congestion. Based on the analysis above, Alternative 3 would not necessitate the provision of new or physically altered facilities in order to maintain the LAPD's capability to serve the Project Site. Accordingly, Alternative 3 would not result in adverse physical impacts associated with the construction of new or altered facilities. Therefore, Alternative 3's impacts related to police protection services would be less than significant and less than those of the Project.

3) Schools

(a) Construction

Similar to the Project, Alternative 3 would generate part-time and full-time jobs associated with its construction between the start of construction and full buildout. However, due to the employment patterns of construction workers in Southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction job opportunities. Therefore, construction employment generated by Alternative 3 would not result in a notable increase in the resident population or a corresponding demand for schools from construction workers in the vicinity of the Project Site. Similar to the Project, impacts on school facilities during construction of Alternative 3 would be less than significant.

(b) Operation

As shown in Table VI-11, based on LAUSD demographic analysis, Alternative 3 would result in approximately 98 additional LAUSD students (56 elementary students, 14 middle school students, and 28 high school students), compared to the Project's 141 students (80 elementary, 20 middle, and 41 high school students). Thus, Alternative 3 would generate 43 fewer students than the Project. Under Alternative 3 and using future enrollment projections for each school, 9th Street Elementary School would operate over capacity by 113 students, Hollenbeck Middle School would operate under capacity by 67 students, and the Boyle Heights Zone of Choice High Schools would operate over capacity by 424 students.

Table VI-11
Alternative 3: Estimated Student Generation

Land Use	Project Amount	Student Generation			
		Elementary	Middle	High	Total
Live/Work Units	88 net new units[1]	36	9	18	**63**
Non-Residential Uses	130 net new employees[2]	20	5	10	**35**
	Total	**56**	**14**	**28**	**98**

[1] *Alternative 3 would include 98 live/work units; 10 existing live/work units are located on the Project Site. Thus, a net increase of 88 live/work units would be developed.*

[2] *Estimated new employment at Project Site over the existing employment. See Table IV.J-2 for calculation. A net increase of 130 employees generates 35 students, using 0.2691 students per employee student generation rate for office/retail, including creative office, land uses from the 2012 Developer Fee Justification Study. Office/retail rates are for total number of students, not broken down by elementary, middle, or high school. Thus, the total is broken down by the same relative rate as households: 4:1:2.*

As with the Project, the number of students generated by Alternative 3 who could attend LAUSD schools serving the Project Site would likely be less than the above estimate because this analysis does not include LAUSD options that would allow students generated by Alternative 3 to enroll at other LAUSD schools (i.e., Magnet Schools, Charter Schools, and Pilot Schools) located away from their home attendance area, or students who may enroll in private schools or participate in home-schooling. In addition, this analysis does not account for students who may already reside in the school attendance boundaries. Furthermore, as with the Project, pursuant to the California Government Code, the Project Applicant's payment of the school fees established by the LAUSD in accordance with existing rules and regulations regarding the calculation and payment of such fees would, by law, provide full and complete mitigation for this alternative's direct and indirect impacts to schools. Therefore, due to a reduction in the number of students generated under Alternative 3, impacts related to schools under Alternative 3 would be less than significant and less than those of the Project.

4) Parks and Recreation

(a) Construction

Construction of Alternative 3 would result in a temporary increase in the number of construction workers at the Project Site. As described above, due to the employment patterns of construction workers in Southern California, and the operation of the market for construction labor, the likelihood that construction workers would relocate their households as a consequence of working on Alternative 3 is negligible. Therefore, the construction workers associated with Alternative 3 would not result in a notable increase in the residential population of the Project vicinity, or a corresponding permanent demand for parks and recreational facilities in the vicinity of the Project Site. As such, similar to the Project, construction of Alternative 3 would not generate a demand for park or recreational facilities that cannot be adequately accommodated by existing or planned facilities and services, increase the use of existing parks such that substantial physical deterioration of the facility would occur, or interfere with existing park usage. Therefore, similar to the Project, impacts on parks and recreational facilities during construction of Alternative 3 would be less than significant.

(b) Operation

Alternative 3 would provide 25,200 square feet of open space and recreational amenities, which would exceed the open space requirements as set forth by LAMC Section 12.21-G. By reducing the number of residential units as compared to the Project, Alternative 3 would generate approximately 76 fewer residents at the Project Site. Thus, Alternative 3 would reduce the demand for parks and recreational facilities in the Project area as compared to the Project.

Similar to the Project, Alternative 3 would not be expected to cause or accelerate substantial physical deterioration of off-site public parks or recreational facilities given the provision of on-site public and private open space described above. As with the Project, employees generated by Alternative 3 would not utilize parks and recreational facilities beyond a 0.5-mile radius from the Project Site as lunch breaks typically are not long enough for workers to take advantage of such facilities and return to work within the allotted time (e.g., 30 to 60 minutes). Instead, as with the Project, it is anticipated that employees under Alternative 3 would utilize on-site open space as it would be more easily accessible and convenient, resulting in a negligible demand for surrounding parks and recreational facilities. Thus, Alternative 3 would not substantially increase the demand for off-site public parks and recreational facilities. Furthermore, Alternative 3 would pay a Dwelling Unit Construction Tax in accordance with Section 21.10-3,a(1) of the LAMC and comply with the requirements of Section 17.12 of the LAMC regarding payment of Quimby fees. Therefore, impacts on parks and recreational facilities during

operation of Alternative 3 would be less than significant and less than those of the Project due to the reduction in the number of residents.

5) Libraries

(a) Construction

Similar to the Project, construction of Alternative 3 would result in a temporary increase in the number of construction workers on the Project Site. However, due to the employment patterns of construction workers in Southern California and the operation of the market for construction labor, construction workers are not likely to relocate their households as a consequence of construction of Alternative 3. Therefore, construction employment generated by Alternative 3 would not result in a notable increase in the resident population or a corresponding demand for library services in the vicinity of the Project Site. As such, similar to the Project, impacts to library facilities during construction of Alternative 3 would be less than significant.

(b) Operation

Alternative 3 would add a fewer number of residents and employees to the Project Site when compared to the Project. As a result, Alternative 3 would reduce the residential demand for library services at the Project Site as compared to the Project.

In addition, similar to the Project, Alternative 3 would generate revenues to the City's General Fund (in the form of property taxes, sales tax, and business tax, etc.) that could be applied toward the provision of new library facilities and related staffing for any one of the libraries serving the Project area, as deemed appropriate. Revenue from Alternative 3 contributed to the General Fund would help offset increases in demand for library services. As such, Alternative 3 would not conflict with or impede implementation of the applicable policies and goals related to libraries in the Framework Element or the Central City North Community Plan.

Similar to the Project, it is anticipated that new jobs generated by Alternative 3 would typically be filled by persons already residing in the vicinity of the workplace and who already generate a demand for the libraries in the vicinity of the Project Site. Therefore, any indirect or direct new demand for library services generated by employees under Alternative 3 would already be taken into account in library services provisions.

