



1601 San Francisco Avenue

Initial Study – Mitigated Negative Declaration

prepared by

City of Long Beach
333 West Ocean Boulevard, 5th Floor
Long Beach, California 90802
Contact: Cuentin Jackson, Planner

prepared with the assistance of

Rincon Consultants, Inc.
250 East 1st Street, Suite 1400
Los Angeles, California 90012

May 2019



RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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Initial Study

1. Project Title

1601 San Francisco Avenue Project

2. Lead Agency Name and Address

City of Long Beach
333 West Ocean Boulevard, 5th Floor
Long Beach, California 90802

3. Contact Person and Phone Number

Cuentin Jackson, Planner
(562) 570-6345

4. Project Sponsor's Name and Address

Alere Property Group
100 Bayview Circle, Suite 310
Newport Beach, California 92660

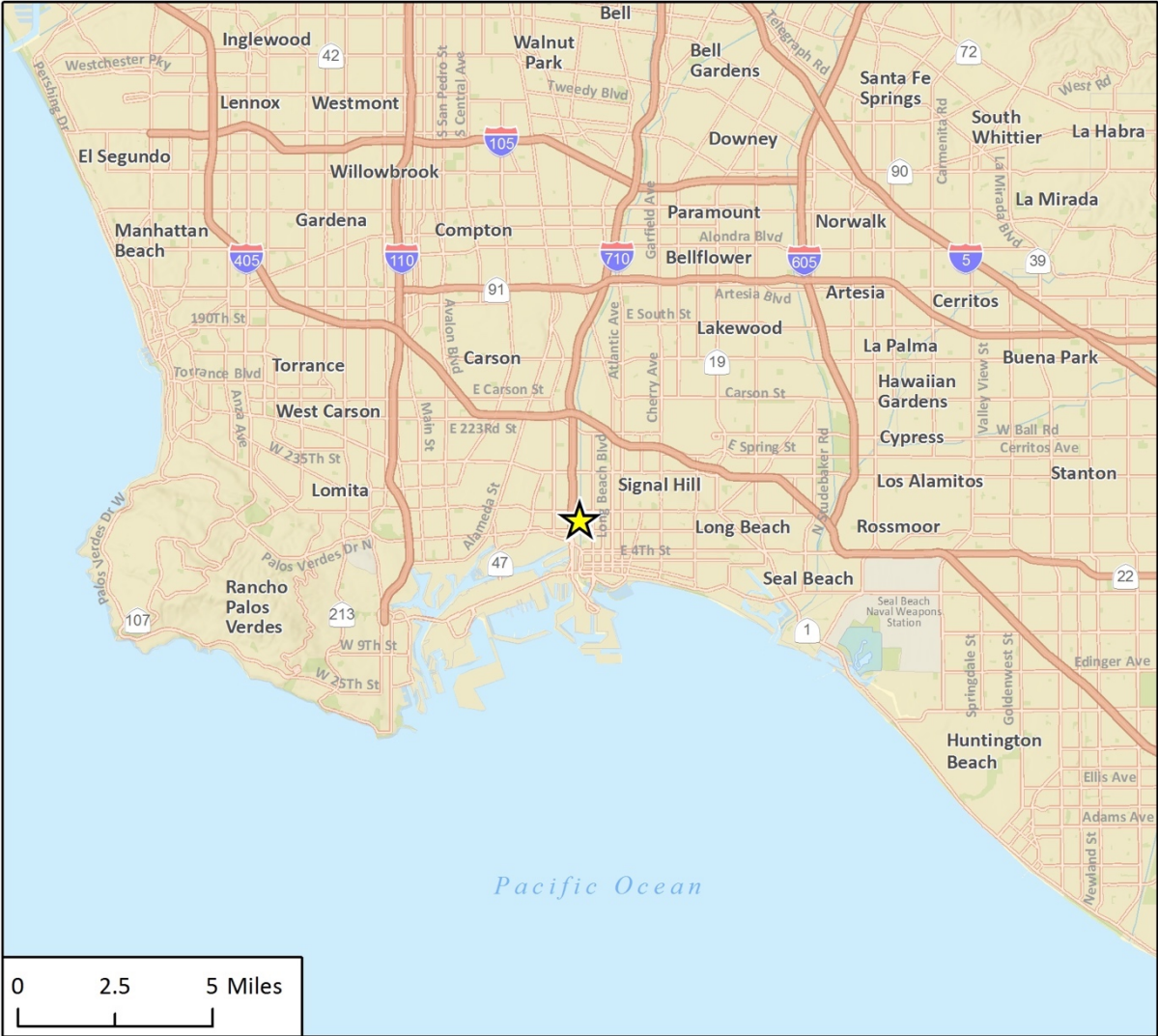
5. Project Location

The project site is located at 1601 San Francisco Avenue, Long Beach, California. The site encompasses 171,191 square feet (sf) (3.93 acres) and includes two parcels, which are identified as Assessor Parcel Numbers (APNs) 7271-012-020 and 7271-012-023. The site is bordered by San Francisco Avenue on the east, the channelized Los Angeles River levy on the west, and industrial properties to the north and south. Figure 1 shows the location of the project site in the region and Figure 2 shows the site in its neighborhood context.

6. Existing Setting

The project site includes two previously-developed parcels in an industrial area of Long Beach adjacent to the Los Angeles River and levy. The site is currently occupied by two buildings, which total approximately 11,750 sf, and associated storage yard and parking areas. Ruderal vegetation generally occurs along the perimeter fence and in cracks in the pavement. No trees are present on site. Figure 3 includes photos of the existing conditions at the project site.

Figure 1 Regional Location



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★ Project Location

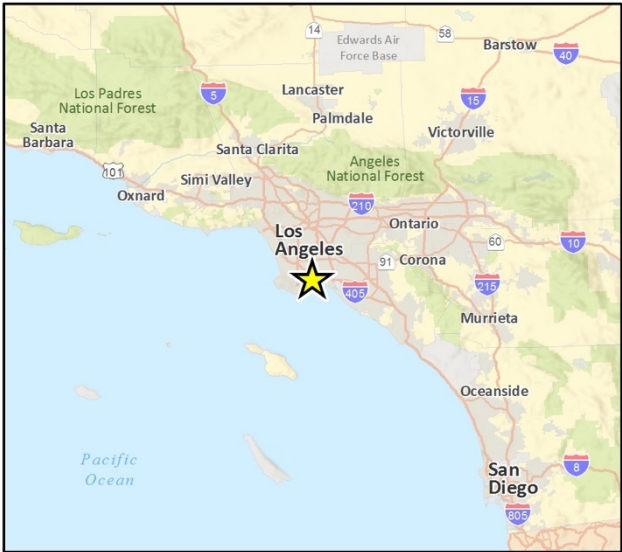


Fig 1 Regional Location

Figure 2 Project Location



Figure 3 Views of the Project Site



Photograph 1. View of the project site looking west at existing development.



Photograph 2. View from the project site looking east (across San Francisco Avenue) at surrounding industrial uses.

7. General Plan Designation

9G (General Industry District)

8. Zoning

IG (General Industrial)

9. Description of Project

The 1601 San Francisco Avenue Project (“proposed project” or “project”) involves the development of two “L-shaped” buildings, restricted to a maximum height of 35 feet above grade (two-stories), that would serve as a warehouse/manufacturing facility with associated office support. The two proposed units would total a square footage of 94,872. The individual building sizes would be 48,657 SF and 46,215 SF.

Office space would be provided in the interior frontage of each building to support the business operations. Office space would occupy a maximum of 25 percent of the gross floor area pursuant to Chapter 21.33 of the LBMC. Office space in Building 1 would total 12,128 sf and 11,518 sf in Building 2, which together represents 23,646 sf, or 25 percent of the gross floor area. Loading docks would be located on the north and south sides of the respective buildings, with an orientation to the interior of the project and full screening from street view. The site would provide a maximum of 11 dock doors. The facility would operate 24 hours a day, 365 days a year. Table 1 provides details of the proposed buildings while Figure 4 and Figure 5 show the proposed site plan and building elevations, respectively.

Building Characteristics

The buildings would be constructed of concrete tilt-up walls with slab-on grade floors. The architectural improvements will include ample low-reflective glass, paint with texture, and eave relief. Other aspects of the building design include state of the art fire sprinkler systems, three percent skylights and windows for maximum natural lighting, electric vehicle (EV) charging stations, 100 percent concrete drives and courts, and high-finish offices all in compliance with CALGreen requirements.

Infrastructure Improvements

Associated improvements to the project site would include, but are not limited to: surface parking areas, vehicle drive aisles, landscaping, truck court, utility infrastructure, exterior lighting and signage. The proposed project would add new curb, gutter and sidewalk and landscaping on San Francisco Avenue along the site frontage.

Access and Parking

Passenger cars would be able to access the project site via San Francisco Avenue from either Pacific Coast Highway (PCH), Anaheim Street or 16th Street. Trucks would be able to access the project site via permitted truck routes, either Anaheim Street from the south or PCH from the north and exit the

site via PCH. The proposed project would require 96 automobile parking spaces for employees and visitors. A security check-in point may be implemented at the truck court entrance.

Construction

Project construction is anticipated to begin in 2019 and the project is expected to be open for operation in 2020. The construction process would include demolition of approximately 11,750 SF of existing buildings. Construction phasing would include site preparation and demolition, grading, building construction, asphalt paving and architectural coating. The graded soil would be utilized on-site for construction of the building pads and foundations.

Table 1 Project Summary

	Building 1	Building 2	Total
Building Areas (in sf)			
Office – First Floor	10,128	9,518	19,646
Office – Second Floor	2,000	2,000	4,000
Warehouse	36,529	34,697	71,226
Total	48,657	46,215	94,872
Parking Stalls			
Standard (8.5 ft x 18 ft)	36	34	70
Clean Air/Vanpool (8.5 ft x 18 ft)	6	6	12
Accessible Parking (9 ft x 18 ft)	2	2	4
Accessible Van Parking (12 ft x 18 ft)	1	1	2
EV Accessible Parking (12 ft x 18 ft)	1	1	2
EV Parking (8.5 ft x 18 ft)	3	3	6
Total	49	47	96
Site Area and Coverage			
In sf	100,192	92,518	192,710
In acres	2.30	2.12	4.42
Coverage	48.6%	50.0%	49.2%
Setbacks			
Yard fronting Arterial Street			10 ft
Yard local or Collector Street			None
Parking lot setback fronting Street			5 ft
Notes: sf = square feet; ft = feet			

Figure 4 Project Site Plan

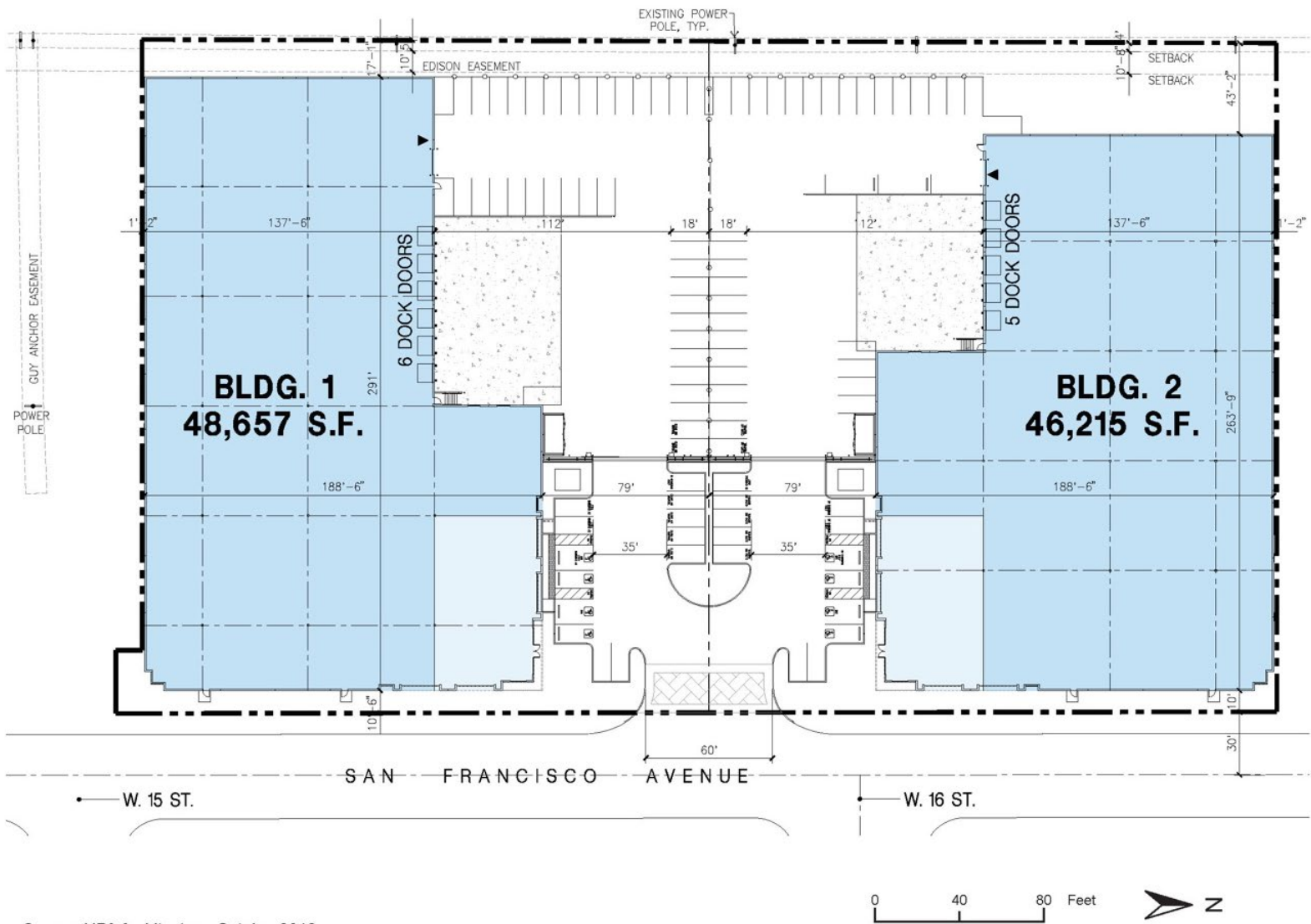


Figure 5 Project Elevations



Source: HPA Architecture, January 2018

10. Surrounding Land Uses and Setting

The project site is located in an urbanized area that is bound by industrial properties to the east on San Francisco Avenue, the channelized Los Angeles River levy on the west, followed by Interstate 710 (I-710) and commercial uses, and by industrial properties on the north and south.

11. Required Approvals and Mitigation Measures

Project entitlements include a Site Plan Review.

12. Other Public Agencies Whose Approval is Required

The City of Long Beach is the lead agency with responsibility for approving the proposed project. Approval from other public agencies is not required. There are no responsible or trustee agencies for the project.

13. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

As part of the process of identifying cultural resources issues in or near the project site, the City sent letters inviting tribes to consult with the City on July 23, 2018. The City requested a response within 30 days of receipt as specified by AB 52. The City received a request for consultation from the San Gabrieleño Band of Mission Indians - Kizh Nation. Consultation was held on May 9, 2019. The results of consultation are further discussed in Section 18, *Tribal Cultural Resources*.

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Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- ☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Cuentin Jackson
Signature

5/13/19
Date

Cuentin Jackson
Printed Name

Project Planner
Title

Environmental Checklist

1	Aesthetics			
	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Except as provided in Public Resources Code Section 21099, would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a. *Would the project have a substantial adverse effect on a scenic vista?*

The project site is located in an industrial and manufacturing area in the City of Long Beach. The project would include the removal of the two existing buildings and storage yard area on the project site, and the development of a warehouse/manufacturing facility. Views of the project site consist of a storage yard facility with two associated buildings. According to the City's General Plan Scenic Routes Element, cultural assets in the City include the downtown Civic Center Complex which is approximately 4.5 miles south of the project site. Historical assets in City include two preserved ranches: Rancho Los Cerritos and Rancho Los Alamitos, which are 4.5 miles north and 6.5 miles east of the project site, respectively. Additionally, American Legion Post #560, which is a historic structure designated by the City of Long Beach, is located over seven miles north of the project site. The project site and surroundings are flat. There are no scenic vistas that can be viewed from the project site or scenic vistas that would be obstructed by the project. Views from the project site include industrial and manufacturing uses to the north and south and east, across San Francisco

Avenue. Views of the channelized Los Angeles River from the intervening bike trail would not be affected. Development of the proposed project would not obstruct public views of cultural or historical resources as no views of these resources are available in the project site vicinity. Therefore, no impact to scenic vistas would occur.

