

DRAFT

**6th Street and Victoria Avenue Warehouse Project
Initial Study/Mitigated Negative Declaration**

Prepared for:

City of Highland

27215 Base Line

Highland, California 92346

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Acronyms and Abbreviations

| Acronym/Abbreviation | Definition |
|----------------------|--|
| AB | Assembly Bill |
| ACM | asbestos-containing materials |
| ACOE | U.S Army Corps of Engineers |
| ADA | Americans Disability Act |
| AERMOD | American Meteorological Society/Environmental Protection Agency Regulatory Model |
| APN | assessor's parcel numbers |
| AQMP | Air Quality Management Plan |
| ARD | aquatic resource delineation |
| BenMAP | EPA Benefits Mapping and Analysis Program |
| BMP | best management practice |
| BP | business park |
| CAAQS | California Ambient Air Quality Standards |
| CAL FIRE | California Department of Forestry and Fire Protection |
| CalEEMod | California Emissions Estimator Model |
| Caltrans | California Department of Transportation |
| CARB | California Air Resources Board |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CMP | corrugated metal pipe |
| CMP | Congestion Management Program |
| CNEL | Community Noise Equivalent Level |
| CO | carbon monoxide |
| CRHR | California Register of Historic Resources |
| CY | cubic yards |
| dB | decibels |
| dBA | A-weighted decibel |
| DPM | diesel particulate matter |
| EPA | U.S. Environmental Protection Agency |
| EV | electric vehicle |
| EVWD | East Valley Water District |
| FICON | Federal Interagency Committee on Noise |
| FTA | Federal Transit Administration |
| GHG | greenhouse gas |
| HIA | health impact assessments |
| HRA | health risk assessment |
| HVAC | heating, ventilation, and air conditioning |
| I- | Interstate |
| IS | initial study |
| ITE | Institute of Transportation Engineers |
| LOS | level of service |
| LST | localized significance threshold |
| MND | mitigated negative declaration |
| MT | metric tons |

| Acronym/Abbreviation | Definition |
|----------------------|---|
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |
| NPDES | National Pollution Discharge Elimination System |
| NRHP | National Register of Historic Places |
| OEHHA | Office of Environmental Health Hazard Assessment |
| OSHA | Occupational Safety and Health Administration |
| PCE | passenger car equivalent |
| PM | particulate matter |
| REL | reference exposure level |
| ROW | right-of-way |
| RTP | Regional Transportation Plan |
| RWQCB | Regional Water Quality Control Board |
| SB | Senate Bill |
| SBCOG | San Bernardino Council of Governments |
| SBIA | San Bernardino International Airport and Trade Center |
| SBSD | San Bernardino County Sheriff's Department |
| SCAB | South Coast Air Basin |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SCS | Sustainable Communities Strategy |
| SJVAPCD | San Joaquin Valley Air Pollution Control District |
| SLF | Sacred Lands File |
| SMBMI | San Manuel Band of Mission Indians |
| SR | State Route |
| SWPPP | Stormwater Pollution Prevention Program |
| SWRCB | State Water Resources Control Board |
| TAC | toxic air contaminant |
| TCR | tribal cultural resource |
| TIA | traffic impact analysis |
| USGS | U.S. Geological Survey |
| VMT | vehicle miles traveled |
| VOC | volatile organic compounds |
| WQMP | Water Quality Management Plan |
| WRP | Water Reclamation Plant |

1 Introduction

1.1 Project Overview

The City of Highland (City) received an application from Patriot Development Partners (project applicant) requesting the following approvals for development of the 6th Street and Victoria Avenue Warehouse Project (project) located at the northwest corner of 6th Street and Victoria Avenue in Highland, California:

- Conditional Use Permit (CUP 21-007)
- Design Review (DRA 21-005)
- Variance (No. VAR 21-001)
- Parking Reduction
- Tentative Parcel Map (TPM 21-002)

The project includes design review for the construction of an approximately 305,617-square-foot, one-story industrial/warehouse facility on an approximately 12.29-acre (gross) property located in the southern part of the City. The project site is composed of five parcels (Assessor's Parcel Numbers [APNs] 1192-281-09, 1192-281-10, 1192-281-11, 1192-281-12, 1192-281-13, and 1192-281-14). In addition to the industrial/warehouse building, the project would include a landscaping area, passenger vehicle parking spaces, trailer parking spaces, and tractor-trailer loading docks.

1.2 California Environmental Quality Act Compliance

The City is the lead California Environmental Quality Act (CEQA) agency responsible for the review and approval of the proposed project. Based on the findings of the Initial Study (IS), the City has made the determination that a Mitigated Negative Declaration (MND) is the appropriate environmental document to be prepared in compliance with CEQA (California Public Resources Code, Section 21000 et seq.). As stated in CEQA Section 21064, an MND may be prepared for a project subject to CEQA when an IS has identified no potentially significant effects on the environment.

This draft Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the City as lead agency and is in conformance with Section 15070(a) of the CEQA Guidelines (14 CCR 15000 et seq.). The purpose of the MND and the IS Checklist is to determine any potentially significant impacts associated with the proposed project and to incorporate mitigation measures into the project design, as necessary, to reduce or eliminate the significant or potentially significant effects of the project.

1.3 Public Review Process

In accordance with CEQA, a good faith effort has been made during the preparation of this IS/MND to contact affected agencies, organizations, and persons who may have an interest in this project.

In reviewing the IS/MND, affected public agencies and the interested public should focus on the sufficiency of the document in identifying and analyzing the project's possible impacts on the environment. The Draft IS/MND and related documents are available for review on City's website (<https://www.cityofhighland.org/200/Documents-Forms>).

Comments on the IS/MND may be made in writing before the end of the public review period. Following the close of the public comment period, the City will consider this IS/MND and comments thereto in determining whether to approve the proposed project.

Written comments on the IS/MND should be sent to the following address by December 9, 2021.

City of Highland
Planning Department
27215 Base Line
Highland, California 92346
Contact: Kim Stater
Email: kstater@cityofhighland.org

1.4 Initial Study Checklist

Dudek, under the City's guidance, prepared the project's Environmental Checklist (i.e., IS) per CEQA Guidelines Sections 15063–15065. The CEQA Guidelines include a suggested checklist to indicate whether a project would have an adverse impact on the environment. The checklist is found in Section 3 of this document. Following the Environmental Checklist, Sections 3.1 through 3.21 include an explanation and discussion of each significance determination made in the checklist for the project.

For this IS/MND, the following four possible responses to each individual environmental issue area are included in the checklist:

1. Potentially Significant Impact
2. Less-than-Significant Impact with Mitigation Incorporated
3. Less-than-Significant Impact
4. No Impact

The checklist and accompanying explanation of checklist responses provide the information and analysis necessary to assess relative environmental impacts of the project. In doing so, the City will determine the extent of additional environmental review, if any, for the project.

2 Project Description

2.1 Project Location

The project site is located in the southwestern area of the City in western San Bernardino County. The City is bounded by the San Bernardino National Forest to the north and to the east, the City of Redlands to the south, and the City of San Bernardino to the west. The project site is located at the northwestern corner of 6th Street and Victoria Avenue, north of 6th Street, east of Grape Street, south of Cypress Street, and west of Victoria Avenue (Figure 1, Project Location Map).

The project site is composed of six parcels (APNs 1192-281-09, 1192-281-10, 1192-281-11, 1192-281-12, 1192-281-13, and 1192-281-14) (Figure 2, Aerial Overview). Regional access to the project area is provided by Interstate (I-) 10 to the south, I-215 to the west, and State Route (SR) 210 to the east. The site is bounded to the north and west by scattered low-density residential land uses, to the east by business park uses, and to the south by the City boundary, with the City of San Bernardino and the San Bernardino Airport located beyond the City limits.

2.2 Environmental Setting

City of Highland

The City of Highland is a mid-sized California city with approximately 55,000 residents and 18 square miles of territory. Within the City, the pattern of land use transitions from predominantly single and multi-family residential and industrial near the San Bernardino International Airport to predominately single-family residential, commercial, service and civic center uses to the north. The eastern areas of the City are mostly made up of planned development areas with various residential types, parks and open space.

Project Site

The approximately 12.3-acre rectangular-shaped project site is located on the northwestern corner of 6th Street and Victoria Avenue. Of the six parcels that comprise the project site, three parcels are developed with residential uses and the remaining three parcels are undeveloped. Vegetation on the undeveloped parcels is largely composed of ruderal (i.e., weedy) species and grasses and is regularly subject to weed abatement and grazing by horses. A portion of the undeveloped parcels is used for equine activities (i.e., horseback riding and grazing). Barns, horse stalls, and a horse corral are located throughout the site. A drainage ditch is located on the southwestern portion of the site. The ditch receives flows from a City storm drain within Victoria Avenue, as well as runoff from Victoria Avenue, before discharging flows into a 48-inch corrugated metal pipe within 6th Street. Figures 3A–C depict the existing conditions on the project site.

The project site is relatively flat and generally slopes from east to west having approximately 8 feet of fall. The maximum site elevation, located on the western side of the site, is approximately 1,148± feet above mean sea level, while the minimum site elevation, located at the southwest corner, is 1140± feet above mean sea level. Soils on site consist of both fill soils and native soils. Fill soils are present approximately 12 to 18 inches deep and classify as silty sand with some gravel, small cobbles, and minor debris. Native soils on site classify as slightly silty to silty sand with some gravel with occasional cobbles.

The City's General Plan Land Use Map designates the project site as Business Park, and the project site is zoned as Business Park within the Airport Influence Zone (Figure 4, General Plan Land Use and Figure 5, Zoning).

Surrounding Land Uses

The project site is located within a developed part of the City and is surrounded by a mix of urbanized land uses. Specific land uses in the immediate project area are depicted in Table 1, Surrounding Land Uses.

Table 1. Surrounding Land Uses

| Direction | Existing Use | General Plan | Zoning Designation |
|-----------|--|--|---|
| North | Industrial uses and single-family homes | Business Park | Business Park |
| East | Vacant parcel | Business Park | Business Park |
| South | 6th Street, undeveloped land, and the San Bernardino International Airport | City of San Bernardino (High Density Residential) ¹ | City of San Bernardino (R-3, Multi-Family Residential) ¹ |
| West | Grape Street, industrial and residential uses | Low Density Residential | R-1 Single Family Residential |

Note: See Figure 4, General Plan Land Use and Figure 5, Zoning.

¹ This area would be within the Airport Gateway Specific Plan, which is in the planning stages and would primarily include distribution uses.

The area south of the project site is currently designated for high density residential uses; however, the area is within the boundary of the proposed Airport Gateway Specific Plan. The Airport Gateway Specific Plan is a public-private partnership project proposed by the Inland Valley Development Agency, a Joint Powers Authority comprised of members from the County of San Bernardino, the City of Loma Linda, the City of San Bernardino, and the City of Colton. The Airport Gateway Specific Plan encompasses 670 acres, inclusive of parcels in the City of Highland and the City of San Bernardino, that would be designated for a mix of industrial uses. The Airport Gateway Specific Plan would be bound by 6th Street to the north, 3rd Street and the San Bernardino International Airport to the south, SR-210 to the east, and Tippecanoe Avenue on the west. The proposed Airport Gateway Specific Plan would border the project site to the south, with industrial uses replacing the existing residential uses (Figure 6, Airport Gateway Specific Plan). This project is currently undergoing environmental review.

2.3 Project Characteristics

The project would include demolition of the three existing residential structures and construction of an approximately 305,617-square-foot¹ (gross area, inclusive of mezzanine/office spaces), one-story warehouse building on an approximately 12.3-acre site (gross area). The warehouse building would be composed of approximately 295,617 square feet of warehouse space and 10,000 square feet of mezzanine/office space (Figure 7, Site Plan, Figure 8, Conceptual Elevations, and Figures 9A-B, Conceptual Rendering). The warehouse building would have a maximum height of 45 feet when measured from grade. Given that the City's Municipal Code allows

¹ A previous version of the draft project description included a project involving 307,445-square feet of development (an increase of 1,812 square feet over the proposed project). Because the technical analyses and modeling had already been completed at the time that this project change was made, the technical analysis within this environmental documentation analyzes the development of the original, 307,445 square foot project. Given the nominal change in square-footage, no updates to the project's technical analysis were conducted, as any changes would have a less than appreciable effect on outputs. Moreover, given that the change constitutes a decrease in square footage, usage of the original project square footage results in a conservative analysis (i.e., a smaller project would result in a less impactful project).

for a maximum height of 35 feet in the Business Park zone, a minor variance (Variance No.VAR 21-001) is being requested to accommodate the project's height. Internally, the project would have a clear height of 36 feet and would not contain any cold storage space.