Furthermore, as with the Project, as the Little Tokyo and Ben Franklin Branch Libraries are already undersized with regard to existing service populations, Alternative 3 would not be anticipated to result in a substantial increase in demand for library services for which current demand exceeds the ability of the facility to adequately serve the population. Therefore, impacts related to libraries under Alternative 3 would be less than

significant and less than those of the Project due to the reduction in the number of residents.

k) Transportation/Traffic

1) Construction

Alternative 3 would involve less excavation with two fewer subterranean levels than the Project, resulting in reduced export of existing soil materials compared to that of the Project. As with the Project, no temporary full street closures are anticipated, access to adjacent buildings and land uses would remain open, no bus stops or transit lines would be affected, and approximately 34 on-street parking spaces along the Project Site's 5th Street and Seaton Street frontages would be removed. As determined in **Section IV.L, Transportation/Traffic**, of the Draft EIR, construction trips generated by the Project would not cause significant traffic impacts. As the maximum daily truck trips generated during excavation activities under Alternative 3 would be no greater than those of the Project, construction trips generated by Alternative 3 also would not cause significant traffic impacts. Therefore, Alternative 3 would result in a construction traffic impact that is less than the Project's less-than-significant impact due to the reduction in the number of haul trips required for export of soil materials from the Project Site.

2) Operation

(a) Intersection Levels of Service

Alternative 3 would reduce traffic generation compared to the Project. Table VI-12 provides the trip generation rates and trip adjustments that were utilized in this analysis. As detailed in Table VI-12, Alternative 3 would generate a total of 2,788 net new daily trips, with 176 net new AM peak hour trips (84 inbound, 92 outbound) and 134 net new PM peak hour trips (96 inbound, 38 outbound).

Alternative 3's net trip generation would be 97 trips less than that of the Project during the AM peak hour and 95 fewer trips during the PM peak hour, with 1,925 fewer daily trips than the Project.

As shown in Table VI-13, under the Baseline Plus Alternative 3 scenario, Alternative 3's intersection impacts would be less than the less-than-significant impacts of the Project due to the fewer number of trips generated by the uses at the Project Site.

Table VI-12
Alternative 3: Trip Generation Estimates

Land Use	ITE Land Use Code	Size		Trip Generation Rates [a]							Estimated Trip Generation						
					AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour		
				Daily	Rate	In%	Out%	Rate	In%	Out%	Daily	In	Out	Total	In	Out	Total
Alternative 3																	
Shopping Center	820	19.120	ksf	42.7	0.96	62%	38%	3.71	48%	52%	816	11	7	18	34	37	71
Less: Internal Capture [b]				*20%*		*21%*	*17%*		*66%*	*59%*	*(163)*	*(2)*	*(1)*	*(3)*	*(22)*	*(22)*	*(44)*
Total Driveway Trips											653	9	6	15	12	15	27
Less: Pass-by [c]				*50%*	*50%*			*50%*			*(326)*	*(4)*	*(3)*	*(7)*	*(6)*	*(7)*	*(13)*
Net External Vehicle Trips											327	5	3	8	6	8	14
Quality Restaurant	931	8.340	ksf	89.95	0.81	50%	50%	7.49	67%	33%	750	4	3	7	42	20	62
Less: Internal Capture [b]				*6%*		*8%*	*4%*		*16%*	*35%*	*(45)*	*(0)*	*(0)*	*(0)*	*(7)*	*(7)*	*(14)*
Total Driveway Trips											705	4	3	7	35	13	48
Less: Pass-by [c]				*10%*	*10%*			*10%*			*(70)*	*(0)*	*(0)*	*(0)*	*(3)*	*(1)*	*(4)*
Net External Vehicle Trips											635	4	3	7	32	12	44
Fast-Food Restaurant	933	1.100	ksf	716	43.87	60%	40%	26.15	51%	49%	788	29	19	48	15	14	29
Less: Internal Capture [b]				*8%*		*8%*	*4%*		*16%*	*35%*	*(63)*	*(2)*	*(1)*	*(3)*	*(2)*	*(5)*	*(7)*
Total											725	27	18	45	13	9	22

Table VI-12
Alternative 3: Trip Generation Estimates

Land Use	ITE Land Use Code	Size		Trip Generation Rates [a]							Estimated Trip Generation						
					AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour		
				Daily	Rate	In%	Out%	Rate	In%	Out%	Daily	In	Out	Total	In	Out	Total
Driveway Trips																	
Less: Pass-by [c]				*50%*	*50%*			*50%*			*(362)*	*(13)*	*(9)*	*(22)*	*(6)*	*(4)*	*(10)*
Net External Vehicle Trips											363	14	9	23	7	5	12
High-Turnover Restaurant	932	11.150	ksf	127.15	10.81	55%	45%	9.85	60%	40%	1,418	67	54	121	66	44	110
Less: Internal Capture [b]				*7%*		*8%*	*4%*		*16%*	*35%*	*(99)*	*(5*	*(2)*	*(7)*	*(10)*	*(15)*	*(25)*
Total Driveway Trips											1,319	62	52	114	56	29	85
Less: Pass-by [c]				*20%*	*20%*			*20%*			*(263)*	*(12)*	*(10)*	*(22)*	*(11)*	*(5)*	*(16)*
Net External Vehicle Trips											1,056	50	42	92	45	24	69
Hotel	310	73	rms	8.17	0.53	59%	41%	0.6	51%	49%	596	23	16	39	22	22	44
Less: Internal Capture [b]				*16%*		*4%*	*13%*		*59%*	*50%*	*(95)*	*(1)*	*(2)*	*(3)*	*(13)*	*(11)*	*(24)*
Total Driveway Trips											501	22	14	36	9	11	20
Residential	230	98	du	5.81	0.44	17%	83%	0.52	67%	33%	569	7	36	43	34	17	51
Less: Internal Capture [b]				*18%*		*10%*	*22%*		*50%*	*50%*	*(102)*	*(1)*	*(8)*	*(9)*	*(17)*	*(9)*	*(26)*

Table VI-12
Alternative 3: Trip Generation Estimates

Land Use	ITE Land Use Code	Size		Trip Generation Rates [a]							Estimated Trip Generation						
					AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour		
				Daily	Rate	In%	Out%	Rate	In%	Out%	Daily	In	Out	Total	In	Out	Total
Total Driveway Trips											467	6	28	34	17	8	25
Creative Office	710	5.395	ksf	11.03	1.56	88%	12%	1.49	17%	83%	60	7	1	8	1	7	8
Less: Internal Capture [b]				*9%*		*13%*	*0%*		*0%*	*25%*	*(5)*	*(1)*	*(0)*	*(1)*	*(0)*	*(2)*	*(2)*
Net External Vehicle Trips											55	6	1	7	1	5	6
Design Incubator [d]	540	2.440	ksf	27.49	2.99	74%	26%	2.54	58%	42%	67	5	2	7	3	3	6
Total Driveway Trips											67	5	2	7	3	3	6
Art Gallery [e]	580	8.070	ksf	1.8	0.28	86%	14%	0.18	16%	84%	15	2	0	2	0	1	1
Total Driveway Trips											15	2	0	2	0	1	1
Total Driveway Trips											4,507	143	124	267	146	94	240
Total Project External Vehicle Trips											3,486	114	102	216	120	77	197
Existing Use Credit																	
Shopping Center	820	22	ksf	42.7	0.96	62%	38%	3.71	48%	52%	939	13	8	21	39	43	82
Less: Internal Capture [b]				*4%*		*5%*	*7%*		*8%*	*5%*	*(38)*	*(1)*	*(1)*	*(2)*	*(3)*	*(2)*	*(5)*
Total Driveway Trips											901	12	7	19	36	41	77