NO IMPACT

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

A review of the California Scenic Highway System indicates that no existing or proposed State scenic highways are in the vicinity of the project site (Caltrans 2011). In addition, the project site is fully developed and devoid of natural features such as trees, rock outcroppings or other identified scenic resources. Existing vegetation on-site is limited to ruderal vegetation along the perimeter fencing and cracks in pavement. As discussed in Section 5, *Cultural Resources*, the two buildings located on-site are not historically significant (see also Appendix C). Development of the project would not result in the obstruction of public views of cultural or historical resources in the project site vicinity. The project would not result in substantial damage to scenic resources in a state scenic highway and no impact would occur.

NO IMPACT

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

As shown in Figure 2 of the Project Description, the project site is in an urbanized area and is located adjacent to the Los Angeles River. As discussed above under checklist item 4 (a), existing public views in the project site vicinity include the adjacent river trail and nearby bridges. Implementation of the project would incrementally change the visual character of the project site by converting an existing industrial site into a new development with two larger buildings. However, the proposed development would be similar to the existing storage yards, industrial and manufacturing uses that currently surround the project site to the north, south and east. Public views of the Los Angeles River would not be affected.

The project site is zoned IG (General Industrial) and has a General Plan land use designation of 9G (General Industry). As shown in Table 14, development of the proposed project would be consistent with the current General Plan land use designation, and development would comply with City zoning standards, including maximum height limits, yards, and front and side setbacks. Therefore, the proposed project would be consistent with the City's envisioned visual character and quality of the project site and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Existing sources of light and glare in the project site vicinity are associated with the manufacturing and industrial uses located on the project site and to the north, south and east of the project site. These sources primarily include exterior building and storage yard security lighting, building

windows, and vehicle and truck windshields and headlights. Construction of the project would introduce construction vehicles and equipment during daytime hours that could potentially create glare for surrounding land uses. However, pursuant to the City of Long Beach Municipal Code (LBMC), Section 8.80.202, construction activity is limited to the hours of 7:00 a.m. to 7:00 p.m. during the weekdays and federal holidays and 9:00 a.m. to 6:00 p.m. on Saturdays. Construction activities are not permitted on Sundays. These hours would reduce impacts from vehicle headlamps and any associated impacts to nighttime views. Since proposed construction would be required to adhere to the timing restrictions laid out in the LBMC, no construction would occur at night when lighting would potentially be required. In addition, any lighting or glare generated during construction would be temporary.

Operation of the proposed project would not substantially increase light and glare in the surrounding area relative to existing levels since the project site is located in an urban area that is surrounded by manufacturing, industrial and storage yards facilities. Operation of the proposed project would include the use of nighttime security lighting, and general lighting associated with industrial uses. Although the proposed facility would operate 24 hours a day, lighting fixtures would be aimed downwards, generally contained on the project site, and would not create a substantial source of light or glare. Operational lighting sources generated by the project would be similar to, and consistent with, the surrounding uses in the area and would not adversely affect day or nighttime views. For these reasons, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

The project site is designated by the City of Long Beach's General Plan as 9G (General Industry District) and zoned IG (General Industrial). The project site is within an area that does not consist of Farmland (DOC 2016). Therefore, the project would not have an impact on designated farmland.

NO IMPACT

- b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

The project site is not zoned for agricultural use or under any Williamson Act contract (DOC 2015). The project site does not include the conversion of farmland to non-agricultural uses, therefore, the proposed project would have no impact with respect to agricultural zoning or other conversion of farmland to non-agricultural use.

NO IMPACT

- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

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

The project site and the surrounding area is developed in industrial uses and is not zoned for forest land or timberland. Accordingly, the project would not conflict with forest land or timberland zoning. Additionally, the project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact would occur.

NO IMPACT

- 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?*

The proposed project would redevelop an existing industrial site for continued industrial use and does not include the conversion of farmland to non-agricultural uses. Therefore, the proposed project would have no impact with respect to agricultural zoning or other conversion of farmland to non-agricultural use.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Air Quality Standards and Attainment

The project site is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, the SCAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether or not the standards are met or exceeded, the SCAB is classified as being in "attainment" or "nonattainment." Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The SCAQMD is in nonattainment for the federal standards for ozone and PM_{2.5} and the state standards for ozone, PM₁₀, and PM_{2.5}. Areas of the SCAB located in Los Angeles County are also in nonattainment for lead (SCAQMD 1993). The SCAB is designated unclassifiable or in attainment for all other federal and state standards. Characteristics of O₃, CO, NO₂, SO₂, and suspended particulate matter are described in Table 2.

Table 2 Health Effects Associated with Nonattainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Carbon monoxide (CO)	Reduces oxygen delivery leading to: (1) Aggravation of chest pain (angina pectoris) and other aspects of coronary heart disease; (2) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (3) impairment of central nervous system functions; and (4) possible increased risk to fetuses.
Nitrogen dioxide (NO ₂)	(1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (2) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (3) contribution to atmospheric discoloration.
Sulfur dioxide (SO ₂)	(1) Bronchoconstriction accompanied by symptoms that may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ^a
Suspended particulate matter (PM _{2.5})	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma. ^a

^a More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: Office of Environmental Health Hazard Assessment, Particulate Matter Health Effects and Standard Recommendations, www.oehha.ca.gov/air/toxic_contaminants/PM10notice.html#may, May 9, 2002; and EPA, Air Quality Criteria for Particulate Matter, October 2004.

Source: US EPA 2016

Air Quality Management

Under state law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District is in non-compliance. The latest Air Quality Management Plan (AQMP) from 2016 (SCAQMD 2017). It incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2012 AQMP, including the approval of the new federal 8-hour ozone standard of 0.070 ppm that was finalized in 2015. The Final 2016 AQMP addresses several state and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and meteorological air quality models. The Southern California Association of Government's (SCAG) projections for socio-economic data (e.g., population, housing, employment by industry) and transportation activities from the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) are integrated into the 2016 AQMP (SCAG 2016). This Plan builds upon the

approaches taken in the 2012 AQMP for the attainment of federal PM and ozone standards and highlights the significant amount of reductions to be achieved. It emphasizes the need for interagency planning to identify additional strategies to achieve reductions within the timeframes allowed under the federal Clean Air Act, especially in the area of mobile sources. The 2016 AQMP also includes a discussion of emerging issues and opportunities, such as fugitive toxic particulate emissions, zero-emission mobile source control strategies, and the interacting dynamics among climate, energy, and air pollution. The Plan also demonstrates strategies for attainment of the new federal eight-hour ozone standard and vehicle miles travelled (VMT) emissions offsets, pursuant to recent United States Environmental Protection Act (USEPA) requirements (Appendix A).

Air Pollutant Emission Thresholds

The SCAQMD recommends quantitative regional significance thresholds for temporary construction activities and long-term project operation in the SCAB, shown in Table 3.

Table 3 SCAQMD Regional Significance Thresholds

Construction Thresholds	Operational Thresholds
75 pounds per day of ROG	55 pounds per day of ROG
100 pounds per day of NO _x	55 pounds per day of NO _x
550 pounds per day of CO	550 pounds per day of CO
150 pounds per day of SO _x	150 pounds per day of SO _x
150 pounds per day of PM ₁₀	150 pounds per day of PM ₁₀
55 pounds per day of PM _{2.5}	55 pounds per day of PM _{2.5}

Source: SCAQMD 2015

Localized Significance Thresholds

In addition to the above regional thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the *CEQA Air Quality Handbook* (SCAQMD 1993). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO_x, CO, PM₁₀, and PM_{2.5}. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size. LSTs have been developed for emissions within construction areas up to five acres in size (SCAQMD 2008a). However, LSTs only apply to emissions in a fixed stationary location and do not apply to mobile sources, such as cars on a roadway (SCAQMD 2008a). As such, LSTs are typically applied only to construction emissions because the majority of operational emissions are associated with project-generated vehicle trips.

LSTs have been developed for emissions within construction areas up to five acres in size. The SCAQMD provides lookup tables for project sites that measure one, two, or five acres. The project site encompasses 3.93 acres. Therefore, this analysis utilizes the five-acre LSTs. The five-acre LSTs provide a more stringent threshold for construction emissions compared to the analysis of emissions over a larger area. Furthermore, the SCAQMD's publication, *Final LST Methodology*, states that projects should use the evaluation distance closest to the nearest receptor but should use the shorter distance if the receptor is located between to distances. The SCAMQD LST Guidance

provides evaluation distances of 82 feet, 164 feet, 328 feet, 656 feet, and 1,640 feet. The nearest receptor is approximately 1,050 feet from the project site. Therefore, the analysis below uses the LST values for 656 feet.

The project site is located in SRA-4 (South Coastal Los Angeles County). LSTs for construction in SRA-4 on a 5-acre site with a receptor 656 feet away are shown in Table 4.

Table 4 SCAQMD LSTs for Construction (SRA 4)

Pollutant	Allowable Emissions (lbs/day)	
	Construction	Operation
Gradual conversion of NO _x to NO ₂	141	141
CO	4,184	4,184
PM ₁₀	92	22
PM _{2.5}	39	10

Source: SCAQMD 2008

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

A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding forecasts used in the development of the AQMP. The 2016 AQMP, the most recent AQMP adopted by the SCAQMD, incorporates local city general plans and the SCAG's 2016 RTP/SCS socioeconomic forecast projections of regional population, housing, and employment growth (SCAG 2016).

The growth projections used by the SCAQMD to develop the AQMP emissions budgets are based on the population, vehicle trends, and land use plans developed in general plans and used by SCAG in the development of the regional transportation plans and sustainable communities strategy. As such, projects that propose development that is consistent with the growth anticipated by SCAG's growth projections and/or the General Plan would not conflict with the SCAQMD AQMP. In the event that a project would propose development that is less dense than anticipated by the growth projections, the project would likewise be consistent with the AQMP. In the event a project proposes development that is greater than anticipated in the growth projections, further analysis would be warranted to determine if the project would exceed the growth projections used in the AQMP for the specific subregional area.

The project site is designated G9, General Industrial, in the Long Beach General Plan. The project is a light industrial project and would be consistent with the land use type identified in City General Plan. Therefore, the project is consistent with the existing land use designation and the project would not result in an increase in emissions that are not already accounted for in the AQMP. Thus, the project would not obstruct or conflict with implementation of the RAQS. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

In accordance with CEQA Guidelines Section 15064(h)(3), the SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and state Clean Air Acts (SCAQMD 1993). If the mass regional emissions calculated for a project exceed the applicable SCAQMD daily significance thresholds that are designed to assist the region in attaining the applicable state and national ambient air quality standards, the project's impact can be considered cumulatively considerable.

Construction

Table 5 summarizes the estimated maximum daily emissions (lbs) of pollutants associated with construction of the project. As shown below, ROG, NO_x, CO, SO₂, PM₁₀, and PM_{2.5} emissions would not exceed SCAQMD regional thresholds or LSTs. Because the project would not exceed SCAQMD's regional construction thresholds or LSTs, project construction would not result in a cumulatively considerable net increase of a criteria pollutant, and project construction would have a less than significant impact.

Table 5 Project Construction Emissions

	Maximum Emissions (lbs/day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction Year 2019	39.8	70.3	47.6	< 0.1	7.0	3.7
Construction Year 2020	0.9	16.0	19.9	< 0.1	1.5	1.1
Maximum Emissions	39.8	70.3	47.6	< 0.1	7.0	3.7
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Maximum On-site Emissions	--	19.0	24.6	--	1.1	2.1
SCAQMD Localized Significance Thresholds (LSTs)	N/A	141	4,184	N/A	92	39
Threshold Exceeded?	N/A	No	No	N/A	No	No

Notes: Emissions modeling was completed using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from "mitigated" results, which account for compliance with regulations and project design features. Maximum on-site emissions are the highest emissions that would occur on the project site from on-site sources such as heavy construction equipment and architectural coatings and excludes off-site emissions from sources such as construction worker vehicle trips and haul truck trips.

Operational

Table 6 summarizes the project's operational emissions by emission source (area, energy, or mobile). As shown below, the emissions generated by operation of the project would not exceed SCAQMD regional thresholds for criteria pollutants. Therefore, the project would not contribute substantially to an existing or projected air quality violation and have a less than significant impact.

In addition, because criteria pollutant emissions and regional thresholds are cumulative in nature, the project would not result in a cumulatively considerable net increase of criteria pollutants.

Table 6 Project Operational Emissions

Emission Source	Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	2.1	< 0.1	< 0.1	0.0	< 0.1	< 0.1
Energy	< 0.1	0.5	0.4	< 0.1	< 0.1	< 0.1
Mobile	0.9	5.3	13.7	< 0.1	4.5	1.2
Total Project Emissions	3.1	5.8	14.1	< 0.1	4.5	1.3
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Maximum On-site Emissions	2.1	0.5	0.4	< 0.1	< 0.1	< 0.1
SCAQMD Localized Significance Thresholds (LSTs)	N/A	141	4,184	N/A	22	10
Threshold Exceeded?	N/A	No	No	N/A	No	No

Notes: Emissions modeling was completed using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from “mitigated” results that include compliance with regulations and project design features that will be included in the project.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

LSTs

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. As shown in Table 5 and Table 6, project emissions would not exceed LSTs. Therefore, the project would not expose local sensitive receptors to substantial pollutant concentrations from on-site activities during construction or operation. Impacts would be less than significant.

CO Hot Spots

Roadway segments and intersections are rated by a level of significance (LOS) standard developed as a professional industry standard to determine area traffic impacts. The LOS standards range from A to F depending on the amount of typical traffic flow measured in average daily traffic (ADT) volumes. The generally accepted region-wide goal is LOS D (or better).

Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions (UC Davis 1997). The SCAB is a CO maintenance area under the federal CAA. This means that the SCAB was previously a nonattainment area and is currently implementing a 10-year plan for continuing to meet and maintain air quality standards. As a result, ambient CO levels have declined significantly. Under these conditions, a low potential for CO hot spots may occur only at signalized intersections that operate at or below level of service E with peak-hour trips for that intersection exceeding 3,000 trips.

As discussed in section 17, *Transportation*, all intersections would operate at LOS A or better under future cumulative plus project conditions. Therefore, the project would not contribute substantial traffic to any signalized intersections that operate at or below level of service E with peak-hour trips for that intersection exceeding 3,000 trips. Therefore, the project would not result in or contribute to a CO hot spot.

Toxic Air Contaminants—Diesel Particulate Matter

Construction

Construction of the project is expected to occur over a 13-month period and would result in the generation of diesel-exhaust Diesel Particulate Matter (DPM) emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities and on-road diesel equipment used to bring materials to and from the project site.

According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, if the duration of proposed construction activities near any specific sensitive receptor were 12 months, the exposure would be approximately 3 percent of the total exposure period used for health risk calculation. Therefore, DPM generated by project construction is not expected to create conditions that expose sensitive receptors to substantial pollutant concentration over an extended period of time. Additionally, with ongoing implementation of USEPA and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new, low-emission diesel engine types, the DPM emissions of individual equipment would be substantially reduced. In addition, the nearest receptor is over 1,000 feet from the project site. Localized air quality impacts from construction-related DPM emissions would be less than significant.

Operation

In addition to criteria pollutant emissions, a project may also affect sensitive receptors by emitting toxic air contaminants (TAC). The project proposes warehousing and office uses, none of which are known emitters of substantial TAC concentrations. The project itself does not include any significant source of TACs that would potentially affect sensitive receptors. Land uses immediately surrounding the project are industrial. The nearest sensitive receptors are located in residential neighborhoods over 500 feet to the north and east.

With the exception of I-710, none of these land uses are typically associated with the emission of TACs. However, as stated in CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* the concern is generally limited to siting new sensitive land uses within 500 feet of a freeway or constructing a new freeway within 500 feet of existing residences (CARB 2005). Because

the project does not involve sensitive receptors, exposure of persons on the project site would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The potential for an odor impact is dependent on a number of variables including the nature of the odor source, distance between the receptor and odor source, and local meteorological conditions. During construction, potential odor sources associated with the project include diesel exhaust associated with construction equipment. Diesel exhaust may be noticeable temporarily; however, construction activities would be temporary. In addition, the nearest receptor is over 1,000 feet from the project site. Therefore, the diesel exhaust odors would result in less than significant impacts.

Common sources of operational odor complaints include sewage treatment plants, landfills, recycling facilities, and agricultural uses. The proposed project would not involve any of these uses that are known to generate odors. In addition, solid waste generated by the proposed on-site uses would be collected by a contracted waste hauler, ensuring that odors resulting from on-site waste would be managed and collected in a manner to prevent the proliferation of odors. Therefore, the project would have a less than significant impact on operational odors.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

The project site is located on an infill site in an industrial and manufacturing area in the City of Long Beach. The entire site is generally paved and supports the existing buildings and associated storage yard. There are no vegetated areas, undeveloped land or landscaping areas on-site. Ruderal vegetation generally occurs along the perimeter fence and in cracks in the pavement. According to the biological assessment conducted by Harmsworth Associates (see Appendix B), there are no biological constraints at the project site due to the lack of native habitats and the fact that site conditions offer limited potential for native plants and wildlife.