Operational Characteristics

The project would support a variety of activities associated with the industrial/warehouse building, including the ingressing and egressing of passenger vehicles and trucks, the loading and unloading of trucks with designated truck courts/loading areas, and the internal and external movement of materials around the project site via forklifts, pallet jacks, yard hostlers, and similar equipment. In addition, the office space would support general internal office activities related to the industrial/warehouse uses.

On- and Off-Site Improvements

The project would also include improvements along the project's street frontage, including landscaping, fencing, and street and sidewalk improvements. A variety of trees, shrubs, and groundcovers would be planted within the project frontage's landscape setback area, within the landscape areas found around the warehouse building, and throughout the project site (Figure 10, Conceptual Landscaping Plan).

Figure 11, Proposed Physical Disturbances, depicts the maximum area that could potentially be disturbed as part of the project for these on- and off-site improvements, including utility connections, as detailed further herein.

Site Access and Parking

Access to the project site would be provided by four driveways: two driveways on the western portion of the site on Grape Street, and two driveways on the eastern portion of the site on Victoria Avenue. The two northern driveways would serve passenger vehicles and trucks and would be full access (i.e., no restrictions on turning movements). The two southern driveways would serve passenger vehicles. The southern driveway along Grape would be full access while the southern driveway on Victoria Avenue would be right-in/right-out.

The project would include a total of 129 passenger parking stalls and 30 high dock door parking stalls. A summary of passenger vehicle parking is provided in Table 2.

Table 2. Summary of Passenger Parking Stalls

| Passenger Parking Stall Type | Number of Stalls |
|-----------------------------------|------------------|
| Standard | 111 |
| Van ADA | 1 |
| ADA | 4 |
| EV Van ADA | 1 |
| EV ADA | 1 |
| EV | 5 |
| Clean Air | 6 |
| Total Passenger Parking Stalls | 129 |
| Trailer Provided | 52 |
| Passenger Parking Stalls Required | 338 |

Note: ADA = Americans Disability Act, EV = Electric Vehicle.

Utility Improvements

The project site is currently served by domestic water, sanitary sewer, electrical, natural gas, and telecommunication service. The project would connect to the existing facilities located on and in the immediate vicinity of the project site, as detailed in following sections and depicted in Figure 12, Conceptual Utilities Plan.

Domestic Water

Domestic water would be provided to the project site by the East Valley Water District (EVWD). The EVWD provides domestic water for the City and for portions of both the City and County of San Bernardino. Water service is provided for residential, commercial, industrial, governmental, and landscaping purposes (City of Highland 2006). A new 2-inch water line would be installed on the eastern side of the project sit to connect to the existing 6-inch water line within the public right-of-way (ROW) along Victoria Avenue.

Sanitary Sewer

Highland's sewer system is maintained by the EVWD, which has joint powers with the City of San Bernardino to accept all sewage generated within the EVWD's boundaries. The sewage from Highland is treated at the San Bernardino Water Reclamation Plant (WRP), operated by the San Bernardino City Municipal Water District (City of Highland 2006). Two new 6-inch sewer lines would connect to the existing 21-inch sewer line within Victoria Avenue and the existing 8-inch sewer line within Grape Street. Future treatment will take place at the EVWD Sterling Natural Resources Plant, currently under construction at the intersection of Del Rosa Drive, between 5th and 6th Streets.

Natural Gas, Electrical Service, and Telecommunications

The Southern California Gas Company would provide natural gas service to the project site. The project would connect to either an 8-inch gas line within 6th Street or a 3-inch gas line within Victoria Avenue. an existing 4-inch-diameter underground gas line within Woodruff Avenue.

Southern California Edison would provide electric service. The project would connect to existing electrical lines within Grape Street or Victoria Avenue. Existing overhead lines would be undergrounded along the project site's frontage. Telecommunication services are provided by AT&T. The project would connect to these existing facilities and would involve the undergrounding of existing overhead lines along the project site's frontage.

Storm Drainage

The project site is not currently served by storm drainage infrastructure. Under the existing conditions, the site is mostly composed of pervious surfaces with scattered weeds, native grasses, and exposed dirt surfaces (with the exception of existing residences in the northwest corner, east-central, and south-central areas of the site). The topography of the project site slopes east to west with about 8 feet of fall. Existing runoff sheet flows westerly to Grape Street, continues south to 6th Street, and ultimately discharges to the City Creek Channel, Santa Ana River, and finally to the Prado Basin. Additionally, the project site contains a drainage ditch within the southeastern portion of the site that receives stormwater from a City storm drain line to the north within Victoria Avenue, as well as runoff from Victoria Avenue. Flows within the drainage ditch then flow south to an existing 48-inch corrugated metal pipe within 6th Street, which is ultimately connected to the City Creek Channel and Santa Ana River.

The project would involve the construction of a new engineered storm drain system to collect and treat on-site and off-site stormwater runoff, as depicted in Figure 13, Conceptual Stormwater Plan. On-site stormwater will be

collected via a series of roof drains, curbs, and gutters, and catch basins before being conveyed to an on-site underground infiltration basin located in the western portion of the site. Prior to entering the infiltration basins, stormwater would be pretreated via a continuous deflection separation system, which separates and traps debris, sediment, oil, and grease from stormwater runoff. The infiltration basins would be designed to allow for stormwater flows to infiltrate into the soils. The infiltration basin would be sized to capture and infiltrate flows for a 100-year design storm, consistent with the San Bernardino County Hydraulics Manual. During an extreme storm event greater than a 100-year storm, flows would be discharged through a proposed 4-foot-wide parkway culvert on the corner of 6th Street and Grape Street that would serve as an emergency spillway².

The project would also involve the removal of the existing drainage ditch along Victoria Avenue and its replacement with an 18-inch and 42-inch storm drain that will connect to the existing 48-inch corrugated metal pipe within 6th Street. The new storm drain would still be connected to the existing City storm drain line and a parkway catch basin would be installed along Victoria Avenue so that runoff within Victoria Avenue would still be captured. Two 4-foot by 4-foot bypass curb inlets would be installed to filter off-site debris and trash from runoff on Victoria Avenue.

2.4 Project Construction and Phasing

The project applicant intends to commence construction on or around February 1, 2022. It is anticipated that construction would take approximately 9 months, ending in October 2022. Table 3 provides a tentative project construction schedule, as used in air quality and greenhouse gas (GHG) emissions impact analysis (refer to Section 3.3 Air Quality, and Section 3.8, Greenhouse Gas Emissions, of this IS/MND; also see Appendix A-1, Air Quality, Greenhouse Gas Emission, and Energy Modeling Inputs and Outputs).

Table 3. Anticipated Project Construction Schedule

| Construction Phase | Duration | Phase Start Date | Phase End Date |
|-----------------------|----------|--------------------|--------------------|
| Demolition | 1 month | February 1, 2022 | February 28, 2022 |
| Site Preparation | 1 month | March 1, 2022 | March 14, 2022 |
| Grading | 1 month | March 15, 2022 | April 25, 2022 |
| Building Construction | 4 months | April 26, 2022 | August 19, 2022 |
| Paving | 1 month | August 20, 2022 | September 16, 2022 |
| Architectural Coating | 1 month | September 17, 2022 | October 13, 2022 |

2.5 Project Approvals

The actions and/or approvals that the City needs to consider for the proposed project include, but are not limited to, the following. This list is preliminary, and may not be comprehensive:

Lead Agency Approvals

- Conditional Use Permit
- Design Review

² As discussed in further detail in Section 3.10, Hydrology and Water Quality, flows that would be discharged under emergency conditions would be less than what would normally be discharged under the existing conditions.

- Tentative Parcel Map
- Variance
- Parking Reduction
- Tree Removal Permit

Subsequent non-discretionary approvals (which would require separate processing through the City) would include, but may not be limited to, a demolition permit, grading permit, building permits, and occupancy permits.

3 Initial Study Checklist

1. Project title:

6th Street and Victoria Avenue Warehouse Project

2. Lead agency name and address:

City of Highland, Planning Department
27215 Base Line
Highland, California 92346

3. Contact person and phone number:

Kim Stater, Assistant Community Development Director
27215 Base Line
Highland, California 92346
909.864.6861 Ext. 259
909.862.3180 (Fax)
kstater@cityofhighland.org

4. Project location:

The project site is located at a 12.3-acre property at the northwestern corner of 6th Street and Victoria Avenue in the City of Highland, California (Figure 1). The project site is composed of six parcels (APNs 1192-281-09, 1192-281-10, 1192-281-11, 1192-281-12, 1192-281-13, and 1192-281-14). The project site is north of 6th Street, east of Grape Street, south of Cypress Street, and west of Victoria Avenue.

5. Project sponsor's name and address:

Patriot Development Partners
12126 West Sunset Boulevard
Los Angeles, California 90094

6. General plan designation:

Business Park

7. Zoning:

Business Park

8. Description of project:

The project would include demolition of the three existing residential structures and construction of an approximately 305,617-square-foot (gross area, inclusive of mezzanine/office spaces), one-story warehouse building on an approximately 12.3-acre site (gross area). The warehouse building would be composed of approximately 295,617 square feet of warehouse space and 10,000 square feet of mezzanine/office space (Figure 7, Site Plan, Figure 8, Conceptual Elevations, and Figure 9A-B, Conceptual Rendering).

9. Surrounding land uses and setting:

The project site is located within a developed part of the City and is surrounded by a mix of urbanized land uses. Specific land uses in the immediate project area include the following:

- **North:** Multi and single-family homes and mixed uses
- **East:** Victoria Avenue, vacant parcels, industrial, religious and institutional uses
- **South:** 6th Street, the San Bernardino International Airport and the City of San Bernardino
- **West:** Grape Street, residential and mixed uses

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

No outside public agency approvals are required.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Please refer to Section 3.5, Cultural Resources, and 3.18, Tribal Cultural Resources, of this IS/MND.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," 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 type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

Determination

On the basis of 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 in 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 “potentially significant unless mitigated” 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 potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature



Date

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less Than Significant With Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - d. The significance criteria or threshold, if any, used to evaluate each question; and
 - e. The mitigation measure identified, if any, to reduce the impact to less than significance

3.1 Aesthetics

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------------|---|-------------------------------------|-------------------------------------|
| I. AESTHETICS – 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 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 which would adversely affect day 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?

No Impact. Scenic vistas and other important visual resources are typically associated with natural landforms such as mountains, foothills, ridgelines, and coastlines. The project site is located within in an area with generally flat terrain near the San Bernardino International Airport. Major scenic vistas that are visible from the project site are the San Bernardino and San Gabriel Mountain ranges. They are located approximately 4 miles northeast and 25 miles northwest of the project site, respectively. The City of Highland’s General Plan aims to preserve the views of the San Bernardino Mountains and stretches of open space along City Creek and the Santa Ana River (City of Highland 2006). The project site is located 1.8 miles away from the nearest stretches of open space along City Creek and the Santa Ana River. Based on these distances, as well as the presence of existing intervening natural topographical variations and human-made urban features, the project site is not located within the direct viewshed of these scenic vistas. Overall, the project site is located well outside the viewshed of any scenic vistas or other important visual resources. Therefore, no impacts associated with scenic vistas would occur.

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

No Impact. Scenic highways and routes are a unique component of the circulation system, as they traverse areas of unusual scenic or aesthetic value. The closest officially designated State Scenic Highway is

California SR 38, located 22 miles east of the project site (Caltrans 2018). Based on this distance and intervening natural topography and human-made development, the project site is not located within the viewshed of this officially designated state scenic highway. Therefore, no impacts associated with state scenic highways would occur.

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

Less-than-Significant Impact. Visual character describes the aesthetic setting of a project area. The project is located within an urbanized area of the City and is surrounded by similar light industrial/business park land uses. Section 20171 of the California Public Resources Code defines an “urbanized area” as “an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.” As of January 1, 2021, the California Department of Finance estimated the population of Highland to be 55,060 persons (DOF 2021). However, because the City of Highland is bordered by the City of San Bernardino, which has a population that exceeds 100,000 persons, regarding the determination of significance under this threshold, the project would be considered to result in a significant adverse impact if the project design would conflict with applicable zoning and other regulations governing scenic quality. The proposed project would be consistent with the designated business park zoning per the City's Zoning Map.