Table VI-12
Alternative 3: Trip Generation Estimates

Land Use	ITE Land Use Code	Size		Trip Generation Rates [a]							Estimated Trip Generation						
					AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour		
				Daily	Rate	In%	Out%	Rate	In%	Out%	Daily	In	Out	Total	In	Out	Total
Less: Pass-by [c]				*50%*	*50%*			*50%*			*(450)*	*(6)*	*(3)*	*(9)*	*(18)*	*(20)*	*(38)*
Net External Vehicle Trips											451	6	4	10	18	21	39
Creative Office	710	16	ksf	11.03	1.56	88%	12%	1.49	17%	83%	176	22	3	25	4	20	24
Less: Internal Capture [b]				7%		4%	33%		25%	18%	*(12)*	*(1)*	*(1)*	*(2)*	*(1)*	*(4)*	*(5)*
Net External Vehicle Trips											164	21	2	23	3	16	19
Warehousing	150	7	ksf	3.56	0.3	79%	21%	0.32	25%	75%	25	2	0	2	1	1	2
Net External Vehicle Trips											25	2	0	2	1	1	2
Residential	220	10	DU	6.65	0.51	20%	80%	0.62	65%	35%	67	1	4	5	4	2	6
Less: Internal Capture [b]				*13%*		*0%*	*0%*		*50%*	*33%*	(9)	0	0	0	(2)	(1)	(3)
Net External Vehicle Trips											58	1	4	5	2	1	3
Total Existing Use Credit											698	30	10	40	24	39	63
Net Incremental External Trips											**2,788**	**84**	**92**	**176**	**96**	**38**	**134**

Table VI-12
Alternative 3: Trip Generation Estimates

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Estimated Trip Generation						
				AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour		
			Daily	Rate	In%	Out%	Rate	In%	Out%	Daily	In	Out	Total	In	Out	Total
[a] Source: Institute of Transportation Engineers [ITE}, Trip Generation, 9th Edition, 2012.																
[b] 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.																
[c] The pass-by credit is based on Attachment 1 of LADOT's Traffic Study Policies and Procedures, December 2016.																
[d] Trip generation rates for community college used for arts school.																
[e] Trip generation rates for museum used for Art Gallery. Since ITE does not provide a daily trip rate for this use, the peak hour rate was multiplied by 10 to develop a daily trip estimate.																
Source: Fehr & Peers, 2018.																

Table VI-13
Alternative 3: Baseline Plus Project Intersection Impact Analysis

No.	Intersection	Peak Hour	Baseline		Baseline Plus Alternative 3			
			V/C	LOS	V/C	LOS	V/C Increase	Significant Impact
1.	San Pedro St &	AM	0.274	A	0.275	A	0.001	No
	E 4th St	PM	0.759	C	0.760	C	0.001	No
2.	San Pedro St &	AM	0.235	A	0.235	A	0.000	No
	E 6th St	PM	0.407	A	0.407	A	0.001	No
3.	Central Ave &	AM	0.176	A	0.176	A	0.001	No
	E 4th St	PM	0.598	A	0.601	B	0.004	No
4.	Central Ave &	AM	0.440	A	0.451	A	0.011	No
	E 6th St	PM	0.701	C	0.707	C	0.006	No
5.	N Alameda St &	AM	0.474	A	0.593	A	0.119	No
	Arcadia St	PM	0.659	B	0.661	B	0.002	No
6.	N Alameda St &	AM	0.378	A	0.380	A	0.002	No
	E Commercial St	PM	0.648	B	0.649	B	0.001	No
7.	N Alameda St &	AM	0.561	A	0.564	A	0.003	No
	E 1st St	PM	0.574	A	0.577	A	0.004	No
8.	S Alameda St &	AM	0.703	C	0.713	C	0.011	No
	E 4th Pl/3rd St	PM	0.420	A	0.428	A	0.008	No
9.	S Alameda St &	AM	0.308	A	0.316	A	0.008	No
	E 4th St	PM	0.623	B	0.629	B	0.007	No
10.	S Alameda St &	AM	0.591	A	0.608	B	0.018	No
	E 6th St	PM	0.624	B	0.629	B	0.006	No
11.	S Alameda St &	AM	0.658	B	0.666	B	0.008	No
	E 7th St	PM	0.631	B	0.635	B	0.004	No
12.	S Alameda St &	AM	0.458	A	0.462	A	0.004	No
	E 8th St	PM	0.457	A	0.459	A	0.002	No
13.	S Alameda St &	AM	0.603	B	0.608	B	0.005	No
	Olympic Blvd	PM	0.747	C	0.748	C	0.001	No
14.	S Alameda St &	AM	0.652	B	0.655	B	0.004	No
	I-10 EB On-Ramp	PM	0.694	B	0.696	B	0.003	No
15.	Merrick St/Molino St &	AM	0.551	A	0.553	A	0.002	No
	E 4th St	PM	0.562	A	0.563	A	0.001	No
16.	Mateo St	AM	0.367	A	0.374	A	0.007	No
	E 6th St	PM	0.368	A	0.378	A	0.010	No
17.	Mateo St	AM	0.366	A	0.372	A	0.006	No
	E 7th St	PM	0.357	A	0.363	A	0.007	No
18.	Pecan St	AM	0.553	A	0.555	A	0.002	No
	E 4th St	PM	0.490	A	0.490	A	0.000	No
19.	US-101 SB Ramp &	AM	0.542	A	0.544	A	0.002	No
	E 4th St	PM	0.345	A	0.347	A	0.003	No
20.	US-101 NB Ramp &	AM	0.737	C	0.738	C	0.001	No
	E 4th St	PM	0.323	A	0.324	A	0.001	No
21.	I-5 NB Ramp &	AM	0.579	A	0.583	A	0.004	No
	E 4th St	PM	0.633	B	0.636	B	0.003	No

Source: Fehr & Peers, 2018.

As shown in Table VI-14, under the Future Plus Project scenario, Alternative 3 would result in two significantly impacted intersections with respect to intersection capacity, in the AM peak hour at the Alameda Street/4th Place/3rd Street and the Alameda Street/6th Street intersections. As a comparison, the Project would result in six significantly impacted intersection under the Future Base Plus Project scenario, including at the same two intersections in the AM peak hour. As discussed in **Section IV.L, Transportation/Traffic**, of the Draft EIR, all but one of the six significantly impacted intersections would be mitigated to less-than-significant levels.

Alternative 3 would also implement Mitigation Measure TR-MM-2, which, as shown in Table VI-15, would reduce impacts at the two significantly impacted intersections to less-than-significant levels. Thus, Alternative 3 would eliminate impacts at all six significantly impacted intersections, including the intersection of Alameda Street and 6th Street (significant and unavoidable impact under the Project). Accordingly, Alternative 3 would result in impacts that would be less than those of the Project.