Although no trees occur on site, ornamental trees are located on adjacent properties immediately to the north and south of the project site and along the public-right-of-way of San Francisco Avenue, which could provide potential habitat for nesting raptors, such as red-tailed hawk (*Buteo jamaicensis*). Nesting birds are protected under the Migratory Bird Treaty Act (MBTA) and the CFGC, and violation of these provisions would be considered a potentially significant impact. Although raptor nesting potential occurs outside of the project footprint, the project could directly (e.g., vegetation removal) and indirectly (e.g., construction noise and motion) affect nesting of these species. Implementation of mitigation measure BIO-1 would minimize potential conflicts with the MBTA and CFGC, thereby reducing potential impacts to a less than significant level.

Mitigation Measure

BIO-1 Nesting Bird Avoidance

If site preparation/construction activities, including vegetation clearing, vegetation trimming, grading or other ground disturbing activities are initiated during the nesting bird season (February 1-August 31 for passerines, January 1 – August 31 for raptors), a preconstruction nesting bird survey shall be conducted by a qualified biologist to determine the presence/absence, location, and status of any active nests on-site or within 100 feet of the site for nesting passerines, or within 250 feet of the site for nesting raptors. In areas where site access is limited or prohibited (e.g. private property) the area will be surveyed using binoculars. Nesting bird surveys shall be completed not more than 14 days before the start of construction activities.

If active nests are discovered within 100 feet of the site for nesting passerines, or within 250 feet of the site for nesting raptors, a qualified biologist will establish a species-specific avoidance buffer around the nest where no construction activity is allowed until a qualified biologist has determined that the nest is no longer active. Encroachment into the buffer can occur at the discretion of the qualified biologist with the City's consent.

The City shall be provided with a preconstruction nesting bird survey results report within 48 hours of completion of the survey, if required, prior to obtaining the City issued grading permit, or within two weeks if not required for permit issuance. The report shall include date of the survey, date of the report, authors and affiliations, contact information, methods, study location, results, and discussion/recommendations. If nesting birds are found, a map must be included with locations, buffers, and recommended measures to avoid impacts to the nests.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, including sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as “threatened” or “very threatened” and keeps records of their occurrences in CNDDDB. Riparian habitats typically exist to a very limited extent along streams and flood channels where disturbance is (City of Long Beach 1973). There are no water bodies or riparian habitat on the project site. The Los Angeles River is located immediately to the west of the project site. The project site is separated by the Los Angeles River by a pedestrian and bicycle trail. According to The City of Long Beach’s General Plan and a site visit, no riparian habitats or other sensitive natural communities are present in the project site vicinity. In addition, project construction and operation would not extend further than the project site boundaries. Therefore, no impact would occur.

NO IMPACT

- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No wetlands are located on or adjacent to the project site. The project would not directly or indirectly affects state or federally protected wetlands (Harmsworth 2018). No impact would occur.

NO IMPACT

- 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 site is in an urban area that is not within an established native resident or migratory wildlife corridor. The project would not impede the use of native wildlife nursery sites (Harmsworth 2018). No impact would occur.

NO IMPACT

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

There are no existing trees located on the project site. Construction of the proposed project is not expected to result in the removal of mature trees that are protected by the City’s Tree Protection Ordinance. Therefore, no impact would occur.

NO IMPACT

- 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 not located in an area subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan area. No impact would occur.

NO IMPACT

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

The project site is located in an urbanized area with existing buildings and a storage yard facility on-site. As concluded in the Cultural Resources Assessment (CRA) (see Appendix C), review of the Long Beach Historic Preservation Element did not reveal any City Historic Districts or Designated Structures within or near the project site. Additionally, a search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC) located at the University of California, Fullerton was completed on July 12, 2018. The search was performed to identify all previously recorded cultural resources, as well as previously conducted cultural resources studies, within the project site and one-mile buffer surrounding it. The CHRIS search included a review of the National Register of Historic Places, the California Register of Historical Resources (CRHR), the California Office of Historic Preservation, and the California Inventory of Historic Structures. The SCCIC records search identified 14 previous cultural resources studies that have occurred and 40 previously recorded cultural resources (37 historic-period buildings and three prehistoric archaeological sites) within one-mile buffer of the project.

As discussed in the CRA, during the field reconnaissance, two historic period buildings were identified; however, neither of these resources is deemed a “historical resource” under CEQA standards. Moreover, neither of the historic-period buildings is recommended eligible for the California Register or as a City Landmark (Long Beach Municipal Code Chapter 2.63.050). As a result, they do not require further consideration.

Furthermore, the project site is surrounded mostly by industrial buildings. No historic resources are located in the immediate vicinity of the project site (City of Long Beach 2009). The closest historic structure designated by the City of Long Beach is the Foster and Kleiser building, located 0.4 miles east of the project site. Therefore, no impact would occur.

NO IMPACT

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*
- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

The project site is located in an urbanized area. Based on the conclusions of the CRA (see Appendix C), there is no evidence that archaeological resources or human remains are present on-site. However, cultural and tribal resources may be encountered during project-related development and ground-disturbing activities (BCR Consulting 2018) (Gabrieleño 2019). Impacts would be significant if construction activities result in the destruction, damage, or loss of scientifically important cultural resources. The activities may include grading, excavation, or any other activity that disturbs the surface of the site. The following mitigation measures would apply to all phases of project construction and would ensure that any significant resources present on-site are preserved. As discussed further in Section 18, *Tribal Resources*, implementation of Mitigation Measures TR-1 and TR-7 would reduce potential impacts to the unanticipated discovery of archeological resource and human remains during ground distributing activities, to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Electricity and Natural Gas

In 2017, California used 292,039 gigawatt-hours (GWh) of electricity, of which 29 percent were from renewable resources (CEC 2019a). California also consumed approximately 12,500 million U.S. therms (MMthm) of natural gas in 2017 (CEC 2017b). The project site would be provided electricity by Southern California Edison (SCE) and natural gas by Southern California Gas Company (SCG). Table 7 and Table 8 show the electricity and natural gas consumption by sector and total for SCE and SCG. In 2017, SCE provided approximately 28.9 percent of the total electricity used in California. Also, in 2017, SCG provided approximately 41.1 percent of the total natural gas usage in California.

Table 7 Electricity Consumption in the SCE Service Area in 2017

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage
2,975.4	31,925.3	4,283.3	13,094	2,410.6	28,975.0	627.9	84,291.6

Notes: All usage expressed in GWh

Source: CEC 2017a

Table 8 Natural Gas Consumption in SCG Service Area in 2017

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage
69.4	895.9	72.1	1,716.6	229.7	2,158.1	5,141.8

Notes: All usage expressed in MMThm

Source: CEC 2017c

Petroleum

In 2016, approximately 40 percent of the state's energy consumption was used for transportation activities (EIA 2019). Californians presently consume over 19 billion gallons of motor vehicle fuels per year (CEC 2019). Though California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030, a 20 percent to 22 percent reduction. This decline comes in response to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles (CEC 2019).

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Construction Energy Demand

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The project would require site preparation and grading, including hauling material off-site; pavement and asphalt installation; building construction; architectural coating; and landscaping and hardscaping.

The total consumption of gasoline and diesel fuel during project construction was estimated using assumptions and factors from CalEEMod (Appendix A). Table 9 presents the estimated construction phase energy consumption, indicating construction equipment, vendor trips, and worker trips would consume approximately 39,592 gallons of fuel over the project construction period. Construction equipment would consume an estimated 35,426 gallons of fuel; vendor and haul trips would consume approximately 4,104 gallons of fuel; and worker trips would consume approximately 3,583 gallons of fuel over the combined phases of project construction.

The construction energy estimates represent a conservative estimate since the construction equipment used in each phase of construction was assumed to be operating every day of construction. Construction equipment would be maintained to all applicable standards, and construction activity and associated fuel consumption and energy use would be temporary and typical for construction sites. It is also reasonable to assume contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during construction to reduce construction costs. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and the construction-phase impact related to energy consumption would be less than significant.

Table 9 Estimated Fuel Consumption during Construction

Fuel Type	Gallons of Fuel	MBtu ⁴
Diesel Fuel (Construction Equipment) ¹	35,426	4,516
Diesel Fuel (Hauling & Vendor Trips) ²	4,104	523
Other Petroleum Fuel (Worker Trips) ³	3,583	393
Total	43,113	5,432

¹ Fuel demand rate for construction equipment is derived from the total hours of operation, the equipment's horse power, the equipment's load factor, and the equipment's fuel usage per horse power per hour of operation, which are all taken from CalEEMod outputs (see Appendix A), and from compression-ignition engine brake-specific fuel consumptions factors for engines between 0 to 100 horsepower and greater than 100 horsepower (U.S. EPA 2018). Fuel consumed for all construction equipment is assumed to be diesel fuel.

² Fuel demand rate for hauling and vendor trips (cut material imports) is derived from hauling and vendor trip number, hauling and vendor trip length, and hauling and vendor vehicle class from "Trips and VMT" Table contained in Section 3.0, *Construction Detail*, of the CalEEMod results (see Appendix A). The fuel economy for hauling and vendor trip vehicles is derived from the United States Department of Transportation (DOT 2018). Fuel consumed for all hauling trucks is assumed to be diesel fuel.

³ The fuel economy for worker trip vehicles is derived from the U.S. Department of Transportation National Transportation Statistics (24 mpg) (DOT 2018). Fuel consumed for all worker trips is assumed to be gasoline fuel.

⁴ CaRFG CA-GREET 2.0 fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for worker trips specified above (California Air Resources Board [CARB] 2015). Low-sulfur Diesel CA-GREET 2.0 fuel specification of 127,464 Btu/gallon used to identify conversion rate for fuel energy consumption for construction equipment specified above (CARB 2015). Totals may not add up due to rounding.

Operational Energy Demand

The operation of the project would increase area energy demand from greater electricity, natural gas, and gasoline consumption at a currently undeveloped site. Natural gas and electricity would be used for heating and cooling systems, lighting, appliances, water use, and the overall operation of the project. Gasoline consumption would be attributed to the trips generated from people employed by the proposed project during normal operations, and patrons accessing the site. The estimated number of average daily trips associated with the project is used to determine the energy consumption associated with fuel use from the operation of the project. The majority of the fuel consumption would be from motor vehicles traveling to and from the project site. According to the CalEEMod calculations, the project would result in just under 1.6 million annual VMT (Appendix A). This uses the most conservative estimate of daily trip generation determined in the preliminary Traffic Impact Analysis (TIA). Table 10 shows the estimated total annual fuel consumption of the project using the estimated trip generation (Appendix H) and VMT with the assumed vehicle fleet mix (Appendix A). One gallon of gasoline is equivalent to approximately 109,786 Btu, while one gallon of diesel is equivalent to approximately 127,460 Btu (EIA 2019).

Table 10 Estimated Project Annual Transportation Energy Consumption

Vehicle Type ¹	Percent of Vehicle Trips ²	Annual Vehicle Miles Traveled ³	Average Fuel Economy (miles/gallon) ⁴	Total Annual Fuel Consumption (gallons)	Total Fuel Consumption (MBtu) ⁶
Passenger Cars	54.6	859,212	24	35,800	3,930
Light/Medium Trucks	36.9	580,676	17.4	33,372	3,664
Heavy Trucks/Other	7.9	124,318	7.4	16,800	1,844
Motorcycles	0.5	7,868	44.0	179	20
Total	100.0	1,573,648	–	81,907	8,972

¹ Vehicle classes provided in CalEEMod do not correspond exactly to vehicle classes in DOT fuel consumption data, except for motorcycles. Therefore, it was assumed that passenger cars correspond to the light-duty, short-base vehicle class, light/medium trucks correspond to the light-duty long-base vehicle class, and heavy trucks/other correspond to the single unit, 2-axle 6-tire or more class.

² Percent of vehicle trips from Table 4.4 “Fleet Mix” in Air Quality and Greenhouse Gas Emissions Study, CalEEMod output (see Appendix A).

³ Mitigated annual VMT found in Table 4.2 “Trip Summary Information” in Air Quality and Greenhouse Gas Emissions Study CalEEMod output (see Appendix A).

⁴ Average Fuel Economy: U.S. Department of Energy, 2018.

⁵ U.S. Department of Transportation 2013

⁶ CaRFG fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for vehicle classes specified above (CARB 2015).

Notes: Totals may not add up due to rounding.

As shown in Table 10, the project would consume an estimated 81,907 gallons of fuel, or 8,972 MBtu, each year for transportation uses from the operation under the most conservative estimate.

Operation of the project would consume approximately 1.1 GWh of electricity per year (electricity use provided in the CalEEMod output of Appendix A). The project’s electricity demand would be served by SCE, which provided 84,291 GWh of electricity in 2017; therefore, SCE would have sufficient supplies for the project. Estimated natural gas consumption for the project would be 0.017 MMthm per year (electricity use provided in the CalEEMod output of Appendix A). The project’s natural gas demand would be serviced by SCG, which provided 5,142 MMthm per year in 2017; therefore, SCG would have sufficient supplies for the project. The project would comply with all standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California’s Green Building Standards Code (CALGreen; California Code of Regulations, Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2019 Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the Energy Commission. As the name implies, these standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. The standards are updated every three years and each iteration is more energy efficient than the previous standards. For example, according to the CEC, residences built with the 2019 standards will use about seven percent less energy due to energy efficiency measures versus those built under the 2016 standards, or 53 percent less energy with rooftop solar, and nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018a). Furthermore, the project would continue to reduce its use of

nonrenewable energy resources as the electricity generated by renewable resources provided by SCE continues to increase to comply with state requirements through Senate Bill 100, which requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

In conclusion, the construction of the project would be temporary and typical of similar projects, and would not result in the wasteful, inefficient, or unnecessary consumption of energy. The operation of the project would increase the consumption of fuel, natural gas, and electricity from existing conditions of an undeveloped site; however, the increase would be in conformance with the latest version of California's Green Building Standards Code and the Building Energy Efficiency Standards. In addition, SCE and SCG have sufficient supplies to serve the project. Therefore, the project would have a less than significant impact.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

As mentioned above, SB 100 mandates 100 percent clean electricity for California by 2045. Because the proposed project would be powered by the existing electricity grid, the project would eventually be powered by renewable energy mandated by SB 100 and would not conflict with this statewide plan. The City of Long Beach has not adopted any specific renewable energy or energy efficiency plans with which the project could comply; however, a Climate Action and Adaptation Plan (CAAP) is currently under development. This plan would provide a framework for updating policies, programs, practices, and incentives for residents and business to reduce emissions and will likely include various energy efficiency measures to that end. As demonstrated further in Issue 8, *Greenhouse Gas Emissions*, the proposed project is consistent with and would not conflict with or obstruct the state plan for renewable energy; therefore, no impact would occur.

NO IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Geotechnical Professionals Inc. (GPI) prepared a Geotechnical Engineering Report (Geotechnical Report) for the project site on December 20, 2010 (GPI 2010). GPI concludes that the proposed project is feasible from a geotechnical engineering standpoint provided that the recommendations presented in the report are adhered to during planning and construction of the project, to the satisfaction of the Department of Building and Safety. The following is based on the information and analysis contained in the Geotechnical Report, which is provided as Appendix D.

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?

The project site is located in a seismically active region of Southern California; however, there are no known faults on the project site (Long Beach General Plan Seismic Safety, 1988). The nearest known active fault is Newport-Inglewood Fault Zone which is approximately 2.1 miles away from the project site (California Department of Conservation 2018). The project site is not located in an Alquist-Priolo earthquake fault zone as defined by the State Geologist (DOC 2018). Furthermore, ground breakage has not been observed along the faults of the Newport-Inglewood Zone in historic times. The proposed project would comply with State of California standards for building design through the California Building Standards Code (California Code of Regulations, Title 24), which requires various measures of all construction in California to account for hazards from seismic shaking. Therefore, the proposed project would not directly or indirectly cause adverse impacts associated with surface fault rupture. No impact would occur.

NO IMPACT

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The project site is located in the highly seismic Southern California region where several fault systems are considered to be active or potentially active. Nearby active faults include the Newport-Inglewood Fault Zone which is approximately two miles away from the project site (DOC 2018). The Newport-Inglewood fault zone could create substantial ground shaking if a seismic event occurred along that fault. Similarly, a strong seismic event on any other fault system in Southern California has the potential to create considerable levels of ground shaking throughout the City. However, the project site is not subject to unusual levels of ground shaking.