To ensure that both current and future development within the City is designed and constructed to conform to existing visual character and quality of the surrounding built environment, the City's Municipal Code includes design standards related to building size, height, and setbacks, as well as landscaping, signage, and other visual considerations. The project is consistent with all applicable regulations outlined in the City's Municipal Code related to scenic quality with the exception of Section 16.24.040, which states that building heights are not to exceed 35 feet within the Business Park zone. The proposed warehouse building would have a maximum height of 45 feet. Given that the City's Municipal Code allows for a maximum height of 35 feet in the Business Park Zone, a minor variance (Variance No. VAR 21-001) is being requested to accommodate the project's height. This request for additional height is consistent with other industrial uses in the vicinity. With approval of the minor variance, the project would not conflict with the City's Municipal Code.

The project would be required to apply for a design review by the City's planning commission. This design review is intended to ensure that the proposed project would not interfere with existing or future development within the City, and to ensure the project is consistent with the applicable elements of the general plan. Views of utilitarian project components, such as loading areas and mechanical equipment, would be screened from public view to the maximum extent practicable through the project's site plan design. Parkway and setback landscape areas along the public ROW would soften views of the project site and enhance the visual quality of the project.

These project components, as well as the City's review of the project's design, would ensure that the project would not degrade the existing visual character and quality of the area. Therefore, impacts would be less than significant.

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

Short-Term Construction Impacts

No Impact. In accordance with the City's Municipal Code Section 8.50.050, Controlled Hours of Operation, construction hours are limited to between the hours of 7:00 a.m. and 10:00 p.m. However, the project's proximity to sensitive receptors would limit construction from 7:00 a.m. to 6:00 p.m. (see Section 3.13, Noise, for more details). As such, project construction would be limited to daytime hours and nighttime lighting would not be required until the project is operational. Therefore, no short-term construction impacts associated with light and glare would occur.

Long-Term Operational Impacts

Less-than-Significant Impact. Consistent with Section 16.40.160 of the City's Development Code, all lighting used on the project site is required to be directed and/or shielded to prevent the light from adversely affecting adjacent parcels, and no structures or features that create adverse glare effects are permitted. Thus, all exterior lighting would be shielded/hooded to prevent light trespass onto nearby properties. A Photometrics Plan, prepared by a certified engineer, must be approved by the Planning Commission in conjunction with the Conditional Use Permit. Additionally, the project would use a variety of non-reflective materials, and although some new reflective improvements (i.e., windows and building front treatments) would be introduced onto the project site, the project as a whole would not be considered a source of glare in the project area. Therefore, long-term impacts associated with light and glare would be less than significant.

3.2 Agriculture and Forestry Resources

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-------------------------------------|
| II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | | | | |
| a) 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? | <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"/> |

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-------------------------------------|
| 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?***

No Impact. The project site currently consists of developed and vacant land and is not used for agricultural purposes. The General Plan designates the land use at the site as Business Park and the City's Zoning Map identifies the site as Business Park (City of Highland 2006; City of Highland 2012). According to the California Department of Conservation Important Farmland Finder (CDOC 2016), the project site is identified as "Urban and Built-Up Land". The project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (collectively, "Important Farmland"). The project would not occur within any farmland locations and would not result in the conversion of Prime or Unique Farmland or Farmland of Statewide Importance. Therefore, no impacts associated with the conversion of Important Farmland would occur.

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

No Impact. Refer to Section 3.2(a).

- 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))?***

No Impact. Refer to Section 3.2(a). The project site is zoned as Business Park and is located within a developed area. There are no areas zoned for forest land within the vicinity of the project site. Therefore, no impacts associated with forest land would occur.

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

No Impact. Refer to Section 3.2(c). The proposed project would not involve the conversion of forest land to non-forest use. Therefore, no impact with forest land would occur.

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

No Impact. Refer to Section 3.2(a). The project site is zoned as Business Park and is located within a developed area. Further, no off-site improvement associated with the project would result in changes to other properties designated as Farmland or forest land. There are no areas zoned for agricultural use or identified as forest land within the vicinity of the project site. Therefore, no impacts associated with forest land would occur.

3.3 Air Quality

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|--------------------------|
| III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. 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 checked="" type="checkbox"/> | <input 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"/> |

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

Less-than-Significant Impact. The project site is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, San Bernardino Counties, and all of Orange County, and is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD).

SCAQMD administers SCAB's Air Quality Management Plan (AQMP), which is a comprehensive document outlining an air pollution control program for attaining the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The most recently adopted AQMP for SCAB is the

2016 AQMP (SCAQMD 2017).³ The 2016 AQMP focuses on available, proven, and cost-effective alternatives to traditional air quality strategies while seeking to achieve multiple goals in partnership with other entities seeking to promote reductions in GHGs and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017).

The purpose of a consistency finding with regard to the AQMP is to determine if a project is consistent with the assumptions and objectives of the 2016 AQMP and if it would interfere with the region's ability to comply with federal and state air quality standards. SCAQMD has established criteria for determining consistency with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3, of the SCAQMD CEQA Air Quality Handbook. These criteria are as follows (SCAQMD 1993):

Consistency Criterion No. 1: Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP.

Consistency Criterion No. 2: Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

To address the first criterion, project-generated criteria air pollutant emissions have been estimated and analyzed for significance and are addressed under Section 3.3(b). Detailed results of this analysis are included in Appendix A-1. As presented in Section 3.3(b), the project would not generate construction or operational criteria air pollutant emissions that exceed the SCAQMD's thresholds, and the project would therefore be consistent with Criterion No. 1.

The second criterion regarding the potential of the project to exceed the assumptions in the AQMP or increments based on the year of project buildout and phase is primarily assessed by determining consistency between the project's land use designations and its potential to generate population growth. In general, projects are considered consistent with, and not in conflict with or obstructing implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (SCAQMD 1993). The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, and employment by industry) developed by the Southern California Association of Governments (SCAG) for its 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2016). SCAQMD uses this document, which is based on general plans for cities and counties in the SCAB, to develop the AQMP emissions inventory (SCAQMD 2017).⁴ The SCAG RTP/SCS and associated Regional Growth Forecast are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans.

The City's Zoning Map designates the project site as Business Park (BP). According to Section 16.24.020 (A), the primary purpose of the BP District is to provide appropriate regulations and suitable locations for

³ The SCAQMD has initiated the development of the 2022 AQMP to address the attainment of the 2015 8-hour ozone standard (70 parts per billion) for the SCAB and the Coachella Valley. Preliminary rule development for the 2022 AQMP is expected to begin in July 2021 including control measures developed through Residential and Commercial Buildings and Mobile Source Working Groups.

⁴ Information necessary to produce the emissions inventory for SCAB is obtained from the SCAQMD and other governmental agencies, including the California Air Resources Board (CARB), California Department of Transportation, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into its Travel Demand Model for estimating/projecting vehicle miles traveled and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2016–2040 RTP/SCS are integrated in the 2016 AQMP (SCAQMD 2017).

light industrial, research and development, and office-based firms seeking pleasant and attractive working environments, and for business support services and commercial uses requiring large parcels (City of Highland 2021). The Municipal Code identifies Warehousing and Wholesaling as permitted, subject to a conditional use permit application (City of Highland 2021). Therefore, the project would be consistent with the existing zoning of the project site and does not propose a change in land use designation. As such, since the proposed project is not anticipated to result in residential population growth or generate an increase in employment that would conflict with existing employment-population projections, it would not conflict with or exceed the assumptions in the 2016 AQMP. Accordingly, the project is consistent with the SCAG RTP/SCS forecasts used in development of the SCAQMD AQMP.

In summary, based on the considerations presented for the two criteria, impacts relating to the project's potential to conflict with or obstruct implementation of the applicable AQMP would be less than significant.

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

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

A quantitative analysis was conducted to determine whether the project might result in emissions of criteria air pollutants that may cause exceedances of the NAAQS or CAAQS or cumulatively contribute to existing nonattainment of ambient air quality standards. Criteria air pollutants include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide, particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM_{2.5}), and lead. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are important because they are precursors to O₃, as well as CO, sulfur oxides (SO_x), PM₁₀, and PM_{2.5}.

Regarding NAAQS and CAAQS attainment status,⁵ the SCAB is designated as a nonattainment area for federal and state O₃ and PM_{2.5} standards (CARB 2019; EPA 2020). The SCAB is also designated as a nonattainment area for state PM₁₀ standards; however, it is designated as an attainment area for federal PM₁₀ standards. The SCAB is designated as an attainment area for federal and state CO and NO₂ standards, as well as for state sulfur dioxide standards. Although the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard.⁶

⁵ An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. These standards for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare are set by the EPA and CARB, respectively. Attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards.

⁶ Re-designation of the lead NAAQS designation to attainment for the Los Angeles County portion of the SCAB is expected based on current monitoring data. The phase-out of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

The project would result in emissions of criteria air pollutants for which the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (EPA) have adopted ambient air quality standards (i.e., the NAAQS and CAAQS). Projects that emit these pollutants have the potential to cause, or contribute to, violations of these standards. The SCAQMD CEQA Air Quality Significance Thresholds, as revised in April 2019, set forth quantitative emission significance thresholds for criteria air pollutants, which, if exceeded, would indicate the potential for a project to contribute to violations of the NAAQS or CAAQS. Table 4 lists the revised SCAQMD Air Quality Significance Thresholds (SCAQMD 2019).

Table 4. South Coast Air Quality Management District Air Quality Significance Thresholds

| Criteria Pollutants Mass Daily Thresholds | | |
|---|---|----------------------------|
| Pollutant | Construction (Pounds per Day) | Operation (Pounds per Day) |
| VOCs | 75 | 55 |
| NO _x | 100 | 55 |
| CO | 550 | 550 |
| SO _x | 150 | 150 |
| PM ₁₀ | 150 | 150 |
| PM _{2.5} | 55 | 55 |
| Lead ^a | 3 | 3 |
| TACs and Odor Thresholds | | |
| TACs ^b | Maximum incremental cancer risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic and acute hazard index ≥ 1.0 (project increment) | |
| Odor | Project creates an odor nuisance pursuant to SCAQMD Rule 402 | |

Source: SCAQMD 2019.

Notes: VOC = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; TAC = toxic air contaminant; SCAQMD = South Coast Air Quality Management District.

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

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

^b TACs include carcinogens and noncarcinogens.

The project would result in a cumulatively considerable net increase for O₃, which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the SCAQMD VOC or NO_x thresholds shown in Table 4. These emission-based thresholds for O₃ precursors are intended to serve as a surrogate for an O₃ significance threshold (i.e., the potential for adverse O₃ impacts to occur) because O₃ itself is not emitted directly, and the effects of an individual project's emissions of O₃ precursors (i.e., VOCs and NO_x) on O₃ levels in ambient air cannot be determined through air quality models or other quantitative methods.

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from construction and operation of the project, with the exception of operational mobile source emissions.⁷ The following discussion quantitatively evaluates project-generated construction and operational emissions and impacts that would result from implementation of the project.

⁷ CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with construction and operational activities from a variety of land use projects, including warehouses.

Construction Emissions

Construction of the project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (e.g., off-road construction equipment, soil disturbance, and VOC off-gassing from architectural coatings and asphalt pavement application) and off-site sources (e.g., vendor trucks, haul trucks, and worker vehicle trips). Specifically, entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM₁₀ and PM_{2.5} emissions. Internal combustion engines used by construction equipment, haul trucks, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOC, NO_x, CO, PM₁₀, and PM_{2.5}. Construction emissions can vary substantially from day to day depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions.

Emissions from the construction phase of the project were estimated using CalEEMod default values. For the purpose of conservatively estimating project emissions, construction was modeled beginning in February 2022 and concluding in October 2022,⁸ lasting approximately 9 months. As a result of demolition, 964 cubic yards (CY) (1,158 tons) of debris were estimated to be exported from the site. The analysis contained herein is based on the following schedule assumptions (duration of phases is approximate):

- Demolition: 1 month (February 2022)
- Site preparation: 2 weeks (March 2022)
- Grading: 1 month (March 2022–April 2022)
- Building construction: 5 months (April 2022–August 2022)
- Paving: 1 month (August 2022–September 2022)
- Application of architectural coatings: 4 weeks (September 2022–October 2022)

Construction modeling assumptions for equipment and vehicles are provided in Table 5. Equipment mix and horsepower were based on CalEEMod default values, including equipment load factor. The site would require the import of approximately 188 CY of earthwork materials to balance the site during the grading phase. For the analysis, it was generally assumed that heavy-duty construction equipment would be operating at the site 5 days per week.