(b) Regional Transportation System

Alternative 3 would generate approximately 40 percent fewer trips than the Project. As identified in **Section IV.L, Transportation/Traffic**, of the Draft EIR, the Project's impacts to the CMP locations would be less than significant without mitigation. Therefore, similar to the Project, it may be assumed that Alternative 3 would also have less-than-significant impacts at CMP locations. Similarly, Alternative 3 would generate fewer transit trips than the Project due to its smaller scale. Given that the Project's impact on regional transit has been concluded to be less than significant in Section IV.L, the impact of Alternative 3 on regional transit would be less than the Project's less-than-significant impact.

(c) Access and Circulation

Similar to the Project, Alternative 3 would provide on-site parking within the subterranean parking levels. All driveways proposed under Alternative 3 would be the same as those proposed for the Project and designed in accordance with LADOT standards. Similar to the Project, Alternative 3 would provide sufficient valet staff to effectively manage the valet curbside space, to ensure the flow of vehicles to the garage is streamlined, and to minimize spillback queues onto 5th Street. Therefore, Alternative 3 would not result in inadequate access.

In addition, as with the Project, Alternative 3 does not include any sharp curves, dangerous intersections, or incompatible uses. No hazardous sight distance situations would result from Alternative 3 development in accordance with City specifications for sidewalks and building setbacks. Therefore, similar to the Project, Alternative 3's impacts related to hazardous roadway features would be less than significant.

Table VI-14
Alternative 3: Future Base Plus Project Intersection Impact Analysis

No.	Intersection	Peak Hour	Future Base		Future Plus Alternative 3 Conditions			
			V/C	LOS	V/C	LOS	V/C Increase	Significant Impact
1.	San Pedro St &	AM	0.485	A	0.485	A	0.001	No
	E 4th St	PM	1.023	F	1.025	F	0.001	No
2.	San Pedro St &	AM	0.348	A	0.348	A	0.000	No
	E 6th St	PM	0.537	A	0.537	A	0.001	No
3.	Central Ave &	AM	0.299	A	0.301	A	0.003	No
	E 4th St	PM	0.765	C	0.769	C	0.004	No
4.	Central Ave &	AM	0.757	C	0.763	C	0.006	No
	E 6th St	PM	1.130	F	1.134	F	0.004	No
5.	N Alameda St &	AM	0.907	E	0.910	E	0.003	No
	Arcadia St	PM	1.101	F	1.102	F	0.001	No
6.	N Alameda St &	AM	0.647	B	0.649	B	0.002	No
	E Commercial St	PM	1.079	F	1.080	F	0.001	No
7.	N Alameda St &	AM	1.171	F	1.174	F	0.003	No
	E 1st St	PM	1.190	F	1.193	F	0.004	No
8.	S Alameda St &	AM	1.151	F	1.161	F	0.011	**Yes**
	E 4th Pl/3rd St	PM	0.932	E	0.938	E	0.006	No
9.	S Alameda St &	AM	0.927	B	0.682	B	0.009	No
	E 4th St	PM	1.036	F	1.073	F	0.007	No
10.	S Alameda St &	AM	0.673	F	1.067	F	0.013	**Yes**
	E 6th St	PM	1.066	F	1.221	F	0.006	No
11.	S Alameda St &	AM	1.254	F	1.261	F	0.008	No
	E 7th St	PM	1.344	F	1.351	F	0.007	No
12.	S Alameda St &	AM	0.651	B	0.654	B	0.003	No
	E 8th St	PM	0.655	B	0.656	B	0.001	No
13.	S Alameda St &	AM	0.836	D	0.840	D	0.004	No
	Olympic Blvd	PM	1.049	F	1.050	F	0.001	No
14.	S Alameda St &	AM	0.885	D	0.888	D	0.004	No
	I-10 EB On-Ramp	PM	0.950	E	0.953	E	0.004	No
15.	Merrick St/Molino St &	AM	0.828	D	0.831	D	0.002	No
	E 4th St	PM	1.073	F	1.074	F	0.001	No
16.	Mateo St	AM	0.941	E	0.949	E	0.008	No
	E 6th St	PM	0.985	E	0.988	E	0.003	No
17.	Mateo St	AM	0.807	D	0.814	D	0.007	No
	E 7th St	PM	0.897	D	0.905	E	0.008	No
18.	Pecan St	AM	0.641	B	0.643	B	0.002	No
	E 4th St	PM	0.556	A	0.556	A	0.000	No
19.	US-101 SB Ramp &	AM	0.633	B	0.635	B	0.002	No
	E 4th St	PM	0.449	A	0.453	A	0.003	No
20.	US-101 NB Ramp &	AM	0.861	D	0.863	D	0.002	No
	E 4th St	PM	0.437	A	0.438	A	0.001	No
21.	I-5 NB Ramp &	AM	0.711	C	0.715	C	0.004	No
	E 4th St	PM	0.787	C	0.790	C	0.003	No

Source: Fehr & Peers, 2018.

Table VI-15
Alternative 3: Future Base Plus Project Intersection Impact with Mitigation

No.	Intersection	Peak Hour	Future Plus Alternative 3 Conditions				Future Plus Alternative 3 with Mitigation Conditions			
			V/C	LOS	V/C Increase	Significant Impact	V/C	LOS	V/C Increase	Residual Impact
8.	S Alameda St & E 4th Pl/3rd St	AM PM	1.161 0.938	F E	0.011 0.006	**Yes** No	1.151 N/A	F N/A	0.001 N/A	No N/A
10.	S Alameda St & E 6th St	AM PM	1.067 1.221	F F	0.013 0.006	**Yes** No	1.057 N/A	F N/A	0.003 N/A	No N/A

N/A = not applicable
Source: Fehr & Peers, 2018.

(d) Bicycle, Pedestrian, and Vehicular Safety

Bicycle, pedestrian, and vehicular access to the Project Site under Alternative 3 would be the same as the Project and designed in accordance with LADOT and other applicable standards to provide adequate sight distance, sidewalks, and/or pedestrian movement controls that would meet the City's requirements to protect pedestrian safety. As with the Project, Alternative 3 would improve the Project Site-adjacent sidewalks and circulation system and would not disrupt bicycle flow along local streets. Similar to the Project, visitors, patrons, and employees arriving by bicycle would have the same access options as pedestrian visitors, and to facilitate bicycle use, bicycle parking spaces and amenities would be provided within the Project Site under Alternative 3. Therefore, as with the Project, Alternative 3 would not substantially increase hazards to bicyclists, pedestrians, or vehicles. Similar to the Project, impacts related to bicycle, pedestrian and vehicular safety under Alternative 3 would be less than significant.

(e) Parking

In compliance with the parking requirements for commercial uses set forth in the State Enterprise Zone and in compliance with the requirements for residential uses set forth in the Central City Parking District, Alternative 3 would provide a total of 379 parking spaces. Similar to the Project, impacts related to parking under Alternative 3 would be less than significant.

l) Tribal Cultural Resources

Alternative 3 proposes three levels of subterranean parking (two fewer than the Project) and would require excavation and grading. As discussed in **Section IV.N, Tribal Cultural Resources**, of the Draft EIR, no tribal cultural resources have been identified for the Project Site. As with the Project, in the event that tribal cultural resources are inadvertently encountered, Alternative 3 would be subject to the City's standard

condition of approval regarding inadvertent discoveries to ensure that the resources are properly assessed and addressed. Therefore, due to the reduction in grading, impacts related to tribal cultural resources under Alternative 3 would be less than significant and less than those of the Project.

m) Utilities and Service Systems

1) Wastewater

(a) Construction

Similar to the Project, during construction of Alternative 3, a negligible amount of wastewater would be generated by construction workers. Temporary on-site sanitation facilities (e.g., portable toilets and hand wash areas) would be provided by a private company and the wastewater would be properly disposed of off-site.