The California Building Code (CBC) requires structural design and construction methods, which will be employed to minimize adverse effects of seismic ground shaking. Because the project would comply with the CBC, impacts related to seismically induced ground shaking would be less than significant and the proposed project would not exacerbate ground shaking conditions.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Liquefaction is a process whereby soil is temporarily transformed to fluid form during intense and prolonged ground shaking or because of a sudden shock or strain. Liquefaction typically occurs in areas where the groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. Based on GPI's findings, the potential for

liquefaction to negatively affect the proposed project is moderate. However, the depths and thicknesses of the liquefiable soil layers make foundation bearing failure improbable in the event of liquefaction (Appendix D). Compliance with the CBC would reduce impacts associated with seismic-related ground failure, including liquefaction, to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Per the City of Long Beach Seismic Safety Element, the City is relatively flat and characterized by slopes that are not high (less than 50 feet) or steep (generally sloping flatter than 1-1/2:1, horizontal to vertical). The State Seismic Hazard Zone map of the Long Beach Quadrangle indicates that earthquake-induced landslide hazard areas are not present on the project site (DOC 1998). Additionally, the project site and the surrounding area are flat. As such, there is no risk of landslides on the site.

NO IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Ground-disturbing activities associated with the project implementation may result in the removal of some topsoil in order to construct the two proposed buildings. Standard construction best management practices (BMPs) would be implemented in order to avoid or minimize soil erosion associated with ground-disturbing activities. As discussed further in Section 10, *Hydrology and Water Quality*, implementation of erosion control measures stated in Chapter 98.02 of the LBMC, as well as adherence to requirements provided in the National Pollutant Discharge Elimination System (NPDES) permit for construction activities would avoid or minimize potential impacts. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable, or would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Per Plate 9, "Slope Stability Study Areas," of the Long Beach General Plan Seismic Safety Element, the project site is not located in an area of slope instability (City of Long Beach 1988). As discussed above, the project site is located in an area with moderate liquefaction potential; however, the depths and thicknesses of the liquefiable soil layers make foundation bearing failure improbable in the event of liquefaction. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils are highly compressible, clay-based soils that tend to expand as they absorb water and shrink as water is drawn away. The soil profile of the project site is characterized by compressible soils underlying a layer of undocumented fill within 7 to 40 feet below existing grades. Furthermore, raised grades and projected foundation loads at the project site have the potential to cause significant settlement due to the compressibility of the native soils. Mitigation measure GEO-1 would address the potentially significant impacts relating to settlement from compressible soils.

Despite the moderately compressible soils on the project site, impacts would be less than significant with incorporation of regulatory code compliance and the recommendations provided in the Geotechnical Report, as implemented to the satisfaction of the Department of Building and Safety.

Mitigation Measure

GEO-1 Expansive Soils

Grades shall not be raised more than a foot within areas where settlement would directly impact structures or utilities. Moreover, fills greater than 2 feet shall be left in place and monitored by GPI personnel for at least four months prior to beginning construction. The installation of piles at a sufficient depth would help offset both static and downdrag loads associated with liquefaction. Additionally, surcharging, or the compaction of underlying loose silts and clays by introducing an earth embankment across an area, shall be implemented as a viable ground improvement practice.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The proposed project would not include the installation of septic tanks or alternative wastewater disposal systems. No impacts would be associated with wastewater conveyance.

NO IMPACT

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The project site is located in an urbanized area. Based on the CRA (see appendix D), BCR Consulting evaluated the paleontological sensitivity of the geologic units that underlie the project site using the results of the paleontological locality search and review of existing information in the scientific literature concerning known fossils within those geologic units (2018). There is no evidence that paleontological resources are present on-site. The Holocene alluvial deposits mapped at ground surface are likely too young to contain fossilized material in the project site, consequently, deemed as having a low paleontological resource potential (Saucedo et al. 2016). Shallow ground-disturbing activities (i.e. grading), especially those within pre-disturbed areas, would likely not unearth any paleontological resources. Therefore, impacts to paleontological resources are not anticipated. Nonetheless, implementation of GEO-2 would reduce potential adverse impacts to paleontological resources to a less than significant level.

Mitigation Measure

GEO-2 Unanticipated Discovery of Paleontological Resources

If evidence of subsurface paleontological resources is found during excavation or construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the City of Long Beach Development Services Department. With direction from the Development Services Department, a paleontologist certified by the County of Los Angeles shall evaluate the find. If warranted, the paleontologist shall prepare and implement a standard Paleontological Resources Mitigation Program for the salvage and curation of the identified resources.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHGs). GHGs contribute to the "greenhouse effect," which is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature.

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

In late 2015, the California Supreme Court's Newhall Ranch decision confirmed that there are multiple potential pathways for evaluating GHG emissions consistent with CEQA, depending on the circumstances of a given project (Center for Biological Diversity v. Department of Fish and Wildlife (2015) 62 Cal. 4th 204). Given the legislative attention and judicial action regarding post-2020 goals and the scientific evidence that additional GHG reductions are needed through the year 2050, the Association of Environmental Professionals' (AEP) Climate Change Committee published a white paper in October 2016 to provide guidance on defensible GHG thresholds for use in CEQA analyses

and GHG reduction targets in climate action plans in light of the change in focus on the 2030 reduction target and questions raised in the Newhall Ranch case.

The AEP Climate Change Committee white paper identifies seven thresholds for operational emissions. The following four methods described are the most widely used evaluation criteria.¹

- (1) **Consistency with a Qualified GHG Reduction Plan.** For a project located within a jurisdiction that has adopted a qualified GHG reduction plan (as defined by CEQA Guidelines Section 15183.5), GHG emissions would be less than significant if the project is anticipated by the plan and fully consistent with the plan. However, projects with a horizon year beyond 2020 should not tier from a plan that is qualified up to 2020.
- (2) **Bright line Thresholds.** There are two types of bright line thresholds:
 - a. **Standalone Threshold.** Emissions exceeding standalone thresholds would be considered significant.
 - b. **Screening Threshold.** Emissions exceeding screening thresholds would require evaluation using a second tier threshold, such as an efficiency threshold or other threshold concept to determine whether project emissions would be considered significant.

Projects with a horizon year beyond 2020 should take into account the type and amount of land use projects and their expected emissions out to the year 2030.

- (3) **Efficiency Thresholds.** Land use sector efficiency thresholds are currently based on AB 32 targets and should not be used for projects with a horizon year beyond 2020. Efficiency metrics should be adjusted for 2030 and include applicable land uses.
- (4) **Percent Below “Business as Usual” (BAU).** GHG emissions would be less than significant if the project reduces BAU emissions by the same amount as the statewide 2020 reductions. However, this method is no longer recommended following the Newhall Ranch ruling.

Operational emissions methods (1), (3), and (4) are not applicable as explained in the following discussion. The City of Long Beach is currently drafting a Climate Action and Adaptation Plan (CAAP), which is anticipated to be released by the end of 2019. However, the CAAP has not yet been finalized or adopted by the City and cannot be used for project tiering. Additionally, to develop an efficiency threshold, the local planning area is first evaluated to determine emissions sectors that are present and will be directly affected by potential land-use changes.

Efficiency thresholds are quantitative thresholds based on a measurement of GHG efficiency for a given project, regardless of the amount of mass emissions. These thresholds identify the emission level below which new development would not interfere with attainment of statewide GHG reduction targets. A project that attains such an efficiency target, with or without mitigation, would result in less than significant GHG emissions.

With the release of the 2017 Climate Change Scoping Plan Update, CARB recognized the need to balance population growth with emissions reductions and in doing so, provided a new local plan level methodology for target setting that provides consistency with state GHG reduction goals using

¹ The three other thresholds are best management practices/best available mitigation, compliance with regulations, and a hybrid threshold concept: separate transportation and non-transportation threshold. These are not commonly used and do not specifically apply to this project.

per capita efficiency thresholds. A project-specific efficiency threshold can be calculated by dividing statewide GHG emissions by the sum of statewide jobs and residents. However, not all statewide emission sources are present in Long Beach (e.g., mining). Accordingly, consistent with the concerns raised in the Golden Door (2018) and Newhall Ranch (2015) decisions regarding the correlation between state and local conditions, the 2030 statewide inventory target was modified with substantial evidence provided to establish a locally-appropriate, evidence-based, residential project-specific threshold consistent with California's SB 32 targets. This option cannot be utilized, however, because the City does not have an existing community-wide baseline inventory that can be used to calculate a project-specific efficiency threshold.

Furthermore, BAU emissions are no longer recommended following the Newhall Ranch ruling. Therefore, the most appropriate threshold for the project is the bright line threshold of 3,000 MT of CO₂e established by SCAQMD. As such, the project would result in a significant impact if project-generated emissions exceed the bright line threshold provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010.

Emissions associated with the project were estimated using CalEEMod, version 2016.3.2 (CAPCOA 2016). Complete CalEEMod results and assumptions can be viewed in Appendix A.

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

GHG emissions associated with construction emissions and operation emissions from the project are discussed below.

Construction Emissions

It was assumed that construction activity would begin May 2019 with completion by the beginning of 2020. As shown in Table 11, construction activity for the project would generate an estimated 361 MT CO₂e. When amortized over a 30-year period, construction of the project would generate 12 MT CO₂e per year.

Table 11 Estimated Construction GHG Emissions

Year	Project Emissions (MT/yr CO ₂ e)
Total	361
Total Amortized over 30 Years	12

See Appendix A for CalEEMod worksheets.

Operational and Total Project Emissions

Table 12 combines the construction and operational GHG emissions associated with development of the project. As shown, annual emissions from the proposed project would be approximately 1,265 MT CO₂e. These emissions would not exceed the 3,000 MT CO₂e per year bright line threshold. Therefore, the project would have a less than significant impact.

Table 12 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (CO ₂ e in metric tons)
Construction	12
Operational	
Area	<1
Energy	429
Solid Waste	44
Water	102
Mobile	
CO ₂ and CH ₄	668
N ₂ O	10
Total	1,265

See Appendix A for CalEEMod worksheets.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

There are numerous state plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall state plan and policy is AB 32, the California Global Warming Solutions Act of 2006, and the follow up, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the Low Carbon Fuel Standard, and regulations requiring an increasing fraction of electricity to be generated from renewable sources are being implemented at the statewide level; as such, compliance at a project level is not addressed. Therefore, the project does not conflict with statewide plans and regulations.

Senate Bill 375, signed in August 2008, directs each of the State's 18 major Metropolitan Planning Organizations (MPO) to prepare a SCS that contains a growth strategy to meet these emission targets for inclusion in the RTP. In April 2016, SCAG adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (SCAG 2017). SCAG's RTP/SCS includes a commitment to reduce emissions from transportation sources by promoting compact and infill development to comply with SB 375. The City of Long Beach is developing its first Climate Action and Adaptation Plan (CAAP) which will provide a framework for creating or updating policies, programs, practices, and incentives for Long Beach residents and businesses to reduce the City's GHG footprint.

The proposed project would not conflict with any of the SCAG's RTP/SCS goals because it would allow for the construction of an industrial warehouse and office project in an urbanized, industrial area along a major transportation corridor.

Table 13 illustrates the project's consistency with relevant goals and strategies embodied in Chapter 5, *On the Road to Greater Mobility and Sustainable Growth*, of the 2016 RTP/SCS (SCAG 2016). As shown in Table 13, the project is consistent with the applicable strategies in the 2016 RTP/SCS.

Table 13 Consistency with Applicable SCAG RTP/SCS GHG Emission Reduction Strategies

Strategy/Action	Project Consistency
Land Use and Transportation	
<p><i>Focus new growth around transit</i></p> <p>The 2016 RTP/SCS land use pattern reinforces the trend of focusing growth in the region's High Quality Transit Areas (HQTAs). Concentrating housing and transit in conjunction concentrates roadway repair investments, leverages transit and active transportation investments, reduces regional life cycle infrastructure costs, improves accessibility, avoids greenfield development, and has the potential to improve public health and housing affordability. HQTAs provide households with alternative modes of transport that can reduce VMT and GHG emissions.</p>	<p>Consistent.</p> <p>The project would be developed within 0.25 mile of bus stops along PCH and Anaheim Street. The project site is also within one mile of the Metro Blue Line's PCH and Anaheim Street Stations.</p>
<p><i>Plan for growth around livable corridors</i></p> <p>The Livable Corridors strategy seeks to create neighborhood retail nodes that would be walking and biking destinations by integrating three different planning components:</p> <ol style="list-style-type: none"> 1. Transit improvements 2. Active transportation improvements (i.e., improved safety for walking and biking) 3. Land use policies that include the development of mixed-use retail centers at key nodes and better integrate different types of ritual uses. 	<p>Consistent.</p> <p>The project would be developed within 0.25 mile of bus stops along PCH and Anaheim Street. The project site is also within one mile of the Metro Blue Line's PCH and Anaheim Street Stations. As such, future employees would have access to public transit.</p>
<p><i>Provide more options for short trips</i></p> <p>38 percent of all trips in the SCAG region are less than three miles. The 2016 RTP/SCS provides two strategies to promote the use of active transport for short trips. Neighborhood Mobility Areas are meant to reduce short trips in a suburban setting, while "complete communities" support the creation of mixed-use districts in strategic growth areas and are applicable to an urban setting.</p>	<p>Consistent.</p> <p>The project would be developed within 0.25 mile of bus stops along PCH and Anaheim Street. The project site is also within one mile of the Metro Blue Line's PCH and Anaheim Street Stations. As such, alternative means of transportation would be available for access to and from the project site.</p>
<p><i>Protect Natural and Farm Lands</i></p> <p>Many natural and agricultural land areas near the edge of existing urbanized areas do not have plans for conservation and they are susceptible to the pressures of development. Many of these lands, such as riparian areas, have high per-acre habitat values and are host to some of the most diverse yet vulnerable species that play an important role in the overall ecosystem.</p>	<p>Consistent.</p> <p>The project would be developed in an urbanized area designated for industrial land uses and thus would not add pressure to develop natural or agricultural lands.</p>
Transit Initiatives	
<p>Develop first-mile/last-mile strategies on a local level to provide an incentive for making trips by transit, bicycling, walking, or neighborhood electric vehicle or other ZEV options.</p>	<p>Consistent.</p> <p>The project would be developed within 0.25 mile of bus stops along PCH and Anaheim Street. The project site is also within 1 mile of the Metro Blue Line's PCH and Anaheim Street Stations. This would incentivize greater use of alternative transportation.</p>

Strategy/Action	Project Consistency
Other Initiatives	
Reduce emissions resulting from a project through implementation of project features, project design, or other measures. Incorporate design measures to reduce energy consumption and increase use of renewable energy.	Consistent. The design and implementation of the proposed project would comply with CALGreen Building Standards, which includes measures to reduce emissions. The project would also comply with SCAQMD Rule 1113 that limits ROG's from building architectural coatings.
Source: SCAG 2016	

Given the aforementioned, the project is consistent with state and local policies for reducing GHG emissions identified in SCAG's 2016 RTP/SCS. Therefore, the project would have a less than significant impact.

LESS THAN SIGNIFICANT IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SCS Engineers (SCS) prepared a Phase 1 environmental site assessment (ESA) for the project site on July 13, 2015 (SCS 2015). SCS Engineers concludes that the proposed project is feasible from a health and safety engineering standpoint provided that the recommendations presented in the report are adhered to during planning and construction of the project. The following is based on the information and analysis contained in the ESA report, which is provided as Appendix E.

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Project construction would involve the use of potentially hazardous materials such as vehicle fuels and fluids that could be released should an accidental leak or spill occur. However, standard construction best management practices for the use and handling of such materials would be implemented to avoid or reduce the potential for such conditions to occur. Any use of potentially hazardous materials utilized during construction of the proposed project would comply with all local, state, and federal regulations regarding the handling of potentially hazardous materials. Operation and maintenance of the proposed industrial project may involve the routine transport, use, or disposal of hazardous materials. However, operation of the project would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- 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?*

As described above, construction of the proposed project would involve the use of potentially hazardous materials such as vehicle fuels and fluids that could be released should an accidental leak or spill occur. However, standard construction best management practices for the use and handling of such materials would be implemented to avoid or reduce the potential for such conditions to occur. The transport, use, and storage of hazardous materials during the construction of the project would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22.

The results of the Phase 1 Environmental Site Assessment indicate that the first uses of the existing development can be traced back to the early 1950s. Some building materials commonly used during this time period, such as drywall/sheet rock, ceiling tiles, vinyl floor tiles and mastic as well as the stucco may contain asbestos. The report indicates that asbestos containing waste was identified on the project site. It is also likely that some of the painted surfaces may have been painted with lead-based paint. Therefore, there are potentially hazardous materials associated with the existing building. To reduce the potential hazardous impacts associated with demolition of the existing building, the mitigation measures listed below for handling Asbestos-Containing Materials (ACM), Asbestos-Containing Construction Materials (ACCM), Presumed Asbestos Containing Materials (PACM), and Lead-Containing Materials (LCM) were adopted from the Cal/OSHA requirements set forth in 8 CCR 1529 as well as other applicable State and federal rules and regulations. Adherence to these mitigation measures would reduce impacts to a less than significant level.