Table 5. Construction Scenario Assumptions

| Construction Phase | One-Way Vehicle Trips | | | Equipment | | |
|--------------------|----------------------------|----------------------------------|------------------------|--------------------------|----------|-------------|
| | Average Daily Worker Trips | Average Daily Vendor Truck Trips | Total Haul Truck Trips | Equipment Type | Quantity | Usage Hours |
| Demolition | 16 | 0 | 114 | Concrete/industrial saws | 1 | 8 |
| | | | | Excavators | 3 | 8 |
| | | | | Rubber-tired dozers | 2 | 8 |
| Site Preparation | 18 | 0 | 0 | Rubber-tired dozers | 3 | 8 |

⁸ The analysis assumes a construction start date of February 2022, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

Table 5. Construction Scenario Assumptions

| Construction Phase | One-Way Vehicle Trips | | | Equipment | | |
|-----------------------|----------------------------|----------------------------------|------------------------|---------------------------|----------|-------------|
| | Average Daily Worker Trips | Average Daily Vendor Truck Trips | Total Haul Truck Trips | Equipment Type | Quantity | Usage Hours |
| | | | | Tractors/loaders/backhoes | 4 | 8 |
| Grading | 20 | 0 | 20 | Excavators | 2 | 8 |
| | | | | Graders | 1 | 8 |
| | | | | Rubber-tired dozers | 1 | 8 |
| | | | | Scrapers | 2 | 8 |
| | | | | Tractors/loaders/backhoes | 2 | 8 |
| Building Construction | 224 | 88 | 0 | Cranes | 1 | 7 |
| | | | | Forklifts | 3 | 8 |
| | | | | Generator sets | 1 | 8 |
| | | | | Tractors/loaders/backhoes | 3 | 7 |
| | | | | Welders | 1 | 8 |
| Paving | 16 | 0 | 0 | Pavers | 2 | 8 |
| | | | | Paving equipment | 2 | 8 |
| | | | | Rollers | 2 | 8 |
| Architectural Coating | 46 | 0 | 0 | Air compressors | 1 | 6 |

Emissions generated during construction (and operation) of the project are subject to the rules and regulations of the SCAQMD. Rule 403, Fugitive Dust, requires the implementation of measures to control the emission of visible fugitive/nuisance dust, such as wetting soils that would be disturbed. It was assumed that the active sites would be watered at least three times daily per MM-AQ-1, resulting in an approximately 61% reduction of fugitive dust (CalEEMod default value), which exceeds the compliance requirements of SCAQMD standard dust control measures in Rule 403. The application of architectural coatings, such as exterior/interior paint and other finishes, and the application of asphalt pavement would also produce VOC emissions; however, the contractor is required to procure architectural coatings that comply with the requirements of SCAQMD's Rule 1113, Architectural Coatings.⁹

Table 6 shows the estimated maximum daily construction emissions associated with the construction phase of the project.

⁹ SCAQMD Rule 1113, Architectural Coatings, requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Table 6. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

| Year | VOC | NO _x | CO | SO _x | PM ₁₀ | PM _{2.5} |
|----------------------------|-----------------------|-----------------|------------|-----------------|------------------|-------------------|
| | <i>Pounds Per Day</i> | | | | | |
| 2022 | 26.66 | 39.00 | 29.89 | 0.07 | 9.48 | 5.48 |
| <i>SCAQMD Threshold</i> | <i>75</i> | <i>100</i> | <i>550</i> | <i>150</i> | <i>150</i> | <i>55</i> |
| Threshold Exceeded? | No | No | No | No | No | No |

Source: Appendix A-1.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

The values shown are the maximum summer or winter daily emissions results from CalEEMod.

These estimates reflect control of fugitive dust required by SCAQMD Rule 403, and MM-AQ-1, specifically, watering of active site areas three times per day.

As shown in Table 6, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM₁₀, or PM_{2.5} during project construction, and short-term construction impacts would be less than significant.

Operational Emissions

Emissions from the operational phase of the project were estimated using CalEEMod. Operational year 2023 was assumed consistent with the project's Traffic Impact Analysis (TIA) (Appendix H to this IS/MND).

Area Sources

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

Consumer products are chemically formulated products used by household and institutional consumers, including:

- Detergents
- Cleaning compound
- Polishes
- Floor finishes
- Cosmetics
- Personal care products
- Home, lawn, and garden products
- Disinfectants
- Sanitizers
- Aerosol paints
- Automotive specialty products

Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2017). Consumer product VOC emissions were estimated in CalEEMod based on the floor area of buildings and default factor of pounds of VOC per building square foot per day. The CalEEMod default values for consumer products were assumed.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from the application of surface coatings based on the VOC emission factor, the building square footage,

the assumed fraction of surface area, and the reapplication rate. The VOC emissions factor is based on the VOC content of the surface coatings, and SCAQMD's Rule 1113, Architectural Coatings, governs the VOC content for interior and exterior coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SCAQMD 2016). CalEEMod default values were assumed, including the surface area to be painted, the VOC content of architectural coatings, and the reapplication rate of 10% of area per year.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated with landscape equipment use were estimated based on CalEEMod default values for emission factors (grams per square foot of building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days.

Mobile Sources

The project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of the employee passenger vehicles (workers) and truck traffic associated with the operation of the warehouse.

Emissions from the mobile sources during operation of the project were estimated using a spreadsheet-based model and emission factors from the CARB EMFAC2021 and EPA AP-42 factors for paved road dust generation. The maximum daily trip rates, taken from the TIA prepared for the project (Appendix H), were 535 primary trips per day, which were assumed 7 days per week. The passenger vehicle trip lengths were assumed to be CalEEMod default trip length of 16.6 miles for commercial-work trips (i.e., trips made by someone who is employed by the warehouse land use) and assumed to be 100% of primary trips. The light-duty, medium-heavy-duty, and heavy-duty truck trip lengths were based on the SCAQMD recommendation of 40 miles and assumed to be 100% of primary trips.¹⁰ Vehicle emissions occur during start-up, operation (running), and idling, as well as from evaporative losses when the engines are resting. The emissions factors for trucks and passenger vehicles were determined using EMFAC2021, which generates emissions factors, expressed in grams per mile, grams per trip, and grams per vehicle per day, for the fleet in a class of motor vehicles within a region for a particular study year. For this analysis, SCAQMD was selected for the San Bernardino region and calendar year 2023 was selected in EMFAC to represent the project operational start year.

A composite, or weighted-average, emissions factor was developed for project vehicle types if more than one vehicle category in EMFAC is anticipated to be representative of the project vehicle. The composite emission factors are weighted by vehicle miles traveled (VMT), population, or trips depending on the emissions process, which is the physical mechanism that results in the emissions of a pollutant. The vehicle mix was provided by the TIA (Appendix H), assuming 72.5% are passenger vehicles, 17.2% are 4+-axle trucks, 5.7% are 3-axle trucks, and 4.6% are 2-axle trucks. For passenger vehicles, the default fleet mix composite emission factor represents the weighted average emission rate for passenger vehicles, light-duty trucks, motorcycles, and a composite mix of gasoline-fueled, diesel-fueled, electric and plug-in hybrid. The 4+-axle trucks were assumed to be heavy-duty trucks, 3-axle trucks were assumed to be medium-

¹⁰ The average trip length for heavy-duty trucks were based on implementation of the Facility-Based Mobile Source Measures adopted in the SCAQMD's 2016 AQMP. SCAQMD's "Preliminary Warehouse Emission Calculations" assumed a heavy-heavy-duty truck trip length of 39.9 miles (SCAQMD 2018) and the default commercial-nonwork trip length for trucks in CalEEMod is 6.9 miles. Therefore, the conservatively assumed trip length of 40 miles is utilized for this analysis.

heavy-duty trucks, and 2-axle trucks were assumed to be light-heavy-duty trucks and all trucks were assumed to be a mix of gasoline-fueled, diesel-fueled, and electric.

Project truck idling would be limited to 5 minutes in accordance with CARB's adopted Airborne Toxic Control Measure; however, for modeling purposes, it was conservatively assumed that the trucks would idle for a total of 15 minutes: 5 minutes at the entrance, 5 minutes at the loading dock, and 5 minutes at the exit of the project site.

On May 7, 2021, the SCAQMD adopted the Warehouse Indirect Source Rule, Rule 2305. Rule 2305 was adopted to facilitate local and regional emission reductions associated with existing and new warehouses with an indoor warehouse floor space equal to or greater than 100,000 square feet within a single building and the mobile sources associated with these warehouses. Under Rule 2305, operators of applicable existing and new warehouses are subject to an annual Warehouse Actions and Investments to Reduce Emissions (WAIRE) Points Compliance Obligation (WPCO) intended to reduce regional and local emissions from warehouse indirect sources. Based on the approximately 305,617-square-foot warehouse building proposed for the project, Rule 2305 would be applicable to the project. However, Rule 2305 provides options for the operator to earn a certain number of points each year from emission-reducing activities or payment of a mitigation fee. Because there is possible payment of a mitigation fee, conservatively, no emission reductions from Rule 2305 are proposed for the air quality or GHG analysis.

Off-Road Equipment (Forklifts)

The exact operational off-road equipment is unknown at this time; however, in a good faith effort to include anticipated forklifts, forklifts were estimated based on the warehouse square footage and the SCAQMD study, as described below.

The SCAQMD published a summary of operational survey results from 34 operating high-cube warehouses (SCAQMD 2014). The SCAQMD survey reported an average of 0.12 forklifts/pallet jacks per 1,000 square feet of building area, which was applied to the project. Note that this estimate is for total forklifts and pallet jacks. Pallet jacks are small as they are primarily used to lift small loads in tight quarters (and are electric or manual); therefore, assuming all pieces of equipment are forklifts is conservative. For the project, a total of 35 forklifts were assumed. Of the total 35 forklifts, 15 of the forklifts were modeled as diesel powered with Tier 4 Interim compliant engines. The remaining 20 forklifts are assumed to be electric-operated. All 35 forklifts are assumed to operate 8 hours per day and 7 days per week at the project site. CalEEMod was used to estimate emissions from diesel powered forklifts while spreadsheet model was used to estimate the energy consumption and GHG emissions from the electric forklifts, see Appendix A-1.

Table 7 presents the maximum daily emissions associated with operation of the project in 2023 at buildout. The values shown are the maximum summer and winter daily emissions results from CalEEMod for area, energy, and off-road emissions sources, plus the estimated mobile source emissions using a spreadsheet model and EMFAC2021 and AP-42 emission factors. Complete details of the emissions calculations are provided in Appendix A-1.

Table 7. Estimated Maximum Daily Operation Criteria Air Pollutant Emissions

| Emissions Source | VOC | NO _x | CO | SO _x | PM ₁₀ | PM _{2.5} |
|----------------------------|----------------|-----------------|--------------|-----------------|------------------|-------------------|
| | Pounds per Day | | | | | |
| Area | 6.97 | <0.01 | 0.05 | 0.00 | <0.01 | <0.01 |
| Energy | 0.02 | 0.17 | 0.14 | <0.01 | 0.01 | 0.01 |
| Mobile | 1.89 | 26.23 | 27.27 | 5.77 | 27.84 | 7.18 |
| Off-road (Forklifts) | 0.518 | 10.08 | 17.42 | 0.02 | 0.04 | 0.04 |
| Total | 9.40 | 36.48 | 44.88 | 5.79 | 27.89 | 7.23 |
| <i>SCAQMD Threshold</i> | 55 | 55 | 550 | 150 | 150 | 55 |
| Threshold Exceeded? | No | No | No | No | No | No |

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SCAQMD = South Coast Air Quality Management District; <0.01 = reported value less than 0.01.

See Appendix A-1 for complete results.

As shown in Table 7, maximum daily operational emissions of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} generated by the project would not exceed the SCAQMD's significance thresholds, and long-term operational impacts would be less than significant.

As previously discussed, the SCAB has been designated as a federal nonattainment area for O₃ and PM_{2.5} and a state nonattainment area for O₃, PM₁₀, and PM_{2.5}. However, as indicated in Tables 6 and 7, project-generated construction and operational emissions would not exceed the SCAQMD emission-based significance thresholds for VOCs, NO_x, PM₁₀, or PM_{2.5}.

Cumulative localized impacts would potentially occur if a project were to occur concurrently with another off-site project. Schedules for potential future projects near the project area are currently unknown; therefore, potential impacts associated with two or more simultaneous projects would be considered speculative.¹¹ However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM₁₀ and PM_{2.5} emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all sites in the SCAQMD. Additionally, cumulative VOC emissions would be reduced because all future projects would be subject to VOC content of the surface coatings, SCAQMD's Rule 1113, Architectural Coatings, governs the VOC content for interior and exterior coatings.

Therefore, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant during construction and operation.

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

Less-than-Significant Impact with Mitigation Incorporated. The project would not expose sensitive receptors to substantial pollutant concentrations, as evaluated in the following text.

¹¹ The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145).

Sensitive Receptors

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include sites such as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The nearest sensitive receptors are residential uses located immediately north as well as those approximately 90 feet west of the project site.