No new connections to the public sewer system would be required during the construction period. As such, wastewater generated during Project construction activities would not enter the local conveyance system and, thus, would not affect sewer line capacities in the area. In addition, with the implementation of the Construction Management Plan (discussed in **Section IV.L, Transportation/Traffic**, of the Draft EIR), Alternative 3 would not significantly impact traffic or emergency access in the surrounding area during the installation of new utilities infrastructure. Similar to the Project, construction-related impacts to the existing wastewater infrastructure and facilities would be less than significant.

(b) Operation

As shown in Table VI-16, operation of Alternative 3 would result in a net increase of 23,311 gpd, as compared to existing conditions. This is a reduction of approximately 12,118 gpd as compared to the Project's 35,429 gpd. Thus, Alternative 3 would generate less wastewater than the Project and would result in less-than-significant impacts to wastewater treatment capacity. Similar to the Project, Alternative 3 would be subject to standard regulatory measures. Given the excess capacity at HTP, impacts would be less than significant. Overall, impacts associated with Alternative 3 would be less than significant and less than those of the Project.

Table VI-16
Alternative 3: Estimated Wastewater Generation and Water Demand

Land Use	Size	Wastewater Generation/ Water Demand Rates	Total (gpd)
Residential Live/Work (1 Bedroom)	76 Units	110 gallons / unit	8,360
Residential Live/Work (2 Bedroom)	22 Units	150 gallons / unit	3,300
Hotel	73 Rooms	120 gallons / room	8,760
Retail	19,120 sf	25 gallons /1,000 sf	478
Restaurant	20,590 sf	300 gallons /1,000 sf	6,177
Artist CoLab/Creative Office	7,835 sf	50 gallons /1,000 sf	392
Art Gallery	8,070 sf	50 gallons /1,000 sf	404
		Gross Proposed	**27,871**
		Less Existing	**4,560**
		Net Proposed	**23,311**

gpd = gallons per day sf = square feet

*Source/Rates: City of Los Angeles Department of Sanitation, November 27, 2018. See **Appendix K-2** of the Draft EIR.*

2) Water Supply

(a) Construction

Similar to the Project, water consumption would be required to accommodate construction activities, such as soil watering (i.e. for fugitive dust control), clean up, masonry, painting, and other related activities. As with the Project, construction activities requiring water would occur intermittently and would be temporary in nature. Further, the activities requiring water would not create substantial water demand. Typically, fugitive dust watering is provided by private purveyors and not provided by on-site water sources. Reclaimed water can be used for dust control. Overall, similar to the Project, construction activities under Alternative 3 would require minimal water consumption and would not be expected to have an adverse impact on available water supplies or existing water distribution systems.

Prior to the issuance of grading/building permits, the City would determine if the existing water supply infrastructure maintains sufficient capacity to accommodate the projected water demands. If a deficiency or service problem is discovered during the permitting

process, the Project Applicant shall fund the required upgrades to adequately serve the uses proposed under Alternative 3. Water main and related infrastructure upgrades would not be expected to create a significant impact to the physical environment because: (1) any disruption of service would be of a short-term nature; (2) replacement of the water mains would be within public and private rights-of-way; and (3) the existing infrastructure would be replaced with new infrastructure in areas that have already been significantly disturbed.

While the potential replacement or expansion of the existing infrastructure could result in temporary partial public street closures, a Construction Management Plan would be implemented (see **Section IV.L, Transportation/Traffic,** of the Draft EIR) to direct traffic flow during construction activities, including during the potential water upgrade activities near the Project Site. Similar to the Project, impacts under Alternative 3 would be less than significant.

(b) Operation

As shown in Table VI-16, Alternative 3 would result in a net increase of 23,311 gpd as compared to existing uses at the Project Site. This is also a reduction of approximately 12,118 gpd as compared to the Project's 35,429 gpd net demand. Thus, operation of Alternative 3 would consume less water than the Project and would result in less-than-significant impacts with respect to long-term water supplies. Similar to the Project, Alternative 3 would be subject to standard regulatory measures to ensure that impacts to the water conveyance system would be less than significant. Overall, the impacts of Alternative 3 would be less than significant and less than those of the Project.

3) Solid Waste

(a) Construction

C&D waste generated by demolition of the existing uses would be the same for Alternative 3 and the Project (approximately 7,889 tons). Construction waste generated during the construction of Alternative 3 would be reduced as compared to the Project (approximately 544 tons versus 780 tons for the Project).[6] Landfills that serve the Los Angeles region have an existing daily available capacity of 14,920 tpd, which would be adequate to accommodate Alternative 3's C&D waste as with the Project. Thus, as the construction waste generated by Alternative 3 would be approximately 70 percent of the construction waste generated by the Project and existing landfills and waste facilities

[6] *Based on 4.02 lbs for non-residential construction per square foot. (Source: U.S. Environmental Protection Agency Report No. EPA530-98-010. Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, Tables A-1 and A-2, page A-1: http://www.epa.gov/osw/hazard/generation/sqg/cd-rpt.pdf).*

have sufficient capacity to handle the projected amount of construction waste, construction-related solid waste impacts of Alternative 3 would be less than significant and less than those of the Project.

(b) Operation

As shown in Table VI-17, Alternative 3 would result in a net increase of approximately 0.58 tpd of solid waste generation at the Project Site. This is a reduction of approximately 0.3 tpd as compared to the Project's 0.88 net tpd. Thus, Alternative 3 would generate less solid waste than the Project and would result in less-than-significant impacts to solid waste landfill capacity (with compliance with existing regulations). Overall, the impacts of Alternative 3 would be less than significant and less than those of the Project.

Table VI-17
Alternative 3: Estimated Solid Waste Generation

Land Use	Size	Solid Waste Generation Rates[1]	Total (tons per day)
Existing Subtotal (to be removed) from Table IV.M.3-2			**(0.23)**
Proposed			
Live/Work Units	98 units	12.23 pounds / unit	0.60
Hotel	73 rooms	2 pounds / room	0.07
Retail	19,120 sf	5 pounds / 1,000 sf	0.05
Restaurant	20,590 sf	5 pounds / 1,000 sf	0.05
Artist CoLab/Office	7,835 sf	5 pounds / 1,000 sf	0.02
Art Gallery	8,070 sf	5 pounds / 1,000 sf	0.02
		Proposed Subtotal	**0.81**
		Net Total (Proposed – Existing)	**0.58**

1 ton = 2,000 pounds *sf = square feet*

[1] *CalRecycle Estimated Solid Waste Generation Rates: http://www.calrecycle.ca.gov/LGcentral/GoalMeasure/DisposalRate/MostRecent/default.htm*