Mitigation Measures

HAZ-1 Existing Toxic/Hazardous Materials

ASBESTOS

In the event that any suspect asbestos-containing materials (ACMs) are discovered during demolition activities, the materials shall be sampled and analyzed for asbestos content prior to any disturbance. Prior to the issuance of the demolition permit, the applicant shall provide a letter from a qualified asbestos abatement consultant that no ACMs are present in the buildings.

If additional ACMs are found to be present, all asbestos removal operations shall be performed by a Cal/OSHA-DOSH-registered and California-licensed asbestos contractor. All disturbance of ACMs, and/or abatement operations, shall be performed under the surveillance of a third-party Cal/OSHA Certified Asbestos Consultant. All disturbances of ACMs, and/or abatement operations, shall be performed in accordance with the Cal/OSHA requirements set forth in 8 CCR 1529. Given the location of the project site, all asbestos abatement must also be performed in accordance with SCAQMD requirements set forth in Rule 1403 as well as all other applicable State and federal rules and regulations.

LEAD

Any suspect lead-based paint shall be sampled prior to any demolition activities. Any identified lead based paint located within buildings scheduled for renovation or demolition, or noted to be damaged, shall be abated by a licensed lead-based paint abatement contractor, and disposed of according to all state and local regulations. All construction work shall be subject to 29 Code of Federal Regulations (CFR) Part 1926.62 "Lead Exposure in Construction Interim Final Rule," which was adopted and incorporated into California's own standard Title 8 Code of California Regulations (CCR) Section 1532.1.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The existing school closest to the project site is the George Washington Middle School, which is located approximately 0.6 miles away. During construction of the proposed project, hazardous and potentially hazardous materials would be utilized for the transport and operation of vehicles and machinery. As discussed above, the transport, use, and storage of hazardous materials during the construction and operation of the project would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Therefore, no impact would occur.

NO IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The following databases and listings compiled pursuant to Government Code Section 65962.5 were utilized to identify known hazardous materials contamination at the project site (SCS 2015):

- **United States Environmental Protection Agency (USEPA)**
 - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)
- **State Water Resources Control Board (SWRCB)**
 - GeoTracker search for leaking underground storage tanks (LUST) and other cleanup sites
- **California Department of Toxic Substances Control (DTSC)**
 - EnviroStor database for hazardous waste facilities or known contamination sites
 - Cortese List of Hazardous Waste and Substances Sites

According to the Phase I ESA (see Appendix E), the project site was previously used by Long Beach public service departments for various operations including traffic management, landscaping, and street maintenance. The project site is not situated on or directly adjacent to any known hazardous or contaminated sites that require active monitoring. However, regulatory database information identified the project site on the HAZNET, Historical Cortese, Historical Auto Station, CDL, LUST, RCRA-SQG, FINDS, and UST databases. The Cortese, LUST and UST database listings pertain to UST operations, removals, and cleanups. Additional EDR report information implied that wastes such as organic solids, oil-containing wastes, aqueous solutions with organic residues, asbestos containing waste, unspecified solvent mixture waste, and waste oil and mixed oil, were utilized on the project site. Since the initial investigations performed by SCS in 2005, various phases of investigations and remediation have been conducted on-site to address concerns regarding previously identified recognized environmental conditions (RECs); including a site-wide Phase II investigation of soil and soil vapor, groundwater investigations, UST and clarifier removals, and a limited Phase II investigation. Furthermore, database information suggests the release of substances including hydrocarbons and volatile organic compounds from several sites within 0.25 miles of the project site. As part of the Phase I Environmental Site Assessment, SCS personnel did not note any recognized environmental conditions (RECs) for the adjacent properties, consisting of commercial and industrial businesses, during the site visit. Due to the aforementioned investigations and current use of the Property, the listings of the project site on the associated databases are considered to be controlled recognized environmental conditions (CRECs) or historical recognized environmental conditions (HRECs). Based on the results of the Phase I ESA provided by SCS, further investigation is not necessary and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard, or excessive noise, for people residing or working in the project area?*

The airport or airstrip nearest to the project site is the Long Beach Airport, located approximately 5 miles southeast of the project site. The project site is not located within two miles of a public use airport and would not introduce associated hazards to people residing or working in the area. No impact would occur.

NO IMPACT

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project would not involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. In accordance with the Public Safety Element of the General Plan, emergency response and evacuation procedures would be developed through the City in coordination with the police and fire departments. The proposed project would not require the development of additional streets or introduce new features that would interfere with or obstruct an adopted emergency response plan. Additionally, the project site is surrounded by major roadways, including PCH, which would provide easy access to and from the project site. Therefore, no impact would occur.

NO IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The project site is not located in a wildland fire hazard area as defined by the Department of Forestry and Fire Protection (CalFire 2007). The project would not affect the potential for wildland fires to occur. No impact would occur.

NO IMPACT

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10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or situation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Long Beach is served by three sewage treatment facilities that discharge treated effluent to marine waters. The project is located in an urban area, approximately 500 feet east of the Los Angeles River; however, construction would be limited to the project site and would not directly affect the river. The project site consists of two parcels that have been previously disturbed and graded. Construction and grading are planned to occur and would include industrial and commercial buildings and parking areas. The proposed project would comply with current National Pollutant Discharge Elimination System (NPDES), which regulates discharges into surface waters, and Los Angeles County MS4 permit regulations pertaining to the retention of erosion and detention of site runoff into storm drains and receiving waters and include storm water Low Impact Development (LID) Best Management Practices (BMPs). Additionally, Chapter 18.74 of the LBMC regulates the implementation of the LIDs and BMPs for projects in the City. Compliance with these requirements would reduce potential impacts to local storm water drainage facilities to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The major aquifers beneath Long Beach are known as the 400-foot Gravel, the 200-foot Sand, and the Gaspar Zone (Long Beach Conservation General Plan, 1973). These aquifers have a capacity for storing approximately 30 million acre-feet of water. The proposed project would involve the construction of industrial buildings with minimal excavation. Water supply requirements associated with the project would not deplete local groundwater supplies and groundwater would not be pumped for the project. Therefore, no impact would occur.

NO IMPACT

- c.(i) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or situation on- or off-site?*
- c.(ii) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would 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?*
- c.(iv) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

The project would alter the existing drainage patterns on the project site by introducing additional structures and pervious surfaces, but implementation of the project would not alter the course of a stream or river. The project would comply with Chapter 18.74 of the LBMC, which requires implementation of standard construction BMPs to avoid or minimize temporary adverse effects such as erosion and siltation. A LID Plan shall be prepared to demonstrate the following (LBDS 2013):

1. Stormwater runoff will be infiltrated, evapotranspired, and/or captured and used through stormwater management techniques as identified in Section 4.1. The on-site stormwater management techniques must be properly sized, at a minimum, to infiltrate, evapotranspire, store for use, without any stormwater runoff leaving the site to the maximum extent feasible, for at least the volume of water produced by the water quality design storm event that results from:
 - i. The 85th percentile 24-hour runoff event determined as the maximized capture stormwater volume for the area using a 48- to 72-hour drawdown time, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or
 - ii. The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in the California Stormwater Best Management Practices Handbook –Industrial/Commercial, (2003); or
 - iii. The volume of runoff produced from a 0.75-inch storm event.

Compliance with these requirements would reduce potential impacts to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

- d. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project site is located 2.75 miles north from the Pacific Ocean. It is not located in an inundation or tsunami zone (DOC 2018). The dam closest to the project site is the Sepulveda Dam approximately 36 miles to the northwest. Additionally, the project site is not located near a body of water that would be subject to seiche and is not located on or near slopes subject to mudflow events. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the project site is located in a 100-year flood zone (Map # 06037C1962F), which refers to an area that statistically has a 1-percent chance of a flood occurring in a given year. The project site is located in Zone AH, which pertains to areas of 1-percent annual chance of shallow flooding with a constant water-surface elevation (i.e. ponding) where average depths are between 1 and 3 feet (FEMA 2018). FEMA requires owners of any properties in these zones to acquire flood insurance. An alternate option for these aforementioned property owners would require seeking direct involvement from FEMA to obtain a Letter of Map Revision (LOMR) indicating that the FIRM has been amended to exclude the site from the 100-year flood zone. Given the fact that the project site is already paved, increases in flood elevation, off-site flood hazards, and runoff are not anticipated. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Potential water quality impacts associated with the proposed project are discussed above under checklist question a. and b. The project would not substantially degrade water quality. No impact would occur.

NO IMPACT

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project physically divide an established community?

The proposed project would involve removal of the existing of the two buildings and storage yard facility on site and the development of a warehouse/manufacturing facility with associated office support. The project site is bordered by warehouse and manufacturing uses to the north, south and east, and the Los Angeles River Channel to the west. The project does not include any new roads or infrastructure that has the potential to divide any established communities. No impact would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project would redevelop an existing industrial site for continued industrial use. The project site is zoned IG (General Industrial). The IG zone permits a wide range of industrial uses with an emphasis on traditionally heavy industrial and manufacturing uses. According to the LBMC, the IG zone is intended to promote an "industrial sanctuary" where land is preserved for industry and manufacturing. Permitted uses in the IG zone may include large construction yards with heavy equipment, chemical manufacturing plants, rail yards, and food processing plants. The project site has a General Plan land use designation of 9G (General Industry). The 9G land use designation was established to maintain the City's strong industrial economic base by allowing for more intense industrial operations that are not permitted under other industrial designations. (City of Long Beach 1998, 2019). As such, the proposed project would be consistent with the existing zoning and General Plan land uses designation. Table 14 summarizes the development standards associated with the IG zone and the proposed project. The proposed project would comply with City zoning standards, including maximum height limits, yards, and front and side setbacks. Additionally, as discussed in Section 3, Air Quality, Section 7, Geology and Soils, Section 13, Noise and Section 17, Transportation, the project would be consistent with the City's Air Quality, Noise, Seismic Safety and Mobility element, respectively. For these reasons, the proposed project would not conflict with any applicable land use plan, policy, or regulation. Impacts would be less than significant.

Table 14 General Industrial District Development Standards

Standard	Requirements	Proposed
Permitted Uses	Industrial/Manufacturing	Industrial/Manufacturing
Maximum Lot Coverage	80%	49.2%
Maximum Building Height	65 ft	35 ft
Maximum Accessory Office Space	25% of gross floor area	25% of gross floor area
Parking (warehouse: 1/1000 sf)	96 vehicle	96 vehicle
Setbacks		
Yard fronting Arterial St	10 ft	10 ft
Yard local or Collector St.	None	None required
Parking lot setback fronting St.	5 ft	None required
sf = square feet		
Source: City of Long Beach Municipal Code, Chapter 21.33, Industrial Districts.		

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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?*
- 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 project site and surrounding properties are located in an urbanized area, and the project site is already developed in an industrial use. The project site is zoned IG (General Industrial) and has a General Plan land use designation of 9G (General Industry). The California Surface Mining and Reclamation Act of 1975 (SMARA) was enacted to promote conservation and protection of significant mineral deposits. According to the California Department of Conservation Mineral Land Classification Maps, the project site is located in an area with an MRZ-3 designation, indicating that the presence of significant mineral deposits on-site has not been evaluated (DOC 1982). Although oil deposits are abundant in the City of Long Beach, no oil extraction occurs on or adjacent to the project site (City of Long Beach 1973f). Because there are no known mineral resources on the project site or in the vicinity of the site, the project would have no impact on the availability or recovery of mineral resources.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Include general noise background discussion here, explaining basic terminology and key considerations. Follow up with a brief overview of local noise regulation, which will vary by jurisdiction. This information is likely available from a recent Initial Study prepared for the same agency. If we are relying on a noise study prepared by Rincon or another consultant, introduce the study here.

Noise

The unit of measurement used to describe a noise level is the decibel (dB). However, the human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, a method called “A weighting” is used to filter noise frequencies that are not audible to the human ear. A weighting approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the “A-weighted” levels of those sounds. Therefore, the A-weighted noise scale is used for measurements and standards involving the human perception of noise. In this analysis, all noise levels are A weighted and “dBA” is understood to identify the A weighted decibel.

Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A 10 dB increase represents a 10-fold increase in sound intensity, a 20 dB change is a 100-fold difference, 30 dB is a 1,000-fold increase, etc. Thus, a

doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two equivalent noise sources do not sound twice as loud as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease; that a change of 5 dBA is readily perceptible; and that an increase (decrease) of 10 dBA sounds twice (half) as loud (California Department of Transportation [Caltrans] 2013).

Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this analysis are the one-hour equivalent noise level (L_{eq}) and the community noise equivalent level (CNEL).

- The L_{eq} is the level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound. For example, $L_{eq(1h)}$ is the equivalent noise level over a 1-hour period and $L_{eq(8h)}$ is the equivalent noise level over an 8-hour period. $L_{eq(1h)}$ is a common metric for limiting nuisance noise whereas $L_{eq(8h)}$ is a common metric for evaluating construction noise.
- The CNEL is a 24-hour equivalent sound level. The CNEL calculation applies an additional 5 dBA penalty to noise occurring during evening hours, between 7:00 p.m. and 10:00 p.m., and an additional 10 dBA penalty is added to noise occurring during the night, between 10:00 p.m. and 7:00 a.m. These increases for certain times are intended to account for the added sensitivity of humans to noise during the evening and night.

Propagation

Sound from a small, localized source (approximating a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dBA for each doubling of the distance.

Traffic noise is not a single, stationary point source of sound. Over some time interval, the movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. The drop-off rate for a line source is 3 dBA for each doubling of distance.

Vibration

Vibration levels are usually expressed as single-number measure of vibration magnitude, in terms of velocity or acceleration, which describes the severity of the vibration without the frequency variable. The peak particle velocity (ppv) is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in inches per second. Since it is related to the stresses that are experienced by buildings, ppv is often used in monitoring of blasting vibration. Although ppv is appropriate for evaluating the potential of building damage, it is not suitable for evaluating human response. It takes some time for the human body to respond to vibrations. In a sense, the human body responds to an average vibration amplitude (FTA 2018). Because vibration waves are oscillatory, the net average of a vibration signal is zero. Thus, the root mean square (rms) amplitude is used to describe the “smoothed” vibration amplitude (FTA 2018). The rms of a signal is

the square root of the average of the squared amplitude of the signal, usually measured in inches per second. The average is typically calculated over a 1-second period. The rms amplitude is always less than the ppv and is always positive. Decibel notation is used to compress the range of numbers required to describe vibration. The abbreviation VdB is used in this report for vibration decibels to reduce the potential for confusion with sound decibels.

Continued vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hertz), or when foundations or utilities, such as sewer and water pipes, connect the structure and the vibration source.

Project Area Noise Conditions

The primary noise source in the project area are motor vehicles (e.g., automobiles, buses, and trucks), particularly medium and heavy-duty trucks along San Francisco Avenue and 16th Street. Motor vehicle noise is a concern because it is characterized by a high number of individual events that often create sustained noise levels. Ambient noise levels would be expected to be highest during the daytime and rush hour unless congestion slows speeds substantially. The project area is also exposed to operational noise from industrial equipment.

To determine ambient noise levels in the project area, three 10-minute sound level measurements were taken using an Extech ANSI Type II sound level meter during the afternoon peak traffic hour between 8:00 AM and 9:00 AM on January 30, 2019 (refer to Appendix F for sound measurement data). Measurement locations were selected to capture ambient noise at the site, at adjacent industrial uses, and at the nearest arterial roadway that would capture the most project-generated vehicle trips. See Figure 6 for the locations of sound measurements. As shown in Table 15, the ambient noise level at the project site was measured at 63.2 dBA L_{eq} .

Table 15 Sound Level Measurement Results

	Measurement Location	Primary Source(s) of Noise	Distance to Roadway Centerline (feet)	Sample Time	Leq[10] (dBA) ¹
1	San Francisco Avenue, eastern boundary of the site	Vehicles on San Francisco Avenue, Industrial machinery	30	822 AM – 832 AM	63.2
2	West 16 th Street, east of the site	Vehicles on West 16 th Street, Industrial machinery	35	8:35 AM – 8:45 PM	58.2
3	PCH, north of the site	Vehicles on PCH	50	8:52 PM – 9:02 PM	74.7

See Figure 6 for a map of sound level measurement locations. See Appendix F for noise monitoring data.

¹The equivalent noise level (L_{eq}) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). For this measurement, the L_{eq} was over a 10-minute period ($L_{eq}[10]$).