Localized Significance Thresholds

The SCAQMD recommends a localized significance threshold (LST) analysis to evaluate localized air quality impacts to sensitive receptors in the immediate vicinity of the project as a result of project activities. The impacts were analyzed using methods consistent with those in the SCAQMD's Final Localized Significance Threshold Methodology (SCAQMD 2008a). The project is located within Source-Receptor Area 34 (Central San Bernardino Valley). This analysis applies the SCAQMD LST values for a 3.5-acre site within Source-Receptor Area 34 with a receptor distance of 25 meters (82 feet), which is the shortest available distance provided in the SCAQMD's methodology.

Project construction activities would result in temporary sources of on-site criteria air pollutant emissions associated with off-road equipment exhaust and fugitive dust generation. According to the Final Localized Significance Threshold Methodology, "off-site mobile emissions from the project should not be included in the emissions compared to the LSTs" (SCAQMD 2008a). Trucks and worker trips associated with the project are not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways since emissions would be relatively brief in nature and would cease once the vehicles pass through the main streets. Off-site emissions from truck trips were limited to 1,000 feet of estimated on-site activity within the LST analysis. The maximum daily on-site emissions generated by construction of the project in each construction year are presented in Table 8 and compared to the SCAQMD localized significance criteria for Source-Receptor Area 34 to determine whether project-generated on-site emissions would result in potential LST impacts.

Table 8. Construction Localized Significance Thresholds Analysis

| | NO ₂ | CO | PM ₁₀ | PM _{2.5} |
|----------------------------------|---------------------------------|-------|------------------|-------------------|
| Year | <i>Pounds per Day (On Site)</i> | | | |
| 2022 | 38.87 | 29.16 | 10.46 | 6.03 |
| SCAQMD LST Criteria ^a | 220 | 1,359 | 11 | 6 |
| Threshold Exceeded? | No | No | No | Yes |

Source: SCAQMD 2008a; Appendix A-1.

Notes: NO₂ = nitrogen dioxide; CO = carbon monoxide; PM₁₀ = particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter); PM_{2.5} = particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter); SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.

Maximum on-site emissions occurred during the overlap of the following phases: grading and site preparation.

^a LST are shown for a 3.5-acre disturbed area corresponding to a distance to a sensitive receptor of 25 meters in Source-Receptor Area 34 (Central San Bernardino Valley).

As shown in Table 8, proposed construction activities would generate emissions in excess of site-specific LSTs for PM_{2.5}.

MM-AQ-1: Fugitive Dust Watering. To reduce the potential for criteria air pollutants, specifically fugitive particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM_{2.5}), as a result of construction of the project, the applicant shall:

Comply with SCAQMD rules and regulations regarding emissions generated during construction activities. Rule 403, Fugitive Dust,¹² requires the implementation of measures to control the emission of visible fugitive/nuisance dust, such as wetting soils that would be disturbed. By rule, active sites would be watered at least two times daily, resulting in an approximately 55% reduction of fugitive dust (CalEEMod default value), to further control fugitive PM_{2.5}, the project applicant, or its designee, shall water active sites at least three times daily resulting in an approximately 61% reduction of fugitive dust (CalEEMod default value).

Implementation of **MM-AQ-1** would reduce project construction-generated PM_{2.5} emissions to the extent feasible. The LST results after incorporation of **MM-AQ-1** are presented in Table 9.

Table 9. Construction Localized Significance Thresholds Analysis

| Year | NO ₂ | CO | PM ₁₀ | PM _{2.5} |
|----------------------------------|--------------------------|-------|------------------|-------------------|
| | Pounds per Day (On Site) | | | |
| 2022 | 38.87 | 29.16 | 9.28 | 5.42 |
| SCAQMD LST Criteria ^a | 220 | 1,359 | 11 | 6 |
| Threshold Exceeded? | No | No | No | No |

Source: SCAQMD 2008a; Appendix A-1.

Notes: NO₂ = nitrogen dioxide; CO = carbon monoxide; PM₁₀ = particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter); PM_{2.5} = particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter); SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.

Maximum on-site emissions occurred during the overlap of the following phases: grading and site preparation.

^a LST are shown for a 5-acre disturbed area corresponding to a distance to a sensitive receptor of 25 meters in Source-Receptor Area 34 (Central San Bernardino Valley).

As shown in Table 9, implementation of **MM-AQ-1** would reduce construction-generated PM_{2.5} to levels below SCAQMD thresholds. Thus, impacts would be **less than significant** with mitigation.

Carbon Monoxide Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed "CO hotspots." The transport of CO is extremely limited, as it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections operating at an unacceptable level of service (LOS) (LOS E or worse is unacceptable). Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project

¹² SCAQMD Rule 403 requires implementation of various best available fugitive dust control measures for different sources for all construction activity sources within its jurisdictional boundaries. Dust control measures include, but are not limited to, maintaining stability of soil through pre-watering of site prior to clearing, grubbing, cut and fill, and earth-moving activities; stabilizing soil during and immediately after clearing, grubbing, cut and fill, and other earth-moving activities; stabilizing backfill during handling and at completion of activity; and pre-watering material prior to truck loading and ensuring that freeboard exceeds 6 inches. While SCAQMD Rule 403 requires fugitive dust control beyond watering control measures, compliance with Rule 403 is represented in CalEEMod by assuming two times daily watering of active sites (55% reduction in PM₁₀ and PM_{2.5} [CAPCOA 2017]).

would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots. As discussed in Section 3.17, Transportation, the proposed project is forecast to generate 74 a.m. peak hour trips and 83 p.m. peak hour trips (passenger car equivalent-adjusted), the proposed project would not exceed the 250 two-way peak hour trip threshold for the preparation of a TIA per the CMP or the 100 two-way peak hour trip threshold for preparation of a TIA per the City's Traffic Study Guidelines. Therefore, a TIA and further LOS analysis would not be required, unless requested by the City for a focused analysis of specific facilities.

In addition, at the time that the SCAQMD Handbook (SCAQMD 1993) was published, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO. In 2007, the SCAQMD was designated in attainment for CO under both the CAAQS and NAAQS as a result of the steady decline in CO concentrations in the SCAB due to turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. The SCAQMD conducted CO modeling for the 2003 AQMP¹³ (SCAQMD 2003b) for the four worst-case intersections in the SCAB:

- (1) Wilshire Boulevard and Veteran Avenue
- (2) Sunset Boulevard and Highland Avenue
- (3) La Cienega Boulevard and Century Boulevard
- (4) Long Beach Boulevard and Imperial Highway

At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. The 2003 AQMP projected 8-hour CO concentrations at these four intersections for 1997 and from 2002 through 2005. From years 2002 through 2005, the maximum 8-hour CO concentration was 3.8 parts per million at the Sunset Boulevard and Highland Avenue intersection in 2002 and the maximum 8-hour CO concentration was 3.4 parts per million at the Wilshire Boulevard and Veteran Avenue in 2002.

Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least over 100,000 vehicles per day. Because the project is not anticipated to increase daily traffic volumes at any study intersection to more than 100,000 vehicles per day, a CO hotspot is not anticipated to occur.

Based on these considerations, the project would not generate traffic that would contribute to potential adverse traffic impacts that may result in the formation of CO hotspots. This conclusion is supported by the analysis in Section 3.17, which demonstrates that traffic impacts would be less than significant. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Based on these considerations, the project would result in a less-than-significant impact to air quality with regard to potential CO hotspots.

Toxic Air Contaminants

In addition to impacts from criteria pollutants, certain projects may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or hazardous air pollutants. State law has established the framework for California's TAC identification and control project, which is generally more stringent than the federal project, and is aimed at TACs that are a problem in California. The

¹³ SCAQMD's CO hotspot modeling guidance has not changed since 2003.

state has formally identified more than 200 substances as TACs, including the federal hazardous air pollutants, and is adopting appropriate control measures for sources of these TACs.

In an abundance of caution, a voluntary health risk assessment (HRA) was performed for construction and operation of the project, as discussed below, is presented in Appendix A-2.

The most recent guidance from the Office of Environmental Health Hazard Assessment (OEHHA) is the 2015 Risk Assessment Guidelines Manual (OEHHA 2015), which was adopted in 2015 to replace the 2003 HRA Guidance Manual. The Children's Environmental Health Protection Act of 1999 (Senate Bill 25), which requires explicit consideration of infants and children in assessing risks from air toxics, required revisions of the methods for both non-cancer and cancer risk assessment and of the exposure assumptions in the 2003 HRA Guidance Manual. Cancer risk parameters, such as age-sensitivity factors, daily breathing rates, exposure period, fraction of time at home, and cancer potency factors were based on the values and data recommended by OEHHA as implemented in HARP2. SCAQMD's Modeling Guidance for American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) (SCAQMD 2018) and Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (SCAQMD 2003c) provide guidance to perform dispersion modeling for use in HRAs within the SCAB.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends a carcinogenic (cancer) risk threshold of 10 in one million. Some TACs increase noncancer health risk due to long-term (chronic) exposures. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. The Chronic Hazard Index estimates for all receptor types used the OEHHA-derived calculation method, which uses high-end exposure parameters for the inhalation and next top two exposure pathways and mean exposure parameters for the remaining pathways for non-cancer risk estimates. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system.¹⁴ A hazard index less than 1.0 means that adverse health effects are not expected. Within this analysis, noncarcinogenic exposures of less than 1.0 are considered less than significant. The SCAQMD recommends a Chronic Hazard Index significance threshold of 1.0 (project increment) and an acute hazard index of 1.0.

The greatest potential for TAC exposure from project construction and operation is from diesel particulate matter (DPM), as the exhaust from diesel engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts. No short-term, acute relative exposure values are established and regulated and therefore these are not addressed in this assessment.

The dispersion modeling was performed using AERMOD, which is the model SCAQMD requires for atmospheric dispersion of emissions. AERMOD (Version 19191) is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain (EPA 2018a).

¹⁴ The HIC estimates for all receptor types used the OEHHA-derived calculation method (OEHHA 2015).

Construction Health Risk

Construction Health Risk Assessment

An HRA was performed to evaluate potential health risk associated with construction of the project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting construction HRA documentation, including detailed assumptions, is presented in Appendix A-2.

For risk assessment purposes, PM₁₀ in diesel exhaust is considered DPM, originating mainly from off-road equipment operating at a defined location for a given length of time at a given distance from sensitive receptors. Less-intensive, more-dispersed emissions result from on road vehicle exhaust (e.g., heavy-duty diesel trucks). For the construction HRA, the CalEEMod scenario for the project was adjusted to reduce diesel truck one-way trip distances to 1,000 feet (0.19 miles) to estimate emissions from truck pass-by at proximate receptors.

The air dispersion modeling methodology was based on generally accepted modeling practices of SCAQMD (SCAQMD 2021a). Air dispersion modeling was performed using the EPA's AERMOD Version 19191 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 9.9.0. The HRA followed OEHHA 2015 guidelines (OEHHA 2015) and SCAQMD guidance to calculate the health risk impacts at all proximate receptors as further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the SCAQMD and EPA guidance and identified as representative of the project site and project activities. Principal parameters of this modeling are presented in Table 10.

Table 10. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters

| Parameter | Details |
|----------------------------------|--|
| Meteorological Data | AERMOD-specific meteorological data for the Riverside Airport air monitoring station (KRAL) was used for the dispersion modeling (SCAQMD 2021b). A 5-year meteorological data set from 2012 through 2016 was obtained from the SCAQMD in a preprocessed format suitable for use in AERMOD. |
| Urban versus Rural Option | Urban dispersion option was selected due to the developed nature of the project area and per SCAQMD guidelines. |
| Terrain Characteristics | The elevation of the site is 1,138 feet (347 meters) above sea level. |
| Elevation Data | Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the United States Geological Survey's National Elevation Dataset format with a resolution of 1/3 degree (approximately 10 meters), consistent with the SCAQMD guidance (SCAQMD 2021a). |
| Source Release Characterizations | Air dispersion modeling of DPM emissions was conducted assuming the off-road equipment would operate in accordance with the modeling scenario estimated in CalEEMod (Appendix A-1). The construction equipment and on-site truck travel DPM emissions were modeled as a line of adjacent volume sources across the project site to represent project construction with a release height of 5 meters, plume height of 2.33 meters, and plume width of 11.63 meters (SCAQMD 2008a; EPA 2018a). |

Note: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; SCAQMD = South Coast Air Quality Management District; DPM = diesel particular matter; CalEEMod = California Emissions Estimator Model. See Appendix A.

Regarding receptors, the construction scenario used a 1-kilometer by 1-kilometer Cartesian receptor grid with 50-meter spacing to establish the impact area and evaluate locations of maximum health risk impact (SCAQMD 2021a).