4) Energy Conservation

(a) Construction

Alternative 3 would involve the same amount of site clearance/demolition as the Project but less new construction, excavation, and soil export. As with the Project, construction activities associated with Alternative 3 would consume electricity associated with

conveyance of water that would be used during construction, powering lights, electronic equipment, or other construction activities necessitating electrical power, and petroleum-based fuels. Total construction trips would be reduced under Alternative 3. Furthermore, Alternative 3 construction would require less electricity consumption and would not be expected to have any adverse impact on available electricity supplies and infrastructure. As with the Project, construction activities typically do not involve use of natural gas; thus, Alternative 3 would not generate demand for natural gas during construction activities. As evaluated in **Section IV.M.4, Utilities and Service Systems -- Energy Conservation**, of the Draft EIR, Project construction activities would result in an energy demand that would not be wasteful, inefficient, or unnecessary and would not be expected to have an adverse impact on available energy supplies or the existing infrastructure. As the consumption of energy resources for construction activities would be reduced under Alternative 3 as compared to the Project, Alternative 3 would similarly not be expected to have an adverse impact on available energy resources. Therefore, impacts on energy resources associated with short-term construction activities under Alternative 3 would be less than significant and less than those of the Project.

(b) Operation

As with the Project, operation of Alternative 3 would generate an increased consumption of electricity, natural gas, and petroleum-based fuels compared to existing conditions. Alternative 3 would result in a reduction in floor area compared to that of the Project. Therefore, the reduced size of Alternative 3 would result in a lower net increase in electricity and natural gas consumption, and it is anticipated that the existing distribution facilities in the Project area would have the capability to serve a reduced project under Alternative 3 given the fact that existing service lines in the Project area would have sufficient capacity to serve the Project. Furthermore, Alternative 3 would comply with the same regulations as the Project to reduce energy usage. In terms of petroleum-based fuel usage, the number of daily trips generated by Alternative 3 would be less in comparison to the Project due to the reduction in square footage. As with the Project, the consumption of electricity, natural gas, and petroleum-based fuels under Alternative 3 would not be wasteful, inefficient, or unnecessary. Therefore, operational impacts to energy resources under Alternative 3 would be less than significant and less than those of the Project.

3. Comparison of Impacts

As evaluated above, Alternative 3 would reduce the duration of the Project's significant and unavoidable construction-period vibration impact; however, the impact would remain significant and unavoidable. With respect to traffic and circulation, the reduction in traffic generation under Alternative 3 would eliminate four of the Project's six significantly impacted intersections prior to mitigation and would eliminate the remaining

two significantly impacted intersections after mitigation. All other impacts would be similar to or less than the Project's impacts under Alternative 3.

4. Relationship of the Alternative to Project Objectives

Overall, Alternative 3 represents a reduced scope of development containing similar land uses as the Project. However, this alternative would not fully achieve the Project objectives to the same extent as the Project. Alternative 3 would meet the following Project objectives to generally the same extent as the Project:

- Improve the aesthetic quality of the Project Site by removing older structures and developing new efficient buildings that are consistent in terms of mass, scale, and character with others within the Arts District.
- To construct a mixed-use development that combines complementary uses, such as community serving retail, an Artist CoLab, and live/work uses.
- Create an economically viable mixed-use project including hotel, residential and retail uses, focused on the arts that attracts residents and visitors to the Arts District community.
- Meet the demand for urban housing, including affordable housing, within the general Downtown area and specifically within the Arts District.
- Improve public safety by creating a development that provides the level of density and mix of uses necessary to activate the area both day and night.

  Create a range of construction and permanent jobs to support local workers.

Alternative 3 would meet the following Project objectives to a lesser degree than the Project:

- Maximize the density of an existing Transit Priority Site to increase access to local transit for local residents, employees, and visitors.
- Maximize the availability of market-rate and affordable housing in proximity to the Metro Gold Line Little Tokyo/Arts District Station.
- Maximize the contribution of the Project Site to the City's economic growth by developing commercial, residential, and hotel uses that generate local tax revenues, provide new construction jobs, and generate residents who support local businesses.

Alternative 3 would reduce the number of live/work units developed at the Project Site as compared to the Project. Thus, Alternative 3 would provide less density within a Transit Priority Area than the Project. Also, by reducing the amount of retail and restaurant space, Alternative 3 would not achieve the vehicle trip-reducing benefits of mixed-use co-location or increase access to local transit for local residents, employees, and visitors to the same extent as the Project. Alternative 3 would not provide as many needed housing units, including market-rate and affordable units, in proximity to the Metro Gold Line Little Tokyo/Arts District Station as would the Project.

Alternative 3 would contribute to the City's economic growth by developing land uses that generate tax revenues and provide construction jobs, but it would do so to a lesser degree than the Project as it would have significantly fewer hotel and residential units and would create fewer jobs than the Project. Alternative 3 would result in a reduction of 109 jobs compared to the jobs created by the Project and, thus, would not contribute to the City's economic growth to the same extent as the Project.

Overall, Alternative 3 would be consistent with six of the nine Project objectives. Alternative 3 would also be consistent, but to a lesser degree than the Project, with the remaining three Project objectives because of its decreased number of housing units, decreased number of affordable housing units, decreased number of hotel rooms, and reduction in jobs created when compared to the Project.

VI. Alternatives

D. Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines indicates that an analysis of alternatives to a project shall identify an Environmentally Superior Alternative among the alternatives evaluated in an EIR. The CEQA Guidelines also state that should the No Project Alternative be the Environmentally Superior Alternative, the EIR shall identify another Environmentally Superior Alternative among the remaining alternatives.

To demonstrate the differences between alternatives, Table VI-2 shows the conclusions of the impact categories for each alternative. A more detailed description of the potential impacts associated with each alternative is provided above. Pursuant to Section 15126.6(c) of the CEQA Guidelines, the analysis below addresses the ability of the alternatives to "avoid or substantially lessen one or more of the significant effects" of the Project.

Alternative 1, the No Project Alternative, would avoid all of the Project's significant environmental impacts, including those related to construction noise, construction vibration, and traffic (intersection level of service) during operation. Alternative 1 would eliminate all of the Project's remaining less-than-significant and less-than-significant with mitigation impacts as no changes to the existing conditions would occur. However, Alternative 1 would not meet any of the Project objectives or the Project's underlying purpose of redeveloping a site within the Arts District with a new mixed-use development that includes a combination of complementary uses, such as live/work dwelling units and community-serving retail, hotel, and Artist CoLab uses.

As stated above, the CEQA Guidelines require the identification of an Environmentally Superior Alternative other than the No Project Alternative. Accordingly, in accordance with the CEQA Guidelines, a comparative evaluation of the remaining alternatives indicates that Alternative 2 (Existing Zoning), is the Environmentally Superior Alternative. Alternative 2 represents a reduced density development that is in accordance with the existing zoning designation, height limit, and FAR allowed within the Project Site. Alternative 2 would eliminate the sole significant and unavoidable operational impact of the Project (AM peak hour traffic impacts at the intersection of Alameda Street and 6th Street), but would not eliminate the significant and unavoidable vibration and cumulative noise impacts during Project construction. Alternative 2, however, would not meet most of the Project Objectives to the same degree as the

Project because it would not develop residential units, restaurants, or hotel rooms and would not increase density on a TPA site, thus reducing the multiple environmental benefits that arise from mixed-use development in an urban, transit-accessible location.