Source: Rincon Consultants, field measurements on January 30, 2019 using ANSI Type II Integrating sound level meter.

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. According to the Noise Element of the Long Beach General Plan (1975), noise-sensitive land uses include, but are not limited to, residences, schools, hospitals, and libraries.

The project site is in an industrial area of the City, adjacent to the Los Angeles River. The nearest noise-sensitive receptors include single- and multi-family residences located approximately 1,050 feet (0.2 mile) north of the site across PCH. Additional single- and multi-family residences and Seaside Park are located approximately 1,575 feet (0.3 mile) east of the site across Magnolia Avenue. Figure 6 shows the location of the nearest noise-sensitive receptors with respect to the project site.

Regulatory Setting

City of Long Beach Municipal Code

The City of Long Beach uses the State Noise/Land Use Compatibility Standards, which suggests that less sensitive commercial and industrial uses may be compatible with ambient noise levels up to 70 dBA. The City has also adopted a Noise Ordinance (LBMC Chapter 8.80) that sets exterior and interior noise standards.

As outlined in Section 8.80.150 of the LBMC, maximum exterior noise levels are based on land use districts. According to the Noise District Map of the LBMC, the project site and surrounding area is located within District Four, which is defined as “predominantly industrial with other land use types also present” (LBMC Section 8.80.160). Table 16 summarizes the exterior noise limit for District Four while Table 17 summarizes interior noise limits based on general land uses.

Table 16 Exterior Noise Limits

Time Period	Noise Level (dBA)
Anytime	70

Source: LBMC Section 8.80.160

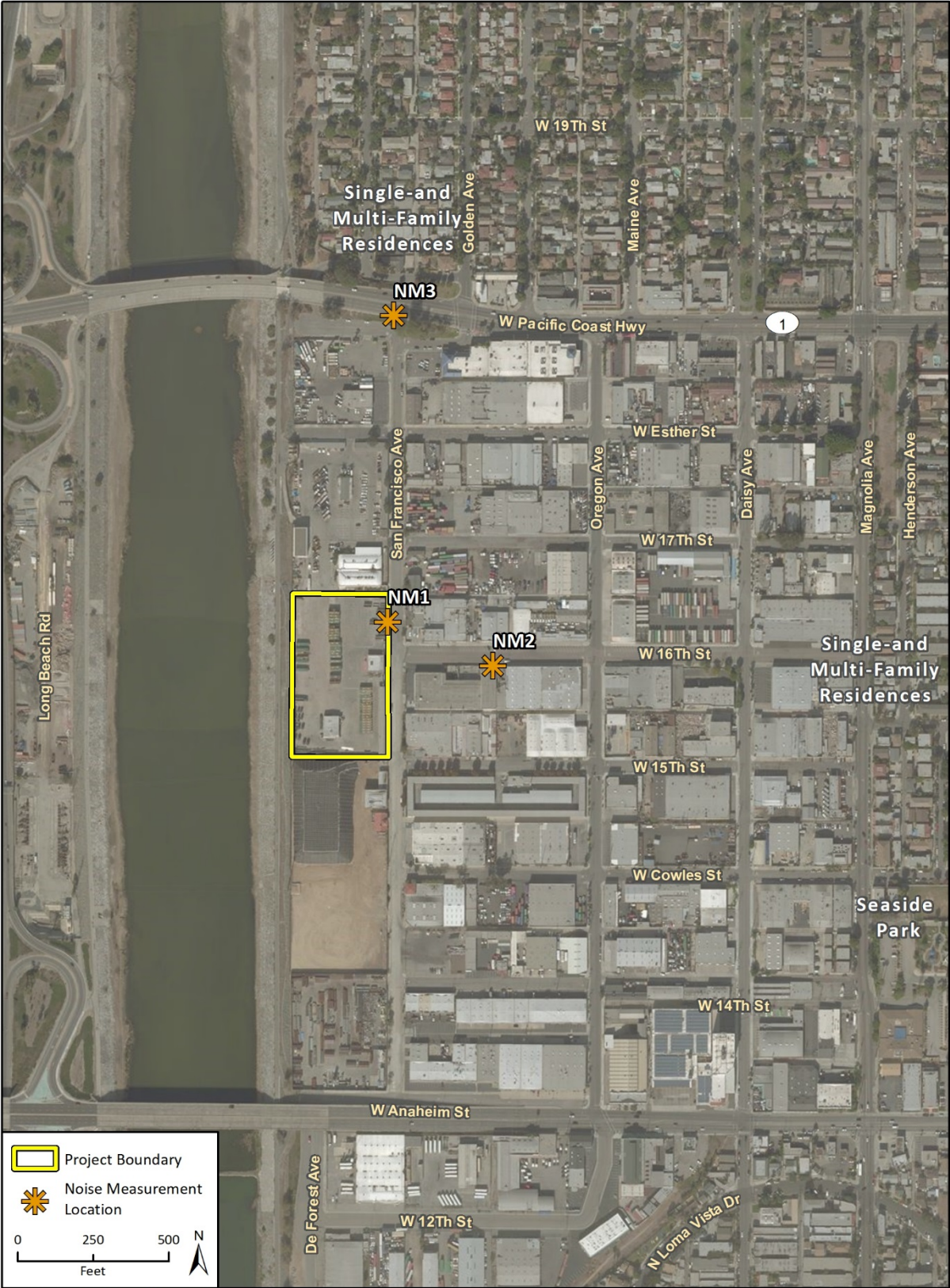
Table 17 Interior Noise Limits

Receiving Land Use	Source Land Use	Time Period	Noise Level (dBA) ¹
All	Residential	10:00 PM to 7:00 AM	35
		7:00 AM to 10:00 PM	45
All	School	7:00 AM to 10:00 PM (while school is in session)	45
Hospital, designated quiet zones and noise sensitive zones		Anytime	40

¹ Cannot be exceeded by more than five minutes cumulatively in an hour.

Source: LBMC Section 8.80.170

Figure 6 Sound Level Measurement and Sensitive Receptor Locations



Sections 8.80.202A through 80.202C of the LBMC specify that no person shall operate tools or equipment used for construction activities or any other related building activity between the hours of 7:00 PM and 7:00 AM on weekdays and Federal holidays; between the hours of 7:00 PM on Friday and 9:00 AM on Saturday and after 6:00 PM on Saturday; or at any time on Sunday.

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The surrounding area, consisting of other industrial uses, may be subject to both temporary construction noise and long-term operational noise (i.e., on-site industrial machinery), including off-site traffic noise, associated with implementation of the proposed project. The following discussion addresses each noise source separately.

Construction Noise

Temporary noise levels caused by construction activity would be a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of noise-generating activities. Construction noise was estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) Version 1.1. To determine construction noise impacts, noise was modeled at the nearest noise-sensitive receptors, which include single- and multi-family residences located approximately 1,050 feet (0.2 mile) north of the site across PCH. Additional single- and multi-family residences and Seaside Park are located approximately 1,575 feet (0.3 mile) east of the site across Magnolia Avenue. The area surrounding the project site consists of other industrial properties, which are not considered noise-sensitive receptors. Nonetheless, construction noise was also modeled at 50 feet to determine noise levels at adjacent industrial uses for informational purposes.

Typical heavy construction equipment would include tractors, bulldozers, excavators, front-end loaders, graders, and stationary equipment, such as compressors and generators. It is assumed that diesel engines would power all construction equipment. For assessment purposes and to be conservative, the loudest hour has been used for this assessment. Noise levels are based on a tractor, loader, a dozer, a grader, and two stationary engines operating simultaneously². Table 18 shows the pieces of equipment assumed to generate the highest noise levels (dBA, L_{eq}) during construction at distances of 50 feet, 1,050 feet and 1,575 feet from the source. Construction noise estimates assume that the analyzed pieces of construction equipment would operate simultaneously, and do not account for the presence of intervening structures or topography, which could reduce noise at receptor locations. Therefore, the noise levels presented in Table 18 represent a reasonably conservative estimate of actual construction noise.

² Machinery informed by the equipment list assumed by CalEEMod for analysis of the proposed project (see Section 3, Air Quality, and Appendix A).

Table 18 Construction Noise Levels

Construction Equipment	Approximate Leq, dBA ¹		
	50 Feet	1,050 Feet	1,575 Feet
Tractor, Loader, Dozer, Grader, Generator, Air Compressor	86	60	56

See Appendix F for RCNM data sheets and assumptions.

¹ Modeled distances for adjacent industrial uses (50 feet), residences (1,050 feet and 1,575 feet), and Seaside Park (1,575 feet).

The City does not have specific quantitative noise standards or limits related to construction noise. As shown in Table 15, ambient noise at the project site vicinity ranged between 58.2 dBA L_{eq} and 63.2 dBA L_{eq} . As shown in Table 18, construction of the project would generate noise levels up to an estimated 86 dBA L_{eq} at 50 feet from the site and approximately 60 dBA L_{eq} at the nearest noise-sensitive receptors. Construction would generate temporary noise in excess of ambient noise levels at other industrial properties in the project site vicinity. However, these properties are already exposed to noise from heavy machinery operations and would not be considered noise-sensitive receptors. In addition, due to the distance between the project site and nearest noise-sensitive receptors, construction of the project would not generate perceptible noise in excess of ambient noise levels at these locations. Further, Sections 8.80.202A through 8.80.202C of the LBMC prohibits construction activities between the hours of 7:00 PM and 7:00 AM on weekdays and Federal holidays, between the hours of 7:00 PM on Friday and 9:00 AM on Saturday and after 6:00 PM on Saturday, and any time on Sunday). Compliance with the LBMC would limit construction hours so that construction noise does not occur during nighttime sleep hours and disturb noise-sensitive residential receptors. Construction noise would cease after completion of the proposed project and temporary construction noise would be less than significant.

On-Site Operational Noise

The primary on-site noise sources associated with operation of the proposed project would include vehicle circulation noise (e.g., engine startups, alarms, parking), particularly that of medium and heavy-duty trucks; heating, ventilation, and air conditioning (HVAC) equipment; and other miscellaneous industrial equipment. However, the project site is currently an industrial property that is surrounded by other industrial properties (e.g., warehouse, trucking, fabrication, storage, etc.), which are not considered noise-sensitive receptors. Therefore, the project site vicinity is already exposed to typical industrial noise, including truck noise and HVAC noise. Operation of the proposed project would not generate sources of noise that are new to the existing surrounding area. Further, the nearest noise-sensitive receptors (single- and multi-family residences) are located approximately 0.2 mile north of the site across PCH and 0.3 mile east of the site across Magnolia Avenue. Seaside Park is also located approximately 0.3 mile east of the site. At these distances, operation of the proposed project would not generate perceptible noise in excess of ambient noise levels at these locations. The proposed project would also be subject to the City's noise standards for industrial uses, as shown in Table 16 and Table 17. The project would not introduce unusual noise sources new to the project area and all noise generated by the project would be subject to the City's Noise Ordinance standards. On-site operational noise would be less than significant.

Off-Site Traffic Noise

The dominant source of noise in the project area is traffic on nearby roadways, including San Francisco Avenue, 16th Street, and PCH. The proposed project would generate new vehicle and truck trips and increase traffic on area roadways. Access to the project site would be provided via San Francisco Avenue, 16th Street, and PCH; however, project-generated trucks would access the site only through PCH and San Francisco Avenue. As discussed in Section 17, *Transportation*, the proposed project would generate a net total of approximately 473 trips per day, with 65 AM peak hour trips and 60 PM peak hour trips, consisting of a vehicle mix of passenger cars, medium-duty trucks, and heavy-duty trucks. However, this vehicle mix would not be uncharacteristic to the existing industrial area and, considering the existing vehicle mix of passenger cars and trucks, the project's increase to existing traffic noise along San Francisco Avenue and 16th Street would not be significant. Nonetheless, to assess the effect of new vehicle and truck trips on existing roadway noise, San Francisco, PCH, and 16th Street were modeled under Existing, Existing plus Project, Cumulative, and Cumulative plus Project, conditions based on the actual daily traffic volumes calculated as part of the Traffic Impact Analysis (TIA) prepared by Urban Crossroads for the proposed project³. See Appendix F for tables showing the actual daily, AM peak hour, and PM peak hour traffic volumes at studied intersections.

Traffic noise associated with existing and future traffic was estimated using the United States Department of Housing and Urban Development (HUD) Day/Night Noise Level (DNL) Calculator (HUD 2018). Traffic noise model data is provided in Appendix F. Because the City does not have a threshold for transportation noise, this analysis uses recommendations in the FTA's Transit Noise and Vibration Impact Assessment (2018) as guidance to determine whether a change in traffic would expose existing noise-sensitive receptors to a substantial permanent increase in roadway noise. Using the FTA criteria, a significant noise exposure increase is 1 dBA CNEL where the existing ambient noise level is between 70 and 75 dBA CNEL (FTA 2018). As discussed under *Sensitive Receptors* of this section, the nearest noise-sensitive receptors include single- and multi-family residences located north of the site across PCH. Existing industrial uses surrounding the project site are not noise-sensitive receptors. Therefore, while Table 19 compares existing and existing plus project-generated traffic noise for roadway segments of San Francisco Avenue, 16th Street, and PCH that would receive project-generated traffic, FTA significance criteria are only applied for the increase in traffic along PCH roadway segments adjacent to existing residences.

³ To analyze traffic impacts, the TIA uses Passenger Car Equivalent (PCE) factors to estimate daily traffic volumes at studied intersections. As discussed in Section 17, *Transportation*, PCE factors allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, for the purposes of capacity and level of service analyses since, by their size alone, medium- and heavy-duty trucks occupy the same space as two or more passenger cars. However, medium- and heavy-duty trucks generate higher noise levels than passenger vehicles. Therefore, for the purpose of analyzing traffic noise impacts, this analysis uses traffic volumes without the application of PCE factors (see Appendix F) since the actual quantity of medium- and heavy-duty trucks is essential to determining project-generated traffic noise impacts.

Table 19 Comparison of Existing and Existing plus Project Traffic Noise

Roadway Segment	Noise Level (dBA, CNEL)			Significance Threshold ¹ (dBA, CNEL)	Significant Increase?
	Existing [1]	Existing Plus Project [2]	Change in Noise Level [2] – [1]		
San Francisco Ave. between 16 th St. and PCH	68.9	71.1	+2.2	N/A	No
16 th St. between San Francisco Ave. and Oregon Ave.	68.9	68.9	0.0	N/A	No
PCH east of Golden Ave.	71.8	71.9	+0.1	1	No
PCH west of Golden Ave.	72.1	72.6	+0.5	1	No

See Appendix F for HUD DNL Calculator results. Results are rounded to the nearest decimal.

¹ See Table 4-6 in the Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2018.

As shown in Table 19, the addition of project-generated vehicle and truck trips would not generate a significant increase of daily traffic noise at noise-sensitive receptors along PCH. The addition of project-generated daily trips would generate a 2.2 dBA increase of traffic noise along San Francisco Avenue; however, this roadway segment provides access to an industrial area and existing industrial uses surrounding the project site are not noise-sensitive receptors. Project-generated traffic noise associated with a vehicle mix of passenger cars, medium-duty truck, and heavy-duty trucks would not be uncharacteristic to the existing industrial area. Therefore, the project's impact on traffic noise would be less than significant under existing plus project conditions. Table 20 compares cumulative and cumulative plus project traffic noise under year 2020 conditions.

Table 20 Comparison of Year 2020 Cumulative and Cumulative plus Project Traffic Noise

Roadway Segment	Noise Level (dBA, CNEL)					Significance Threshold ¹ (dBA, CNEL)	Significant Increase?
	Existing [1]	Cumulative [2]	Cumulative Plus Project [3]	Change in Noise Level [3] – [1]	Project Specific Change in Noise Level [3] – [2]		
San Francisco Ave. between 16 th St. and PCH	68.9	69.0	71.2	+2.3	+2.2	N/A	No
16 th St. between San Francisco Ave. and Oregon Ave.	68.9	69.1	69.1	+0.2	0.0	N/A	No
PCH east of Golden Ave.	71.8	72.4	72.5	+0.7	+0.1	1	No
PCH west of Golden Ave.	72.1	72.7	73.1	+1.0	+0.4	1	No

See Appendix F for HUD DNL Calculator results. Results are rounded to the nearest decimal.

¹ See Table 4-6 in the Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2018.