The health risk calculations were performed using the Hotspots Analysis and Reporting Program Version 2 (HARP2) Air Dispersion and Risk Tool (ADMRT, dated 21081). AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The line of volume sources was partitioned evenly based on the 1 gram per second emission rate. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the non-cancer chronic health indices. There is no reference exposure level (REL) for acute health impacts from DPM, and, thus, acute risk was not evaluated.

Cancer risk is defined as the increase in probability (chance) of an individual developing cancer due to exposure to a carcinogenic compound, typically expressed as the increased chances in one million. Maximum Individual Cancer Risk is the estimated probability of a maximally exposed individual potentially contracting cancer as a result of exposure to TACs over a period of 30 years for residential receptor locations. For the purposes of this construction HRA, given the less-than-lifetime exposure period, and the higher breathing rates and sensitivity of children to TACs, the cancer risk calculation assumes that the exposure would affect children early in their lives. The 9-month exposure duration was assumed to start during the third trimester of pregnancy through 9 months of age based on the duration of construction. The exposure pathway for DPM is inhalation only.

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs since some TACs increase non-cancer health risk due to long-term (chronic) exposures and some TACs increase non-cancer health risk due to short-term (acute) exposures. No short-term, acute relative exposure level has been established for DPM; therefore, acute impacts of DPM are not addressed in the HRA. Chronic exposure is evaluated in the construction HRA. Non-carcinogenic risks are quantified by calculating a hazard index, expressed as the ratio between the ambient pollutant concentration and its toxicity or REL, which is a concentration at or below which health effects are not likely to occur. The chronic hazard index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. A hazard index less of than one (1.0) means that adverse health effects are not expected.

The Maximum Individual Cancer Risk and the Chronic Hazard Index for residential receptors as a result of project construction are presented in Table 11.

Table 11. Construction Health Risk Assessment Results – Unmitigated

| Impact Parameter | Units | Project Impact | CEQA Threshold | Level of Significance |
|--|-------------|----------------|----------------|-------------------------|
| Maximum Individual Cancer Risk–Residential | Per Million | 67.9 | 10 | Potentially Significant |
| Chronic Hazard Index–Residential | Index Value | 0.025 | 1.0 | Less than Significant |

Source: SCAQMD 2019.

Note: CEQA = California Environmental Quality Act.
See Appendix A-2.

As shown in Table 11, project construction activities would result in a Residential Maximum Individual Cancer Risk of 67.9 in 1 million, which exceeds the significance threshold of 10 in 1 million. Project

construction would result in a Residential Chronic Hazard Index of 0.010, which is below the 1.0 significance threshold.

MM-AQ-2: Tier 4 Interim Engines. To reduce the potential for criteria air pollutants, specifically particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀), as a result of construction of the project, the applicant shall:

Prior to the start of construction activities, ensure that all 75 horsepower or greater diesel-powered equipment are powered with CARB-certified Tier 4 interim engines, except where the project applicant establishes to the satisfaction of the City of Highland (City) that Tier 4 interim equipment is not available.

An exemption from these requirements may be granted by the City in the event that the City documents that equipment with the required tier is not reasonably available and corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment. Before an exemption may be considered by the City, the applicant shall be required to demonstrate that two construction fleet owners/operators in San Bernardino County were contacted and that those owners/operators confirmed Tier 4 interim equipment could not be located within San Bernardino County.

As shown in Table 11, the construction HRA results from the unmitigated scenario show cancer risks exceeding the 10 in 1 million threshold and thus a potentially significant impact at the maximally exposed individual residential receptors. Implementation of **MM-AQ-2** would reduce project construction-generated DPM missions to the extent feasible. The HRA results after incorporation of **MM-AQ-2** are presented in Table 12.

Table 12. Construction Health Risk Assessment Results – Mitigated

| Impact Parameter | Units | Project Impact | CEQA Threshold | Level of Significance |
|--|-------------|----------------|----------------|-----------------------|
| Maximum Individual Cancer Risk–Residential | Per Million | 6.50 | 10 | Less than significant |
| Chronic Hazard Index–Residential | Index Value | 0.024 | 1.0 | Less than Significant |

Source: SCAQMD 2019.

Notes: CEQA = California Environmental Quality Act.
See Appendix A-2.

Implementation of **MM-AQ-2** would reduce construction-generated health risks to levels below SCAQMD thresholds. Thus, impacts would be **less than significant** with mitigation.

Operational Health Risk

An HRA was performed to evaluate potential health risk associated with operation of the project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting operational HRA documentation, including detailed assumptions, is presented in Appendix A-2.

CARB's Air Quality and Land Use Handbook: A Community Health Perspective encourages consideration of the health impacts of distribution centers that accommodate more than 100 trucks per day on sensitive receptors sited within 1,000 feet from the source in the land use decision-making process (CARB 2005).

For the operational HRA (included as Appendix A-2), operational year 2023 was assumed, consistent with completion of project construction. Emissions from the operation of the project include truck trips and truck idling emissions. For risk assessment purposes, PM₁₀ in diesel exhaust is considered DPM, originating mainly from trucks traveling on site and off site and trucks idling at the loading docks. Truck travel and idling emission rates were obtained from CARB's EMFAC2021. Emission factors representing the vehicle mix and emissions for 2023 were used to estimate emissions associated with operation of the project. Truck idling would be limited to 5 minutes in accordance with CARB's adopted Airborne Toxic Control Measure; however, truck idling was conservatively assumed to idle for 15 minutes.¹⁵ Therefore, the analysis conservatively overestimates DPM emissions from idling. Deliveries would occur every day of the week. A total of 35 forklifts were assumed to operate with the project loading dock areas. The forklifts were modeled as diesel powered with Tier 4 Interim compliant engines.

Conservatively, a 2023 EMFAC2021 run was conducted and a constant 2023 emission factor data set was used for the entire duration of the analysis (i.e., 30 years). Use of the 2023 emission factors would overstate potential impacts since this approach does not include reductions in emissions due to fleet turnover or cleaner technology with lower emissions. The truck travel DPM emissions were calculated by applying the exhaust PM₁₀ emission factor from EMFAC2021 and the total truck trip number over the length of the distance traveled. In addition, the on-site truck idling exhaust emissions were calculated by applying the idle exhaust PM₁₀ emission factor from EMFAC2021 and total truck trip over the total idling time (i.e., 15 minutes). The truck traffic was modeled as a line of adjacent volume sources with 20% of the truck traffic entering and exiting the project site south via Grape St. and head east on 6th St. to Victoria St. An estimated 80% of the truck traffic would enter and exit the site from Victoria St with 30% and 70% of the total truck traffic traveling to and from the north and south, respectively. Trucks travel north on Victoria to and from SR-210. Trucks travel south on Victoria and then to SR-210 via 5th St. Truck idling was modeled as stationary point sources at the 30 truck loading bays. The forklifts were modeled as a line of adjacent volume sources operating within the truck loading bay area.

As previously described, health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends a carcinogenic (cancer) risk threshold of 10 in one million. Some TACs increase noncancer health risk due to long-term (chronic) exposures. A hazard index less than one (1.0) means that adverse health effects are not expected. Within this analysis, noncarcinogenic exposures of less than 1.0 are considered less than significant. The exhaust from diesel engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts. No short-term, acute relative exposure values are established and regulated and are therefore not addressed in this assessment.

The air dispersion modeling methodology was based on generally accepted modeling practices of SCAQMD (SCAQMD 2021a). Air dispersion modeling was performed using the EPA's AERMOD (Version 19191) modeling system with the Lakes Environmental Software implementation/user interface, AERMOD View Version 9.9.0. The HRA followed the OEHHA 2015 guidelines (OEHHA 2015) and SCAQMD guidance to calculate the health risk impacts at all proximate receptors as further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected

¹⁵ Although the project is required to comply with CARB's idling limit of 5 minutes, on-site idling emissions was estimated for 15 minutes of truck idling, which would take into account on-site idling while the trucks are waiting to pull up to the loading dock, idling at the loading dock, and idling during check-in and check-out.

consistent with the SCAQMD and EPA guidance and identified as representative of the project site and project activities. Principal parameters of this modeling are presented in Table 13.

Table 13. Operational Health Risk Assessment American Meteorological Society/U.S. Environmental Protection Agency Regulatory Model Operational Principal Parameters

| Parameter | Details |
|--|---|
| Meteorological Data | AERMOD-specific meteorological data for the Riverside Airport air monitoring station (KRAL) was used for the dispersion modeling (SCAQMD 2021b). A 5-year meteorological data set from 2012 through 2016 was obtained from the SCAQMD in a preprocessed format suitable for use in AERMOD. |
| Urban versus Rural Option | Urban dispersion option was selected due to the developed nature of the project area and per SCAQMD guidelines. |
| Terrain Characteristics | The elevation of the site is 1,138 feet (347 meters) above sea level. |
| Emission Sources and Source Release Parameters | Air dispersion modeling of operational activities was conducted using emissions generated using EMFAC2021 and CalEEMod. Off-site and on-site truck travel were modeled as a line of adjacent volume sources, and based on EPA methodology, the modeled sources would result in a release height of 3.4 meters, a plume height of 6.8 meters, and a plume width of 6.6 meters (SBCAPCD 2020; EPA 2015). The truck idling emissions at loading docks were modeled as point sources with a release height of 4 meters, inside stack diameter of 0.1 meters and an exist velocity of 51.71 m/s (EPA 2015; SCAQMD 2003b; SJVAPCD 2006). The project warehouse building was modeled to account for building downwash for point sources. Forklifts were modeled as a line of adjacent volume sources, and based on EPA methodology, the modeled sources would result in a release height of 1.96 meters, a plume height of 4.85 meters, and a plume width of 2.25 meters |

Note: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; SCAQMD = South Coast Air Quality Management District; EPA = U.S. Environmental Protection Agency.
See Appendix A-2.

Regarding receptors, the operational HRA scenario built from the construction HRA's 1-kilometer by 1-kilometer Cartesian receptor grid with 50-meter spacing to establish the impact area and evaluate locations of maximum health risk impact (SCAQMD 2021a). The operational scenario added receptors at 50-meter spacing at sensitive receptor areas adjacent to the truck routes discussed above.

The health risk calculations were performed using the HARP2 Air Dispersion and Risk Tool (ADMRT, dated 19121). AERMOD was run with all sources or source groups emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The line of volume sources was partitioned evenly based on the 1 gram per second emission rate. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the non-cancer chronic health indices. There is no REL for acute health impacts from DPM, and, thus, acute risk was not evaluated.

Cancer risk is defined as the increase in probability (chance) of an individual developing cancer due to exposure to a carcinogenic compound, typically expressed as the increased chances in one million. Maximum Individual Cancer Risk is the estimated probability of a maximally exposed individual potentially contracting cancer as a result of exposure to TACs over a period of 30 years for residential receptor locations. The HRA assumes exposure would start in the third trimester of pregnancy through 30 years for all residential sensitive receptor locations. The exposure pathway for DPM is inhalation only.

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs since some TACs increase non-cancer health risk due to long-term (chronic) exposures and some TACs increase non-cancer health risk due to short-term (acute) exposures. No short-term, acute relative exposure level has been established for DPM; therefore, acute impacts of DPM are not addressed in the HRA. Chronic exposure is evaluated in the operational HRA. Non-carcinogenic risks are quantified by calculating a hazard index, expressed as the ratio between the ambient pollutant concentration and its toxicity or REL, which is a concentration at or below which health effects are not likely to occur. The chronic hazard index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. A hazard index less than one (1.0) means that adverse health effects are not expected.

The results of the health risk assessment during operation are provided in Table 14.

Table 14. Operational Health Risk Assessment Results

| Impact Parameter | Units | Project Impact | CEQA Threshold | Level of Significance |
|--|-------------|----------------|----------------|-----------------------|
| Maximum Individual Cancer Risk–Residential | Per Million | 9.59 | 10 | Less than Significant |
| Chronic Hazard Index–Residential | Index Value | 0.003 | 1.0 | Less than Significant |

Source: SCAQMD 2019.

Notes: CEQA = California Environmental Quality Act.
See Appendix A-2.

As shown in Table 14, project operation would result in a Residential Maximum Individual Cancer Risk of 9.59 in 1 million, which is below the significance threshold of 10 in 1 million. Project operation would result in a Residential Chronic Hazard Index of 0.003, which is below the 1.0 significance threshold. The project operational TAC health risk impacts would be **Less than Significant**.