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VIII. Acronyms and Terms

AB	Assembly Bill
ACC	Advanced Clean Car Standards
ACM	asbestos-containing materials
ADA	Americans with Disabilities Act
AFY	acre-feet per year
AHERA	Asbestos Hazard Emergency Response Act
AMI	Advanced Metering Infrastructure
AP	Alquist-Priolo
APN	Assessor Parcel Number
AQMP	Air Quality Management Plan
ARMMP	Archaeological Resources Monitoring and Mitigation Plan
ARMR	Archaeological Resource Management Reports
AR4	Fourth Assessment Report
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
AST	Above-ground storage tanks
ATCS	Adaptive Traffic Control System
ATSAC	Automated Traffic Surveillance and Control
BAAQMD	Bay Area Air Quality Management District
BACM	Best Available Control Measures
BACT	Best Available Control Technology
BAU	Business As Usual
BCDC	Basic Car District Coordinator
Bcf	billions of cubic feet
BEN	Bicycle-Enhanced Network
bgs	below ground surface

BLS	Basic Life Support
BMP	best management practices
BOE	Bureau of Engineering
BOS	Bureau of Sanitation
BRT	bus rapid transit
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAA	Clean Air Act (Federal)
CAAQS	California ambient air quality standards
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CalGreens	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CA MUTCD	California Manual on Uniform Traffic Control Devices
Cal-OSHA	California Occupational Safety and Health Administration
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAC	Certified Asbestos Consultant
CAD	Computer Aided Dispatch
CAFÉ	Corporate Average Fuel Economy
CAO	Cleanup and Abatement Orders
CAPCOA	California Air Pollution Control Officers Association
CAT	Climate Action Team
CBC	California Building Code
CBIA	California Building Industry Association
CCAA	California Clean Air Act

CCNCP	Central City North Community Plan
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDHS	California Department of Health Services
CDMG	California Division of Mines and Geology
CDPH	California Department of Public Health
CDO	Cease and Desist Orders
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQG	conditional exempt small quantity generators
CEUS	Commercial End-Use Survey
cf	cubic feet
CFC	California Fire Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH	Stiff Clay
CH4	methane
CHP	combined heating and power
CHRIS	California Historical Resources Information System
CHSC	California Health and Safety Code
CI	Central Industrial Unit
CII	commercial/industrial/institutional
CiSRRE	City of Los Angeles Source Reduction and Recycling Plan
CiSWMPP	City of Los Angeles Solid Waste Management Policy Plan
City	City of Los Angeles

CIWMB	California Integrated Waste Management Board, or CalRecycle
CIWMP	California Integrated Waste Management Plan
CL	Sandy Clay
CMA	Critical Movement Analysis
CMP	Congestion Management Plan
C&D	construction and demolition
CAP	Climate Action Plan
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO2	carbon dioxide
CO2e	carbon dioxide equivalent
CO2/MWh	CO2 per MW-hour
COG	council of governments
COMPSTAT	Crime Control Model Computer Statistics
CP	Community Plan
CPs	Community Plans
CPA	Community Planning Area
CPSC	Consumer Product Safety Commission
CPTED	Crime Prevention Through Environmental Design
CPUC	California Public Utilities Commission
CSSA	Collection System Settlement Agreement
CSST	California Certified Site Surveillance Technician
CTCs	county transportation commissions
CMA	Critical Movement Analysis

CMP	Construction Management Plan
CTP	Context/Theme/Property
CVC	California Vehicle Code
CWA	Clean Water Act
Cy	Cubic yard
DA	Development Agreement
dB	decibel
dBA	A-weighted decibel
DBS	Department of Building and Safety
DCP	Department of City Planning
DHS	Department of Health Services
DOGGR	Division of Oil, Gas, and Geothermal Resources
DOSH	California Department of Safety and Health
DPM	Diesel Exhaust Particulate Matter
DPR	Department of Parks and Recreation
DRT	demand responsive transit
DSM	demand side management
DTLA	Downtown Los Angeles
DTSC	Department of Toxic Substances Control
DTWRP	Donald C. Tillman Water Reclamation Plant du dwelling unit
du	dwelling unit
DWR	Department of Water Resources
EDR	Environmental Data Resources, Inc
EE	Energy efficiency
EFZ	Earthquake Fault Zone
EG	Electric generation

EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EMS	Emergency Medical Service
EOB	Emergency Operations Board
EOO	Emergency Operations Organization
EOR	Enhanced Oil Recovery
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Setting Levels
ESOC	Emergency Security Operations Center
EV	Electric Vehicles
FAR	floor-area-ratio
FED	Functional Equivalent Document
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FID	Facility Inventory
FIND	Facility Information Detail
FIS	Flood Insurance Studies
FiT	Feed-in Tariff
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRMs	Flood Insurance Rate Maps
FPPP	Fire Protection and Prevention Plan
ft.	feet
FTA	Federal Transit Administration
FYE	Fiscal Year Ending

GCASP	General Construction Activity Storm Water Permit
GFRC	glass fiber reinforced concrete
GHG	greenhouse gas
gpd	gallons per day
gpm	gallons per minute
GW	Well Graded Gravel
gw-h	gigawatt-hours
GWP	global warming potentials
HAER	Historic American Engineering Record
HAZNET	Facility and Manifest Data
HCD	California Department of Housing and Community Development
HCM	Historical-Cultural Monuments
HCS	Los Angeles Citywide Historic Context Statement
HFCs	hydrofluorocarbons
HHW	Household Hazardous Waste
HIN	High Injury Network
HMD	Hazardous Materials Division
HOT	high-occupancy toll
HOV	high-occupancy vehicle
HP	Horse Power
HPOZ	Historic Preservation Overlay Zones
HQTA	High Quality Transit Area
HSWA	Hazardous and Solid Waste Act
HTP	Hyperion Treatment Plant
HTS	Hyperion Treatment System
HUD	Housing and Urban Development

HVAC	heating ventilation air conditioning
HWCL	Hazardous Waste Control Law
HWRP	Hyperion Water Reclamation Plant
in.	inches
IBC	International Building Code
IGR	Intergovernmental Review
IIPP	Injury and Illness Prevention Program
IPCC	Intergovernmental Panel on Climate Change
IPP	Intermountain Power Project
IRP	Integrated Resources Plan
IS	Initial Study
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation Systems
kw-h	kilowatt-hours
LAA	Los Angeles Aqueduct
LAAFP	Los Angeles Aqueduct Filtration Plant
LABC	Los Angeles Building Code
LABS	Los Angeles Bureau of Sanitation
LAC	Los Angeles County
LACDPW	Los Angeles County Department of Public Works
LACFD	Los Angeles County Fire Department
LACMTA	Los Angeles County Metropolitan Transportation Authority
LADBS	Los Angeles Department of Building and Safety
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles County Department of Public Works
LADRP	Los Angeles Department of Recreation and Parks

LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAGBC	Los Angeles Green Building Code
LAGWRP	Los Angeles-Glendale Water Reclamation Plant
LAMC	Los Angeles Municipal Code
LAPD	Los Angeles Police Department
LAPL	Los Angeles Public Library
LARWQCB	Los Angeles Regional Water Quality Control Board
LASAN	Los Angeles Bureau of Sanitation
LAUSD	Los Angeles Unified School District
LBP	Lead-based paint
lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
Leq	equivalent sound level
LED	Light-Emitting Diode
LEED	Leadership in Energy and Environmental Design
LEV	Low-Emission Vehicle
LID	Low Impact Development
LQG	large quantity generators
LOS	Level of Service
LRTP	Long Range Transportation Plan
LSI	Limited Site Investigation
LST	Localized Significance Thresholds
Lv	velocity level
M&RP	Monitoring and Reporting Plan
MATES-IV	Multiple Air Toxic Exposure Study

MCL	Maximum Containment Levels
MT	Metric Tons
Metro	Metropolitan Transportation Authority
mgd	million gallons per day
mi	mile
MMTCO2e	One Million Metric Tons of Carbon Dioxide-Equivalent
MSSL	Maximum Soil Screening Level
MTCO2e	Metric Tons of Carbon Dioxide-Equivalent
ML	Sandy Silt
MLD	Most Likely Descendant
MOU	Memorandum of Understanding
MPE	maximum probable earthquake
MPO	Metropolitan Planning Organization
MRR	Mandatory Reporting Rule
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MT	Metric Tons
MTA	Metropolitan Transportation Authority (Metro)
MTBE	methyl tertbutyl ether
MTCO2e	Metric Tons of CO2 equivalent
MW	megawatt
MWD	Metropolitan Water District
mw-h	megawatt-hours
N2O	nitrous oxide
NAAQS	National ambient air quality standards
NAHC	Native American Heritage Commission

NAT	No Action Taken
NCHRP	National Cooperative Highway Research Program
NEN	Neighborhood-Enhanced Network
NEPA	National Environmental Policy Act
NESHAPs	National Emission Standards for Hazardous Air Pollutants
NEV	neighborhood electric vehicle
NF3	Nitrogen Trifluoride
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHM	Natural History Museum
NHPA	National Historical Preservation Act
NHTSA	National Highway Traffic Safety Administration
NHWWRP	North Hollywood West Wellhead Remediation Project
NIH	National Institute of Health
NO2	nitrogen dioxide
NOP	Notice of Preparation
NOT	Notice of Termination
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRA	National Resources Agency
O3	Ozone
OES	Governor's Office of Emergency Services
O&M	Operation and Maintenance
OHP	Office of Historic Preservation
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration

PATH	Partnership for Advancing Technology in Housing
Pb	lead
PCE	Passenger Car Equivalency
PCB	Polychlorinated Biphenyls
PDF	Project Design Feature
PEC	Potential Environmental Concern
PEDs	Pedestrian-Enhanced Districts
PEV	plug-in electric vehicle
PFCs	perfluorocarbons
PHEV	plug-in hybrid electric vehicles
PHI	Public Health Investigation
PIPP	Public Information and Participation Program
PM	particulate matter
PM10	respirable particulate matter
PM2.5	fine particulate matter
PPE	personal protective equipment
ppm	parts per million
ppv	peak particle velocity
PRC	Public Resources Code
PRG	Preliminary Remediation Goals
PRP	Public Recreation Plan
PSRP	Power System Reliability Program
psi	pounds per square inch
PST	Pacific Standard Time
PUC	Public Utilities Commission
Qa	Quaternary alluvial deposits

Qc	Quaternary fan deposits
RAP	Remedial Action Plan
RCM	Regulatory Compliance Measure
RCP	Regional Comprehensive Plan
RCPG	Regional Comprehensive Plan and Guide
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RD	Reporting District
REC	Recognized Environmental Condition
RFS	Renewable Fuel Standard
RGA	Rules of General Application
RHNA	Regional Housing Needs Assessment
RIO	River Improvement Overlay
RMS	root mean square
ROG	reactive organic gas
RPS	Renewables Portfolio Standard
RSO	Rent Stabilization Ordinance
RPA	Register of Professional Archaeologist
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SAFE	Solvents/Automotive/Flammables/Electronics
SARA	Superfund Amendment and Reauthorization Act
SB	Senate Bill
SC	Dense Sand

SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCAR	Sewer Capacity Analysis Report
SCCIC	South Central Coastal Information Center
SCG	Southern California Gas Company
SCS	Sustainable Communities Strategies
SDWA	Safe Water Drinking Act
sf	square feet
SFR	Southern Pacific Railroad
SF6	sulfur hexafluoride
SFHA	Special Flood Hazard Area
SLF	Sacred Lands File
SM	Silty Sand
SMP	Soils Management Plan
SN	Sign District
SOHP	State Office of Historic Preservation
SO2	sulfur dioxide
SO4	sulfates
SOx	sulfur oxides
SOPA	Society of Professional Archaeologists
SP	Very Dense Sand
SQG	small quantity generators
SQMP	Stormwater Quality Management Program
SR	State Route
SRCRD	Solid Resources Citywide Recycling Division

SRRE	Source Reduction and Recycling Element
SSMP	Sewer System Management Plan
SUSMP	Standard Urban Stormwater Mitigation Plan
SW	Very Dense Sand
SWGS	Solid Waste Generation Study
SWIRP	Solid Waste Integrated Resourced Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TAP	Technical Assistance Program
TAZ	Transportation Analysis Zone
TCA	trichloroethane
TCLP	Toxicity Characteristics Leaching Procedures
TCR	Tribal Cultural Resources
TDM	transportation demand management
TEN	Transit-Enhanced Network
TFAR	Transfer of Development Rights
TISG	Transportation Impact Study Guidelines
TMDL	Total Maximum Daily Loads
TMO	Transportation Management Organization
TNM	Traffic Noise Model
TOD	transit-oriented development
TPA	Transit Priority Area
Tpd	tons per day
TPH	Total Petroleum Hydrocarbons
TPHd	Total Petroleum Hydrocarbons as Diesel

TRB	Transportation Research Board
TSCA	Toxic Substances Control Act
TSM	transportation system management
TTLC	Total Threshold Lead Concentration
TTLO	Total Threshold Limit Concentration
UNFCCC	United Nations Framework Convention on Climate Change
USDOE	United States Department of Energy
USDOT	United States Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGBC	U.S. Green Building Council
USGS	U.S. Geological Survey
UST	underground storage tank
UTD	Underground Tanks Division
UWMP	urban water management plan
µg/L	micrograms per liter
µg/m3	micrograms per cubic meter
v/c ratio	Volume-to-Capacity ratio
VCP	Vitrified Clay Pipe
Vdb	Vibration Magnitude
VEN	Vehicle-Enhanced Network
VIN	Vehicle Identification Number
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WCI	Western Regional Climate Action Initiative
WWECP	Wet Weather Erosion Control Plan

WDR	waste discharge requirements
WFP	Wastewater Facilities Plan
Wh	Watt Hours
WHO	World Health Organization
WMA	Watershed Management Areas
WMC	Watershed Management Committees
WEAP	Worker Environmental Awareness Program
WQCMPUR	Water Quality Compliance Master Plan for Urban Runoff
WSA	Water Supply Assessment
XRF	X-Ray Fluorescence Analyzer
ZEV	zero-emission vehicle
ZIMAS	Zone Information and Map Access System