As shown in Table 20, the addition of project-generated vehicle and truck trips would not generate a significant increase of daily traffic noise at noise-sensitive receptors along PCH. Similar to the traffic noise increase under existing plus project conditions, the addition of project-generated daily trips would generate an increase of traffic noise along San Francisco Avenue. As discussed in the

preceding analysis, existing industrial uses surrounding the project site along San Francisco Avenue are not noise-sensitive receptors and the traffic noise associated with the proposed industrial use would be compatible with the existing industrial area. Therefore, the project's impact on traffic noise would be less than significant under cumulative plus project conditions.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Operation of the proposed project would potentially generate ground-borne vibration from the use of industrial machinery, including heavy-duty trucks. However, the project site is surrounded by other industrial uses, which are already exposed to vibration from heavy machinery operations and would not be sensitive receptors. Therefore, this analysis considers vibration impacts only from project construction. To determine ground-borne vibration impacts, vibration was modeled at the nearest sensitive receptors; consisting of single- and multi-family residences located approximately 1,050 feet (0.2 mile) north of the site across PCH. Additional single- and multi-family residences and Seaside Park are located approximately 1,575 feet (0.3 mile) east of the site across Magnolia Avenue. Construction vibration was also modeled at 50 feet to determine construction vibration levels at adjacent industrial uses.

Vibration levels were calculated using the VdB of the highest impact pieces of equipment that would be used during project construction, which are the roller and dozer (see Table 18). Table 21 lists ground-borne vibration levels from a roller and dozer at 50 feet, 1,050 feet, and 1,575 feet from the source.

Table 21 Vibration Levels for Construction Equipment

Equipment	Approximate VdB ¹		
	50 Feet	1,050 Feet	1,575 Feet
Roller	85	46	40
Dozer	78	38	33
Loading Truck	77	37	32

See Appendix F for vibration modeling data sheets.

¹ Modeled distances for adjacent industrial uses (50 feet), residences (1,050 feet and 1,575 feet), and Seaside Park (1,575 feet).

As shown in Table 21, operation of a loading truck, dozer, and roller would generate peak vibration levels of approximately 85 VdB at 50 feet from the site and 46 VdB at the nearest noise-sensitive receptors. Although vibration would exceed 75 VdB (the threshold between barely perceptible and distinctly perceptible) at adjacent industrial properties, such events would be intermittent and relatively short. In addition, due to the distance between the project site and nearest noise-sensitive receptors, vibration would not exceed 75 VdB at these locations. According to Sections 8.80.202A through 8.80.202C of the LBMC, construction activities are prohibited between the hours of 7:00 PM and 7:00 AM on weekdays and Federal holidays, between the hours of 7:00 PM on Friday and 9:00 AM on Saturday and after 6:00 PM on Saturday, and any time on Sunday. Compliance with the City's permitted hours of construction would further ensure that noise-sensitive residential receptors are not disturbed by construction vibration during nighttime sleep hours. In addition, according to FTA

vibration levels, ground-borne vibration would not reach levels that could cause damage (100 VdB) to structures near the project site. Therefore, impacts from vibration would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

As discussed in Section 9, *Hazards and Hazardous Materials*, the nearest aircraft facility to the project site is the Long Beach Airport approximately three miles northeast of the project site. According to the Los Angeles County Airport Land Use Commission (ALUC), the project site is outside the influence area of the airport (ALUC 2003). Although the project site would potentially be subject to occasional aircraft overflight noise, the proposed use is not noise sensitive and such occurrences would be intermittent and temporary. In addition, there are no private airstrips near the project site. Therefore, the project would not result in noise impacts related to airports for people residing or working at the project site and its vicinity. Impacts would not occur.

NO IMPACT

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14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

According to the California Department of Finance (DOF), the City of Long Beach has an estimated population of 478,561 with an average household size of 2.83 persons (DOF 2018). The Southern California Association of Governments (SCAG) estimates a population increase to 484,500 by 2040 which is an increase of 1.24 percent or 5,939 persons (SCAG 2016). The project does not include residences and, therefore, would not directly cause population growth. The project would create jobs that could indirectly cause population growth through employees that may relocate to the area. According to the SCAG 2001 Employment Density Study Summary Report, 94,872-sf of warehouse facilities would generate approximately 63 employees (94,872-sf at 1,518 sf per employee) (SCAG 2001). However, it is anticipated that employees would mainly come from the local existing labor workforce and generally would not relocate to the City of Long Beach. Therefore, the proposed project would not cause a substantial increase in population nor induce unplanned population growth. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Because no existing housing is located on site, the proposed project would not displace existing housing or people and would not necessitate the construction of replacement housing elsewhere. No impact would occur.

NO IMPACT

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15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 any of the public services:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Fire protection is provided by the Long Beach Fire Department (LBFD). The nearest fire station to the project site is LBFD Station No. 3 located at 1222 Daisy Ave, Long Beach, CA 90813, approximately one mile southeast. As identified in Chapter 18.48 of the LBMC, the City of Long Beach has adopted the California Fire Code (2016 edition). The Fire Code contains regulations related to construction, maintenance and design of buildings and land uses. The proposed project would be required to adhere to all Fire Code requirements.

The proposed project would increase development intensity on the project site, which would incrementally increase demand for fire protection services. However, the proposed project is an infill development within the existing service area of the LBFD. Additionally, the project site is not located in a Fire Hazard Severity Zone and thus would not be exposed to an increased risk of wildfires. (Cal Fire 2007). The proposed project would not place an unanticipated burden on fire protection services and would therefore not affect response times or service ratios such that new or expanded fire facilities would be needed. Additionally, the LBFD would be required to review project activities and site plans prior to implementation of the portions project that are in their respective

jurisdictions. Based on verbal communication with the LBDF Deputy Fire Marshal, LBFD has adequate capabilities to serve the proposed project (LBFD 2019). Therefore, the project would not create the need for new or expanded fire protection facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the 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?

Police protection services in Long Beach are provided by the Long Beach Police Department (LBPD). LBPD consists of approximately 800 sworn police officers and total staffing of over 1,200 employees (LBPD 2019). Based on a current total population of 478,561 (DOF 2019), the current officer to population ratio is 1.7 sworn officers per 1,000 residents. The Patrol Bureau includes one specialized Field Support Division and three geographical divisions: North, East and West. The project site is served by the LBPD West Division Station, located at 1835 Santa Fe Avenue, approximately 1.2 miles west of the project site. The proposed project would generate approximately 63 employees, some that may contribute to an increase of the City's population. The proposed project would not cause substantially delayed response times, degraded service ratios or necessitate construction of new facilities, due to the relatively small size of the development and the location in an already developed and well served area. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The proposed project includes the demolition of existing buildings and construction of two buildings associated with industrial and office uses. The proposed project does not include additional residences that would substantially increase the local population and necessitate new schools. The project site is served by Long Beach Unified School District (LBUSD). Because the proposed project would not generate additional students in the LBUSD or directly affect any schools, no impact would occur.

NO IMPACT

- a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

Recreational amenities in the City of Long Beach include 170 parks and 26 community centers, providing more than 3,100 acres of developed for recreational space (DPRM 2018). Based on a population of 478,561 residents, the City's current parkland ratio is approximately 6.5 parkland acres per 1,000 residents. The desired standard stated in the 1975 Quimby Act is 3 acres of parkland per 1,000 residents. By this standard, the City of Long Beach has an adequate amount of open space on a per population basis.

The project site is located approximately 1.6 mile north of Caesar E. Chavez Park, which is a 15-acre park that includes two playgrounds, an amphitheater, picnic areas, a large meadow, and a half-court basketball court. The proposed warehouse/manufacturing project would not generate residents or increase the demands on existing parks in the City. Therefore, no impact would occur.

NO IMPACT

- a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

Operation of the project would not generate residents or increase the demand for usage of existing government facilities in the City. Therefore, no impact would occur.

NO IMPACT

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16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *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?*
- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

As discussed above under Section 14, *Population and Housing*, the project would not generate a direct increase in population growth on the project site; therefore, the proposed project would not directly affect any existing parks or increase demand for parks. Because the project would involve warehouse/manufacturing development that would not provide any recreational facilities on-site or generate demand for recreational facilities, no adverse impact related recreation would occur. Furthermore, as mentioned in Section 15, *Public Services*, recreational amenities in the City of Long Beach include 170 parks and 26 community centers, providing more than 3,100 acres of developed for recreational space (DPRM 2018). Based on a population of 478,561 residents, the City's current parkland ratio is approximately 6.5 parkland acres per 1,000 residents. The desired standard stated in the 1975 Quimby Act is three acres of parkland per 1,000 residents. By this guideline standard, the City of Long Beach has an adequate amount of open space for recreational purposes, on a per population basis.

NO IMPACT

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Trip Generation

Urban Crossroads conducted a Traffic Impact Analysis (TIA) for the project, dated March 6, 2019 (see Appendix G). The TIA was peer reviewed by Linscott, Law and Greenspan Engineers (LLG) (see Appendix H). Trip generation estimates for the project site were based on trip generation rates from the Institute of Transportation Engineers (ITE), 10th Edition Trip Generation Manual (2017) for General Light Industrial (ITE 110). Passenger car equivalent (PCE) factors have been applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). Consistent with standard traffic engineering practice in Southern California, PCE factors have been utilized due to the expected heavy truck component for the proposed project's land use. PCE factors allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, for the purposes of capacity and level of service analyses. PCE factors are applied to large truck types such as large two-axles, three-axles, 4+-axles. A PCE factor of 1.5 has been applied to large 2-axle trucks, a factor of 2.0 for 3-axle trucks and a factor of 3.0 for 4+-axle trucks.

Trip generation rates used to estimate traffic generated by the project in terms of PCE and actual vehicles are shown in Table 22. As shown on Table 22, the proposed project would generate a net total of approximately 619 PCE trip ends per day with 87 PCE AM peak hour trips and 79 PCE PM peak hour trips. A summary of trip generation for the proposed project in terms of actual vehicles is also shown in Table 22, which indicates the Project would generate a net total of approximately 473 trips per day with 65 AM peak hour trips and 60 PM peak hour trips.

Table 22 Net Estimated Project Trip Generation

Land Use	Quantity	Units ¹	Morning Peak Hour			Afternoon Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Project Trip Generation Summary (Actual Vehicles)									
Warehouse ¹	95.373	TSF							
Passenger Cars			47	6	53	6	42	48	378
Truck Trips									
2-axle			2	0	2	0	2	2	16
3-axle			2	0	2	0	2	2	20
4+-axle			7	1	8	1	7	8	59
Net Truck Trips			11	1	12	1	11	12	95
Proposed Project Total (Actual Vehicles)			58	7	65	7	53	60	473
Project Trip Generation Summary (PCE) ¹									
Warehouse	95.373	TSF							
Passenger Cars			47	6	53	6	42	48	378
Truck Trips									
2 -axle			3	0	3	0	3	3	24
3-axle			5	1	6	1	4	5	39
4+-axle			22	3	25	3	20	23	178
Net Truck Trips			30	4	34	4	27	31	241
Total Trips Generated	36	DU	77	10	87	10	69	79	619

TSF = thousand square feet

Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

PCE factors: 1.5 for 2-axle, 2.0 for 3-axle, and 3.0 for 4+-axle

Vehicle mix source: ITE Trip Generation Handbook, 2017. Truck Mix Source: City of Fontana Truck Trip Generation Study (Land Use 150), August 2003.

¹ The two proposed buildings will total a square footage of 94,872; the individual building sizes will be 48,657 SF and 46,215 SF, respectively. Thus, the TIA conservatively analyses 501 feet over what is being proposed.

Source: Urban Crossroads 2019. See Appendix G

Analysis Methodology

The potential impact study area was defined in conformance with the requirements of the City of Long Beach traffic study guidelines. Based on these guidelines, the area to be studied includes any intersections at which the proposed project will add 50 or more peak hour trips. Four study area intersection locations, shown on Exhibit 1-2 of the TIA (see Appendix G) and listed in below, were selected for the TIA based on the City of Long Beach's traffic study requirements that require analysis of intersection locations in which a proposed project is anticipated to contribute 50 or more peak hour trips.

1. Golden Avenue/San Francisco Avenue and PCH
2. San Francisco Avenue and Frontage Road/Driveway
3. San Francisco Avenue and 16th Street
4. San Francisco Avenue and Driveway 1

The four study intersections were selected for evaluation utilizing the Intersection Capacity Utilization (ICU) methodology for signalized intersections and the Highway Capacity Manual (HCM) for unsignalized intersections. The ICU methodology compares the volume of traffic using the intersection to the capacity of the intersection. The volume to capacity ratio is then correlated to a performance measure known as Level of Service (LOS) ranging from LOS A (free-flow conditions) to LOS F (extreme congestion and system failure). Similarly, the HCM methodology compares the volume of traffic using the intersection to the capacity of the intersection to calculate the delay associated with the traffic control at the intersection. The intersection delay is then correlated to an LOS performance measure.

Significance Thresholds

Mitigation is required for any signalized intersection where project traffic causes the intersection to deteriorate from LOS D to LOS E or LOS F, or if the project traffic causes an increase in the volume to capacity (v/c) ratio of 0.02 or greater when the intersection is operating at LOS E or LOS F in the pre-project condition. Mitigation is required for any unsignalized intersection where the project traffic increases delay by two percent or greater when the entire intersection is operating at LOS E or LOS F in the pre-project condition.

Analysis Scenarios

The following scenarios were evaluated for the previously listed intersections:

- Existing (2018)
- Existing plus Project
- Opening Year Cumulative (2020), Without and With Project

Existing and Existing plus Project Conditions

Existing plus Project peak hour traffic operations were evaluated for the study area intersections. The intersection analysis results are summarized in Table 23, which indicates the study area intersections would continue to operate at an acceptable LOS during the peak hours with the addition of project traffic. Existing plus project conditions are shown on Exhibit 5-2 of the TIA (See Appendix G). The intersection operations analysis worksheets for existing plus project conditions are included in Appendix 5.1 of the TIA. Impacts would be less than significant.

Table 23 Existing and Existing plus Project Conditions

Intersection	Peak Hour Volume/Capacity – LOS			
	Existing		Existing plus Project	
	Morning	Afternoon	Morning	Afternoon
Golden Av./San Francisco Av. & PCH (CA-1)	0.522 - A	0.564 - A	0.526 - A	0.591 - A
San Francisco Av. & Driveway	7.3 - A	8.0 - A	7.8 - A	8.5 - A
San Francisco Av. & 16th Street	9.8 - A	8.9 - A	9.7 - A	9.5 - A
San Francisco Av. & Driveway 1	–	–	9.1 - A	9.2 - A
Source: Urban Crossroads 2019 (see Appendix G)				

Opening Year Cumulative (2020), Without and With Project Conditions

LOS calculations were conducted for the study intersections to evaluate their operations under Opening Year Cumulative Without Project conditions, with roadway and intersection geometrics. As shown in Table 24, the study area intersections are anticipated to continue to operate at an acceptable LOS during the peak hours. A summary of the peak hour intersection LOS for Opening Year Cumulative Without and With Project conditions are shown on Exhibits 6-3 and 6-4, respectively of the TIA (see Appendix G). The intersection operations analysis worksheets for Opening Year Cumulative Without and With Project traffic conditions are included in Appendix 6.1 and Appendix 6.2 of the TIA, respectively. Impacts would be less than significant.

Table 24 Opening Year Cumulative (2020) Conditions

Intersection	Peak Hour Volume/Capacity – LOS			
	2020 Without Project		2020 With Project	
	Morning	Afternoon	Morning	Afternoon
Golden Av./San Francisco Av. & PCH (CA-1)	0.522 - A	0.564 - A	0.526 - A	0.591 - A
San Francisco Av. & Driveway	7.3 - A	8.0 - A	7.8 - A	8.5 - A
San Francisco Av. & 16th Street	9.8 - A	8.9 - A	9.7 - A	9.5 - A
San Francisco Av. & Driveway 1	–	–	9.1 - A	9.2 - A

Source: Urban Crossroads 2019 (see Appendix G)

The proposed project would be limited to site-specific improvements and would not damage the performance or safety of any public transit, bikeway or pedestrian facilities. Sidewalks are provided along key roadways in the project site vicinity, and pedestrian crosswalks with signalized intersections are provided in the project area. The proposed project would maintain the current sidewalks along the project frontage. Existing transit lines along PCH include Long Beach Transit (LBT), Metro and Orange County Transit Authority (OCTA). The project would not conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, and would not otherwise substantially reduce the performance or safety of such facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Urban Crossroads prepared a VMT Assessment, dated March 7, 2019 (see Appendix I). The purpose of the VMT assessment is to evaluate the proposed project based on Senate Bill 743 (SB 743) requirements consistent with Technical Advisory on Evaluating Transportation Impacts in California Environmental Quality Act (CEQA) (December 2018, "2018 Technical Advisory") prepared by State of California Governor's Office of Planning and Research (OPR) and the *City of Long Beach DRAFT Traffic Impact Analysis Guidelines* (October 2018, "2018 TIA Guidelines"). The following discussion is based on the VMT Assessment.