Health Effects of Criteria Air Pollutants

Construction and operation of the project would generate criteria air pollutant emissions; however, estimated construction and operational emissions would not exceed the SCAQMD mass-emission daily thresholds as shown in Tables 6 and 7, respectively. As previously discussed, the SCAB has been designated as a federal nonattainment area for O₃ and PM_{2.5} and a state nonattainment area for O₃, PM₁₀, and PM_{2.5}.

Health effects associated with O₃ include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2021). VOCs and NO_x are precursors to O₃, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of VOCs and NO_x to regional ambient O₃ concentrations is the result of complex photochemistry. The increases in O₃ concentrations in the SCAB due to O₃ precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O₃ concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O₃ ambient air quality standards tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O₃ precursors is speculative because of the lack of quantitative methods to assess this impact. Because construction and operation of the project would not result in O₃ precursor emissions (i.e., VOCs or NO_x) that would exceed the SCAQMD thresholds (as shown in Tables 6 and 7) the project is not anticipated to substantially contribute to regional O₃ concentrations and their associated health impacts.

Health effects associated with NO_x include lung irritation and enhanced allergic responses (CARB 2021). Construction and operation of the project would not generate NO_x emissions that would exceed the SCAQMD mass daily thresholds; therefore, construction and operation of the project is not anticipated to contribute to exceedances of the NAAQS and CAAQS for NO₂ or contribute to associated health effects. In addition, the SCAB is designated as in attainment of the NAAQS and CAAQS for NO₂, and the existing NO₂ concentrations in the area are well below the NAAQS and CAAQS standards.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2021). CO tends to be a localized impact associated with congested intersections. CO hotspots were discussed previously as a less-than-significant impact. Thus, the project's CO emissions would not contribute to the health effects associated with this pollutant.

Health effects associated with PM₁₀ and PM_{2.5} include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2021). As with O₃ and NO_x, and as shown in Tables 6 and 7, the project would not generate emissions of PM₁₀ or PM_{2.5} that would exceed the SCAQMD's thresholds. Accordingly, the project's PM₁₀ and PM_{2.5} emissions are not expected to cause an increase in related health effects for this pollutant.

The California Supreme Court's decision in *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 (referred to herein as the Friant Ranch decision; issued on December 24, 2018) addressed the need to correlate mass emission values for criteria air pollutants to specific health consequences and contains the following direction from the California Supreme Court:

"The Environmental Impact Report (EIR) must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further" (*Italics in original*).

Currently, SCAQMD, CARB, and EPA have not approved a quantitative method to reliably, meaningfully, and consistently translate the mass emission estimates for the criteria air pollutants resulting from the project to specific health effects. In addition, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days.

In connection with the judicial proceedings culminating in issuance of the Friant Ranch decision, the SCAQMD and the San Joaquin Valley Air Pollution Control District (SJVAPCD) filed amicus briefs attesting to the extreme difficulty of correlating an individual project's criteria air pollutant emissions to specific health impacts. Both SJVAPCD and SCAQMD have among the most sophisticated air quality modeling and health impact evaluation capabilities of the air districts in California. The key relevant points from the SCAQMD and SJVAPCD briefs are summarized herein.

In requiring a health impact type of analysis for criteria air pollutants, it is important to understand how O₃ and particulate matter (PM) are formed, dispersed, and regulated. The formation of O₃ and PM in the atmosphere, as secondary pollutants,¹⁶ involves complex chemical and physical interactions of multiple pollutants from natural and anthropogenic sources. The O₃ reaction is self-perpetuating (or catalytic) in the presence of sunlight because NO₂ is photochemically reformed from nitric oxide. In this way, O₃ is controlled

¹⁶ Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants.

by both NO_x and VOC emissions (NRC 2005). The complexity of these interacting cycles of pollutants means that incremental decreases in one emission may not result in proportional decreases in O₃ (NRC 2005). Although these reactions and interactions are well understood, variability in emission source operations and meteorology creates uncertainty in the modeled O₃ concentrations to which downwind populations may be exposed (NRC 2005). Once formed, O₃ can be transported long distances by wind and due to atmospheric transport, contributions of precursors from the surrounding region can also be important (EPA 2008). Because of the complexity of O₃ formation, a specific tonnage of VOCs or NO_x emitted in a particular area does not equate to a particular concentration of O₃ in that area (SJVAPCD 2015).

PM can be divided into two categories: directly emitted PM and secondary PM. Secondary PM, like O₃, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x (SJVAPCD 2015). Because of the complexity of secondary PM formation, including the potential to be transported long distances by wind, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area (SJVAPCD 2015). This is especially true for individual projects, like the proposed project, where project-generated criteria air pollutant emissions are not derived from a single “point source,” but from construction equipment and mobile sources (passenger cars and trucks) driving to, from, and around the project site.

Additionally, health effects from air pollutants are related to the concentration of the air pollutant that an individual is exposed to, not necessarily the individual mass quantity of emissions associated with an individual project. For example, health effects from O₃ are correlated with increases in the ambient level of O₃ in the air a person breathes (SCAQMD 2015). However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O₃ levels over an entire region (SCAQMD 2015). The lack of link between the tonnage of precursor pollutants and the concentration of O₃ and PM_{2.5} formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects; rather, it is the concentration of resulting O₃ that causes these effects (SJVAPCD 2015). Indeed, the ambient air quality standards, which are statutorily required to be set by EPA at levels that are requisite to protect the public health, are established as concentrations of O₃ and PM_{2.5} and not as tonnages of their precursor pollutants (EPA 2018a). Because the ambient air quality standards are focused on achieving a particular concentration region-wide, the tools and plans for attaining the ambient air quality standards are regional in nature. For CEQA analyses, project-generated emissions are typically estimated in pounds per day or tons per year and compared to mass daily or annual emission thresholds. While CEQA thresholds are established at levels that the air basin can accommodate without affecting the attainment date for the ambient air quality standards, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of O₃ or PM that will be created at or near the project site on a particular day or month of the year, or what specific health impacts will occur (SJVAPCD 2015).

In regard to regional concentrations and air basin attainment, the SJVAPCD emphasized that attempting to identify a change in background pollutant concentrations that can be attributed to a single project, even one as large as the entire Friant Ranch Specific Plan, is a theoretical exercise. The SJVAPCD brief noted that it “would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have” (SJVAPCD 2015). The situation is further complicated by the fact that background concentrations of regional pollutants are not uniform either temporally or geographically throughout an air basin, but are constantly fluctuating based upon meteorology and other environmental factors. SJVAPCD noted that the currently available modeling tools are equipped to model the impact of all emission sources in the San Joaquin Valley Air Basin on attainment (SJVAPCD 2015). The SJVAPCD brief then indicated that, “running the photochemical grid model used for predicting O₃ attainment with the

emissions solely from the Friant Ranch project (which equate to less than 0.1% of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved” (SJVAPCD 2015).

SCAQMD and SJVAPCD have indicated that it is not feasible to quantify project-level health impacts based on existing modeling (SCAQMD 2015; SJVAPCD 2015). Even if a metric could be calculated, it would not be reliable because the models are equipped to model the impact of all emission sources in an air basin on attainment and would likely not yield valid information or a measurable increase in O₃ concentrations sufficient to accurately quantify O₃-related health impacts for an individual project.

Nonetheless, following the Supreme Court’s Friant Ranch decision, some EIRs where estimated criteria air pollutant emissions exceeded applicable air district thresholds have included a quantitative analysis of potential project-generated health effects using a combination of a regional photochemical grid model¹⁷ and the EPA Benefits Mapping and Analysis Program (BenMAP or BenMAP–Community Edition).¹⁸ The publicly available health impact assessments (HIAs) typically present results in terms of an increase in health incidences and/or the increase in background health incidence for various health outcomes resulting from the project’s estimated increase in concentrations of O₃ and PM_{2.5}.¹⁹ To date, the five publicly available HIAs reviewed herein have concluded that the evaluated project’s health effects associated with the estimated project-generated increase in concentrations of O₃ and PM_{2.5} represent a small increase in incidences and a very small percent of the number of background incidences, indicating that these health impacts are negligible and potentially within the models’ margin of error. It is also important to note that while the results of the five available HIAs conclude that the project emissions do not result in a substantial increase in health incidences, the estimated emissions and assumed toxicity are also conservatively inputted into the HIA and thus overestimate health incidences, particularly for PM_{2.5}.

As explained in the SJVAPCD brief and noted previously, running the photochemical grid model used for predicting O₃ attainment with the emissions solely from an individual project like the Friant Ranch project or the proposed project is not likely to yield valid information given the relative scale involved. The five examples reviewed support the SJVAPCD’s brief contention that consistent, reliable, and meaningful results may not be provided by methods applied at this time. Accordingly, additional work in the industry and more importantly, air district participation, is needed to develop a more meaningful analysis to correlate project-level mass criteria air pollutant emissions and health effects for decision makers and the public. Furthermore, at the time of writing, no HIA has concluded that health effects estimated using the photochemical grid model and BenMAP approach are substantial provided that the estimated project-

¹⁷ The first step in the publicly available HIAs includes running a regional photochemical grid model, such as the Community Multiscale Air Quality model or the Comprehensive Air Quality Model with extensions to estimate the increase in concentrations of O₃ and PM_{2.5} as a result of project-generated emissions of criteria and precursor pollutants. Air districts, such as the SCAQMD, use photochemical air quality models for regional air quality planning. These photochemical models are large-scale air quality models that simulate the changes of pollutant concentrations in the atmosphere using a set of mathematical equations characterizing the chemical and physical processes in the atmosphere (EPA 2017).

¹⁸ After estimating the increase in concentrations of O₃ and PM_{2.5}, the second step in the five examples includes use of BenMAP or BenMAP-Community Edition to estimate the resulting associated health effects. BenMAP estimates the number of health incidences resulting from changes in air pollution concentrations (EPA 2018b). The health impact function in BenMAP-Community Edition incorporates four key sources of data: (i) modeled or monitored air quality changes, (ii) population, (iii) baseline incidence rates, and (iv) an effect estimate. All of the five example HIAs focused on O₃ and PM_{2.5}.

¹⁹ The following CEQA documents included a quantitative HIA to address Friant Ranch: (1) California State University Dominguez Hills 2018 Campus Master Plan EIR (CSU Dominguez Hills 2019), (2) March Joint Powers Association K4 Warehouse and Cactus Channel Improvements EIR (March JPA 2019), (3) Amendment to Norman Y. Mineta San Jose Airport Amendment to the Airport Master Plan EIR (City of San Jose 2020), (4) City of Inglewood Basketball and Entertainment Center Project EIR (City of Inglewood 2019), and (5) San Diego State University Mission Valley Campus Master Plan EIR (SDSU 2019).

generated incidences represent a very small percent of the number of background incidences, potentially within the models' margin of error.

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

In addition, an analysis of the project's potential to exceed the SCAQMD LSTs is presented above. The SCAQMD developed the LST analysis in response to CARB Governing Board's Environmental Justice Enhancement Initiative I-4. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS (which are health protective standards) at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area, project size, and distance to the nearest sensitive receptor. LSTs has been developed for NO₂, CO, PM₁₀, and PM_{2.5}. As presented above, the project's localized construction emissions would not exceed site-specific LSTs with mitigation, and impacts would be less than significant with mitigation.

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

Less-than-Significant Impact. The project would result in emissions, including criteria air pollutant and TACs; however, those are addressed under Sections 3.3(b) and 3.3(c). Accordingly, the evaluation of other emissions is focused on the potential for the project to generate odors. The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; the wind speed and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

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

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The project entails operation of a warehouse and would not create any new sources of odors during operation. Therefore, project operations would result in an odor impact that is less than significant.

3.4 Biological Resources

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|-------------------------------------|
| IV. BIOLOGICAL RESOURCES – 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 Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input 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"/> |

The following analysis relies on a biological resources assessment conducted by Dudek biologist Eileen Salas on March 23, 2021. This assessment included a review of the latest available relevant literature, published research, maps, soil data, data on biological baselines, special-status habitats, and species distributions to determine those resources that have the potential to occur within the project site and surrounding 100-foot buffer (the biological study area). A field assessment was conducted to characterize the environmental conditions, vegetation communities/land covers, and any plants or wildlife (including their habitats) that could be impacted during project implementation. During the field survey, vegetation communities and land covers were catalogued and confirmed based on existing site conditions. Dudek compiled a general inventory of plant and wildlife species and made a

determination concerning the potential for special-status species to occur within the study area. Additionally, Dudek conducted an investigation of jurisdictional waters of the U.S. regulated by the U.S. Army Corps of Engineers (ACOE), jurisdictional waters of the state regulated by the Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) jurisdictional streambed and associated riparian habitat. Field data and supporting documentation are included within this Draft IS/MND as Appendix B, Biological Resources Attachments.