The project area is currently served by Long Beach Transit (LBT) and Torrance Transit (TT), municipal transit agencies serving the City of Long Beach and surrounding communities. The LBT offers 2 services: Local services and a Downtown Passport bus circulator. The shuttle service (Passport) provides service to popular downtown attractions, such as Shoreline Village, the Queen Mary, Aquarium, etc. Aqualink is a 68-foot catamaran, which carries passengers from Downtown Long Beach waterfront to Alamitos Bay Landing. There is also the 49-passenger AquaBus water taxi service. The existing transit stops within a ½ mile of the project site are shown on Exhibit 2 of the VMT Assessment. Currently, the study area is served by LBT Routes 1, 171, 175, and 176 along PCH and LBT Route 181 along Magnolia Avenue. LBT has stops located on PCH, less than ½-mile from the site. The study area is also served by TT (Line 3), which has stops on PCH, also less than ½-mile from the site. The transit frequency at the stops along PCH is every 15-minutes during the morning and afternoon peak commute periods and therefore qualifies as a high-quality transit corridor.

The 2018 TIA guidelines state that a project proposed within ½ mile of a high-quality transit corridor (fixed route bus service with service intervals no longer than 15 minutes during peak commute hours) would have a less than significant impact on VMT. As discussed above, the project site is located within a ½ mile of a high-quality transit corridor (routes along CA-1). The adjacency of transit to the project site supports a reduction in VMT per employee as compared to a location not near transit. For these reasons, impacts would be less than significant.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

The adjacent roadway of San Francisco Avenue appears to be built to its ultimate curb-to-curb width as indicated in the City of Long Beach General Plan Circulation Element as a Major Highway (100-foot right-of-way). However, the proposed project would restripe these roadways to provide the ultimate number of lanes adjacent to their site. Additional curb, gutter and parkway improvements are recommended, as needed for site access, along the project's frontage consistent with City of Long Beach standards as will be specified in the project's final conditions of approval. The following conditions would be implemented to improve site access:

- Curb and Gutter and Sidewalk Improvements: San Francisco Avenue is currently constructed to its ultimate cross-section; however, the curb and gutter and sidewalk shall be improved along the project's frontage in order to accommodate the proposed driveway.
- Driveway Improvements: Driveway 1 shall be controlled by a stop sign on the eastbound approach and a single egress and ingress lane on the driveway.
- On-site Traffic Signing and Striping: On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the Project site.

- **Sight Distance:** Sight distance at each project access point shall be reviewed with respect to standard California Department of Transportation (Caltrans) and City of Long Beach sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

Due to the typical wide turning radius of large trucks, the TIA analyzed truck access to determine appropriate curb radii and to verify that trucks will have sufficient space to execute turning maneuvers. Driveway 1 on San Francisco Avenue is anticipated to accommodate the wide turning radius of the heavy trucks. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in inadequate emergency access?

The proposed project would not result in inadequate emergency access because it would be subject to the Long Beach Fire Department review and acceptance of site plans, and structures prior to occupancy to ensure that required fire protection safety features, including adequate driveway access to buildings and adequate emergency access are implemented and no impact would occur.

NO IMPACT

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. 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
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 Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

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

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 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)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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?*

Tribal cultural resources are defined in Public Resources Code 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1

As part of the process of identifying cultural resources issues in or near the project site, the City sent letters inviting tribes to consult with the City on July 23, 2018. The City requested a response within 30 days of receipt as specified by AB 52. The City received a request for consultation from the San Gabrieleño Band of Mission Indians - Kizh Nation (Gabrieleño). Consultation was held on May 9, 2019. Based on correspondence with the Gabrieleño, there is the potential for the recovery of buried cultural materials during project construction activities (Gabrieleño 2019). Mitigation measures TR-1 through TR-7 would address the potentially significant impacts relating to the unanticipated discovery of archeological resources and human remains during project. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

TR-1 Retain a Native American Monitor/Consultant

The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC’s Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day’s activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal

Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

TR-2 Unanticipated Discovery of Tribal Cultural and Archaeological Resources

Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a “historical resource” or “unique archaeological resource”, time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources 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. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

TR-3 Unanticipated Discovery of Human Remains and Associated Funerary Objects

Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

TR-4 Resource Assessment and Continuation of Work Protocol

Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

TR-5 Kizh-Gabrieleno Procedures for Burials and Funerary Remains

If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.

These remains are to be treated in the same manner as bone fragments that remain intact.

Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

TR-6 Treatment Measures

Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.

Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

TR-7 Professional Standards

Archaeological and Native American monitoring and excavation during construction projects shall be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Water

The Long Beach Water Department (LBWD) primarily relies upon groundwater extracted locally from the Central Basin to meet customer water demands. Additionally, LBWD purchases imported water from Metropolitan Water District (MWD) to make up the difference between demand and groundwater supplies. LBWD also provides recycled water to an increasing number of customers to

replace the use of potable water (LBWD 2015). The City of Long Beach's 2015 Urban Water Management Plan (UWMP) reports total citywide water demand for 2015 at 55,206 acre feet. This is projected to increase by 3,900 acre feet (or 7.1 percent) to 59,106 acre feet in 2040. According to the Long Beach UWMP, the City expects to meet project demand needs for the next 25 years (LBWD 2015). The proposed project would demand an estimated 18.5 million gallons (57 acre-feet [AFY]) of water per year according to CalEEMod estimations (See Appendix A). Project water demand would represent approximately 1.5 percent of the projected increase in water demand of 3,900 AFY for 2040. Therefore, the proposed project's projected water demand is within the forecast water supply and would not require the construction of new water supply facilities, or expansion of existing facilities. Impacts would be less than significant.

Wastewater

A majority of the City's wastewater is delivered to the Joint Water Pollution Control Plant (JWPCP) of the Los Angeles County Sanitation Districts (LACSD). The remaining portion is delivered to the Long Beach Water Reclamation Plant (LBWRP) of the LACSD. The JWPCP provides advanced primary and partial secondary treatment for 260 million gallons of wastewater per day (MGD), with a permitted capacity for 400 MGD of wastewater (LACSD 2018a), resulting in an available capacity of 140 MGD. The LBWRP provides primary, secondary, and tertiary treatment for 25 MGD of wastewater (LACSD 2018b).

Assuming that 100 percent of the proposed project's water use would be treated as wastewater, 18.5 million gallons per year (50,685 gallons per day or 0.05 MGD) represents approximately 0.03 percent of the remaining daily capacity of 140 MGD of wastewater at the JWPCP. The proposed project would not require the construction of new treatment facilities as the JWPCP would have adequate capacity to treat the wastewater produced by the proposed project. Impacts would be less than significant.

Stormwater DrainageAs discussed in Section 10, *Hydrology and Water Quality*, the proposed project would comply with current NPDES and Los Angeles County MS4 permit regulations pertaining to the retention of stormwater and detention of site runoff into storm drains. Additionally, the Chapter 18.74 of the LBMC regulates the implementation of the LIDs and BMPs for projects in the City. Compliance with these requirements would reduce potential impacts to local stormwater drainage facilities to a less than significant level.

Electric Power, Natural Gas, Telecommunications

The project site is located in an existing developed area of the City of Long Beach, which has existing infrastructure for electric power, natural gas, and telecommunications services. The proposed project would be infill development consistent with long-range plans for the area (see Section 11, *Land Use and Planning*). It would not cause substantial unplanned population growth (see Section 14, *Population and Housing*), would not result in wasteful or inefficient use or energy (see Section 6, *Energy*), and would not require or result in the construction of new electric power, natural gas, or telecommunication facilities or expansion of existing facilities. As such, although the proposed project would create an incremental increase in demand on these facilities, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

As shown in Table 25, LBWD projects that water supplies will be sufficient to meet all demands through the year 2040 during normal, single dry year, and multiple dry year hydrologic conditions. Although historical precedent has consistently proven that water demands decrease in dry years due to voluntary and mandatory water use restrictions and a general increase in public awareness of the need for water conservation, the 2015 UWMP takes a conservative approach to planning by assuming that water demand will remain steady rather than decrease during dry years. LBWD supplies are projected to significantly exceed demands through 2040 even in future dry years if customers do not reduce their demand as they have done in recent droughts (LBWD 2015).

Table 25 Water Supply and Demand in Single and Multiple Dry Years (AF)

Year-Type	2020	2025	2030	2035	2040
Normal Year					
Total Supplies	77,291	77,791	78,291	78,791	79,291
Total Demands	63,643	63,410	63,454	63,609	64,137
Surplus	13,648	14,381	14,836	15,182	15,154
Single Dry Year					
Total Supplies	77,291	77,791	78,291	78,791	79,291
Total Demands	63,643	63,410	63,454	63,609	64,137
Surplus	13,648	14,381	14,836	15,182	15,154
Multiple Dry Year: 1st, 2nd, and 3rd Year Supply					
Total Supplies	77,291	77,791	78,291	78,791	79,291
Total Demands	63,643	63,410	63,454	63,609	64,137
Surplus	13,648	14,381	14,836	15,182	15,154

Units in acre-feet (AF)

Source: LBWD 2015

The proposed project would demand an estimated 18.5 million gallons (57 acre-feet [AFY]) of water per year according to CalEEMod estimations (See Appendix A). As shown in Table 25, the proposed project would represent 0.38 percent of the 15,154 AF surplus of water supply during normal, single and multiple dry year conditions for year 2040. Because sufficient water is available to serve the project during normal, single and multiple dry year conditions, new sources of water supply would be not required to meet project water needs. Impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- 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?*

As discussed above, the proposed project would create demand for an estimated 18.5 million gallons of wastewater per year according to CalEEMod estimations (see Appendix A). Assuming that 100 percent of this water use would be treated as wastewater, 18.5 million gallons per year (50,685 gallons per day or 0.05 MGD) represents approximately 0.03 percent of the remaining daily capacity of 140 MGD of wastewater at the JWPCP. The proposed project would not require the construction of new treatment facilities as the JWPCP would have adequate capacity to treat the wastewater produced by the proposed project. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The proposed project has two components (construction and operation) that would result in the generation of solid waste. Construction of the proposed project would involve site preparation activities that would generate waste materials. However, construction would be temporary. The Long Beach Environmental Services Bureau and private permitted waste haulers provide solid waste service for the City. Waste generated from the project site would be disposed at various facilities based on the contract made between a permitted waste hauler and the building occupant. One such facility is the Republic Services Bel Art Transfer station located approximately three miles north of the project site. Additionally, as reported in the County of Los Angeles 2016 Countywide Integrated Waste Management Plan, 47 percent of the waste received at the Southeast Resource Recovery Facility is generated by the City of Long Beach (DPW 2017). Materials leaving transfer stations could be transported to a variety of destinations. Savage Canyon (Class III) Landfill is the nearest to the project site, although this would not necessarily be the landfill accepting materials generated by the project site, as that would be determined in part by a contract with a waste hauler. The Savage Canyon landfill is located approximately 19 miles north east of the project site. The landfill has a 350 ton per day maximum permitted throughput capacity and receives approximately 293 tons per day. Additionally, the landfill has a remaining capacity of 4.89 million tons and an estimated remaining life of 39 years (DPW 2017).

According to CalEEMod (see Appendix A), the proposed project would generate about 0.24 tons of solid waste per day. This estimate is conservative since it does not factor in any recycling or waste diversion programs. The 0.24 tons of solid waste generated by the project would be approximately 0.42 percent of the available daily capacity of 57 tons at the Savage Canyon landfill. The proposed project would comply with federal, State, and local statutes and regulations related to solid waste and recycling, such as AB 939 and SB 1383, through participation in existing City waste diversion programs. As there is adequate remaining daily landfill capacity in the region to accommodate project-generated waste, impacts related to solid waste and waste facilities would be less than significant.

LESS THAN SIGNIFICANT IMPACT

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

The project site is located in an urban area of the City of Long Beach. Undeveloped wildland areas are not located in proximity to the project site. According CalFire the project site is not located in a "Fire Hazard Severity Zone" or "Very High Hazard Severity Zone" for wildland fires (CalFire 2007). Therefore, the project site is not located near a state responsibility area or classified as having a high fire hazard.

As discussed in Section 15, *Public Services*, the LBFD provides fire prevention, fire protection, and emergency response for the project site and the surrounding Long Beach area. According to the City's General Plan Public Safety Element, the Department of Emergency Preparedness has prepared and adopted citywide emergency procedures (City of Long Beach 1975b). In order to comply with these procedures, all development in the City of Long Beach, including the proposed project, would account for existing emergency routes, response procedures and action plans. Construction of the

proposed project would maintain emergency access to the site and area roadways, and would not interfere with an emergency response plan or evacuation route as described in the Public Safety Element of the City's General Plan. No impact would occur.

NO IMPACT

- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

As discussed above, the project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Long Beach is located directly east of the Palos Verdes Peninsula, and has a mostly south facing coastline along the Pacific Ocean. The city is largely characterized by flat topography with the Palos Verdes hills to the west that generally block strong west to east wind patterns. Prevailing winds in the city and at the project site are influenced mainly by hilly terrain to the west and the coastline to the south, resulting in wind mostly from the west from February through November and from the north from November through January. The project site and surrounding area is not at risk to high windspeeds or slopes that may exacerbate wildfire risk.

The project site is located immediately east of the channelized Los Angeles River; however, the project site and surrounding areas are not at high risk of downslope or downstream flooding or landslides. The project site is located in an urbanized area and is not located in a high fire hazard severity zone (CalFire 2007). Therefore, wildfire risks would not be exacerbated and risks to people or structures due to runoff, post-fire slope instability, or drainage changes would not occur. Residents and visitors of the project site would not be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impact would occur.

NO IMPACT

- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

The project site is located in an urbanized area and is not located in or near a state responsibility area or land classified as a very high fire hazard severity zone (CalFire 2007). The project includes the development of a warehouse/manufacturing facility with associated office support and would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk. The project site would be adequately served by existing facilities and utilities. Therefore, the proposed project would not require additional roads, fuel breaks, emergency water sources, power lines or other utilities that would exacerbate fire risk and no temporary or ongoing impacts to the environment would occur.

NO IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As discussed in Section 4, *Biological Resources*, the project area does not include any mapped essential habitat connectivity areas in the immediate vicinity of the project site. In addition, regional wildlife movement is restricted given the built-out nature of the project area surroundings, and no native resident or migratory fish or wildlife species, established native resident or migratory wildlife corridors, or native wildlife nursery sites exist on the project site. According to the biological assessment conducted by Harmsworth Associates, there are no biological constraints at the project site due to the lack of native habitat on-site (see Appendix B).

Furthermore, as discussed in Section 5, *Cultural Resources*, Section 7, *Geology and Soils*, and Section 18, *Tribal Cultural Resources*, the proposed project would have a less than significant impact on unanticipated cultural resources, paleontological resources, and tribal cultural resources with implementation of Mitigation Measures TR-1 through TR-7 and GEO-2, which would require adherence to existing local, State and federal regulations and specific monitoring procedures related to the discovery of any unanticipated cultural resources, paleontological resources, tribal cultural resources, and human remains during construction activity.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As concluded in Sections 1 through 20, the project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated, with respect to all environmental issues considered in this document. According to the *Traffic Impact Analysis* conducted by Urban Crossroads, there are 15 cumulative projects located in project site vicinity, which include residential, retail, restaurant, medical, warehouse, and industrial uses (Appendix G). The closest related project is located approximately a mile northwest of the project site. Cumulative impacts of several resource areas have been addressed in the individual resource sections, including Air Quality, Greenhouse Gases, Noise, and Transportation/Traffic (See CEQA Guidelines Section 15064(h)(3)). As discussed in Sections 3, *Air Quality*, and Section 8, *Greenhouse Gas Emission*, the proposed project would result in less than significant impacts associated with air quality and greenhouse gas emissions. Noise and traffic analyses both considered increases in traffic and traffic noise under Existing plus Project conditions and concluded that impacts would be less than significant. Some of the other resource areas (agricultural and mineral) were determined to have no impact in comparison to existing conditions. Therefore, the project would not contribute to cumulative impacts related to these issues. Other issues (e.g., geology, hazards, and hazardous materials) are by their nature project specific and impacts at one location do not add to impacts at other locations or create additive impacts. In addition, as discussed in Section 17, *Transportation*, the TIA analyzes potential cumulative traffic impacts (Future Conditions Year 2020), which were found to be less than significant. As such, with implementation of the mitigation measures included in this Initial Study and compliance with applicable rules and regulations, cumulative impacts would be less than significant (not cumulatively considerable).

LESS THAN SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in analyses for air quality, hazards and hazardous materials, and noise, the proposed project would not result, either directly or indirectly, in adverse hazards related to air quality, hazardous materials or noise. Compliance with applicable rules, regulations, and recommended mitigation measure (see HAZ-1, Section 9, *Hazards and Hazardous Materials*) would reduce potential impacts on human beings to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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