Dudek searched the CDFW's California Natural Diversity Database (CDFW 2021), the California Native Plant Society's Inventory of Rare and Endangered Plants (CNPS 2021), and the U.S. Fish and Wildlife Service's occurrence data (USFWS 2020a) to identify special-status biological resources from the region. The California Natural Diversity Database and California Native Plant Society were searched based on the U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map for Redlands, where the study area is located, as well as the surrounding eight USGS 7.5-minute quadrangle maps (San Bernardino North, Harrison Mtn, Keller Peak, San Bernardino South, Yucaipa, Riverside East, Sunnymead, and El Casco). Potential and/or historic drainages, if any, and aquatic features were investigated based on a review of USGS topographic maps (1:24,000 scale), aerial photographs, the National Wetland Inventory database (USFWS 2020b), and the Natural Resource Conservation Service Web Soil Survey (USDA 2021).

The study area for this effort includes the approximately 12.5-acre Project site, with a surrounding 100-foot buffer, for a total study area of approximately 20.3 acres (Figure 14, Biological Study Area). This Project is located on Section 6, Township 1 South, Range 3 West, and on the Redlands 7.5-minute USGS topographic quadrangle map. The surrounding areas include residential and commercial development to the north, east, south, and west of the study area. The closest regionally significant biological resource is the Santa Ana River, located outside of the study area, approximately 1.25 miles south, and separated by residential and industrial properties. Two soil types were found within the survey area: Hanford coarse sandy loam and Tujunga gravelly loamy sand (Figure 15, Soils). However, most soils within the property were disturbed and compact.

The study area is comprised of multiple residential properties with ornamental landscaped vegetation and disturbed areas with non-native vegetation. Vegetation communities within the study area include non-native grasslands along the western, northern, and south eastern portions of the project site. These areas are dominated by non-native vegetation such as mouse barley (*Hordeum murinum*) and redstem stork's bill (*Erodium cicutarium*) and are regularly subject to weed abatement and grazing. Developed land with ornamental landscapes is found centralized within the study area. A small drainage feature was recorded along the southeastern portion of the project site. This area consisted of disturbed tall flatsedge (*Cyperus eragrostis*) and annual rabbitsfoot grass (*Polypogon monspeliensis*) within the channel. Other non-native ruderal species observed along the banks were burclover (*Medicago polymorpha*) and common sowthistle (*Sonchus oleraceus*). A map of the landscape and vegetation communities within the Biological Study area is depicted on Figure 16, Vegetation Communities. No sensitive vegetation communities were observed within the study area.

The vegetation within the study area is what is typical for urbanized areas in the region. A total of 18 plant species, 4 native and 14 non-native, were recorded within the biological study area (Appendix B, Biological Resources Attachments, Appendix B-1, Wildlife Compendium). The recorded native flora is likely limited due to the disturbed and urbanized setting of this site.

Wildlife species observed during the field survey of the study area were limited to five species including house sparrow (*Passer domesticus*), northern mockingbird (*Mimus polyglottos*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), domestic cat (*Felis catus*), domestic dog (*Canis domesticus*), and domestic horses on the residential properties (*Equus caballus*). These species are typical in an urban and developed setting. Other species expected to occur include the western fence lizard (*Sceloporus occidentalis*).

- a) ***Would the project 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 Game or U.S. Fish and Wildlife Service?***

No Impact. The study area consists of disturbed areas dominated by non-native vegetation and developed residences with ornamental landscapes. As stated previously, a California Natural Diversity Database search was conducted for the Redlands quadrangle and the eight surrounding quadrangles. Special-status species have historically been sighted within a 1-mile radius of the study areas; however, these species were found within the Santa Ana River located 1 mile south of the study area. Due to the lack of suitable habitat and the disturbed nature of a small drainage feature within the study area, special-status species potential to occur on site were low or not expected (Appendix B-2, Plant Species Potential to Occur and Appendix B-3, Wildlife Species Potential to Occur). Therefore, this project will not have a substantial effect on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW and U.S. Fish and Wildlife Service and no mitigation is required.

- 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, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Less-than-Significant Impact. A drainage feature was documented on the southeastern corner of the project site. The feature is a roadside swale/disturbed drainage ditch with a portion of the channel upstream containing riprap and the remainder consisting of disturbed tall flatsedge (*Cyperus eragrostis*) and rabbitsfoot grass (*Polypogon monspeliensis*) with non-native vegetation and disturbed soils. Adequate hydrology was observed along with hydrophytic vegetation; however, no hydric soils were found. This drainage feature does not pass the “three parameter test” and is not considered a federally protected wetland. Existing regulatory processes, including the 404 Permit or Nationwide Permit from the Army Corps of Engineers, a 401 Certification or Waste Discharge Requirement from the Regional Water Quality Control Board, and a Streambed Alteration Agreement from the California Department of Fish and Wildlife may be required if the applicable resource agency(ies) determine that the drainage is a regulated feature.

- 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?***

Less-than-Significant Impact. As explained above, a drainage feature was documented on the southeastern corner of the project site. Adequate hydrology was observed along with hydrophytic vegetation; however, no hydric soils were found. This is a disturbed drainage ditch with a portion of the channel upstream containing riprap and the remainder consisting of disturbed tall flatsedge (*Cyperus eragrostis*; facultative wetland (FACW)) and rabbitsfoot grass (*Polypogon monspeliensis*; FACW) with non-native vegetation and disturbed soils. The drainage feature travels from north to south. Features indicative of an ordinary high water mark were observed throughout the channel including a natural line impressed on beds and banks and a change in plant community. This drainage feature does not pass the “three parameter test” and is not considered a federally protected wetland. Existing regulatory processes, including the 404 Permit or Nationwide Permit from the Army Corps of Engineers, a 401 Certification or Waste Discharge Requirement from the Regional Water Quality Control Board, and a Streambed Alteration Agreement from the California Department of Fish and Wildlife may be required if the applicable resource agency(ies) determine that the drainage is a regulated feature. Through regulatory compliance, impacts to the drainage would be considered less than significant.

- 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?**

Less-than-Significant Impact with Mitigation Incorporated. Wildlife movement corridors, also referred to as dispersal corridors or landscape linkages, are generally defined as linear features along which animals can travel from one habitat or resource area to another. The project site is within a highly urbanized area and does not function as a corridor or linkage between large open space areas capable of supporting wildlife. Existing terrestrial wildlife movement through the study area and surrounding areas is expected to be primarily by medium-sized mammals that are adapted to the urban environment (e.g., coyote, *Canis latrans*) and the project is not expected to alter that use. Project-related construction and operation would have no adverse effects on the movement by any native resident or migratory wildlife species.

As previously described, the study area is generally made up of disturbed or existing development with ornamental landscapes. Although the trees found near these residential developments are primarily non-native, they may provide nesting sites for birds and raptors that are protected under the federal Migratory Bird Treaty Act and/or California Fish and Game Code. To avoid potential direct impacts to all nesting birds, the proposed project would implement mitigation measure MM-BIO-1.

- MM-BIO-1 Nesting Birds.** Commencement of construction activities shall avoid the February 1 through August 31 bird nesting season to the greatest extent feasible. If construction activities must begin within this nesting season, a survey for nesting birds shall be conducted by a qualified biologist within 72 hours before commencement of construction activities. The area surveyed shall include all clearing/construction areas, as well as areas within a 500-foot buffer around the site, or as otherwise determined by the biologist. If no active bird nests are identified on, or within the 500-foot buffer, no further action is necessary and construction activities could commence.

If active nests are found during pre-construction surveys or at anytime throughout the course of construction activities during the nesting bird season, all clearing/construction activities within a minimum 100 feet of the nest shall be postponed until a wildlife biologist has identified the nesting species. If the avian species is protected under the Migratory Bird Treaty Act and/or the California Fish and Game Code, a minimum buffer zone shall be established by the qualified biologist based on the type of bird/raptor species identified and the construction buffer shall be established on site through the erection of cones/flagging/fencing to clearly delineate the protection zone. All construction activities shall avoid this protection zone until a qualified biologist has confirmed that the nest(s) is no longer active, the nest is vacated, and there is no evidence of second nesting attempts.

With implementation of MM-BIO-1, impacts to nesting birds from construction-related activities would be less than significant.

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

Less than significant Impact. The City of Highland's Municipal Code Chapter 8.36 states a permit must be issued by the Department, for the removal or relocation of any heritage tree. A heritage tree is defined as any live tree, shrub or plant which meets specific criteria within the Municipal Code, including "All woody plants in excess of 15 feet in height and having a single trunk circumference of 24 inches or more, as measured four and one-half

feet above ground level.” Several trees meeting this definition are located throughout the project site and are proposed to be removed as part of the project. None of these trees have been designated as historical landmarks. With the implementation of proper permitting, HMC Section 8.36.040, when needed, the project would not conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance. Therefore, impacts would be less than significant.

- 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?**

No Impact. The project site is not located within a Habitat Conservation Plan, Natural Community Conservation Plan, or similar plan (CDFW 2019). The site is not located within or proximate to any Significant Ecological Area, Land Trust, or Conservation Plan. As such, no impact resulting from a conflict with an adopted conservation plan would occur.

3.5 Cultural Resources

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|-------------------------------------|--------------------------|
| V. CULTURAL RESOURCES – 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 checked="" type="checkbox"/> | <input 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 dedicated cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

The following analysis is based, in part, on the Historical Resources Technical Report and the Archaeological Resource Assessment prepared by Dudek in June 2021, included as Appendix C-1 and Appendix C-2, respectively.

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

Less-than-Significant Impact. As defined by the CEQA Guidelines, a “historical resource” is considered to be a resource that is listed in or eligible for listing in the National Register of Historic Places (NRHP) or California Register of Historic Resources (CRHR), has been identified as significant in a historical resource survey, or is listed on a local register of historical resources.

A built environment intensive-level survey was conducted on April 14, 2021, which surveyed 6 parcels properties within the project site. The intensive-level survey involved visiting each property and recording all buildings and structures with notes and photographs. Properties surveyed were fell into two categories: vacant and undeveloped and built environment resources. Three parcels surveyed were vacant properties and fully accessible and visible from the public right-of-way, including: Parcel 4: APN 1192-281-09, Parcel

5: APN 1192-281-12, and Parcel 6: APN 1192-281-14. Three properties, Parcel 1: 7834 Victoria Avenue (APN 1192-281-10), Parcel 2: 26432 6th Street (APN 1192-281-11), and Parcel 3: 7809 Grape Street (APN 1192-281-13) were positive for built environment resources over 45 years old. These parcels contained single-family residences and ancillary buildings including mobile homes, garages, sheds, horse barns, shade structures, and storage buildings.

The property significance evaluation was prepared by architectural historians meeting the Secretary of the Interior's Professional Qualification Standards for architectural history. The evaluation considers NRHP, CRHR, and City of Highland significance criteria and integrity requirements. As defined by the CEQA Guidelines (14 CCR 15000 et seq.), a "historical resource" is considered to be a resource if it is listed in or eligible for listing in the NRHP or CRHR, has been identified as significant in a historical resource survey, or is listed on a local register of historical resources.

The criteria for listing resources in the CRHR were developed in accordance with previously established criteria developed for listing in the NRHP. Thus, the following criteria are expressed in accordance with the NRHP criteria. According to PRC Section 5024.1(c)(1-4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

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

The City of Highland Cultural Resource Designation Criteria are listed under the Historic and Cultural Preservation Ordinance, adopted in 2021. An improvement, natural feature, or site may be nominated as a cultural resource by the historic and cultural preservation board pursuant to HMC 16.32.060 if it meets the criteria for listing on the National Register of Historic Places or the following:

- A. It exemplifies or reflects special elements of the city's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;
- B. It is identified with persons or events significant in local, state, or national history;
- C. It embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;
- D. It is representative of the work of a notable builder, designer, or architect;
- E. It contributes to the significance of an historic area, being a geographically definable area possessing a concentration of historic or scenic properties or thematically related grouping of properties which contribute to each other and are unified aesthetically by plan or physical development;
- F. It has a unique location or singular physical characteristics or is a view or vista representing an established and familiar visual feature of a neighborhood, community, or the city of Highland;
- G. It embodies elements of architectural design, detail, materials, or craftsmanship that represent a significant structural or architectural achievement or innovation;
- H. It is similar to other distinctive properties, sites, areas, or objects based on a historic, cultural, or architectural motif.

- I. It reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning.
- J. It is one of the few remaining examples in the city, region, state, or nation possessing distinguishing characteristics of an architectural or historical type of specimen. (Ord. 171 § 8.50, 1994)

Under CEQA, a project may have a significant effect on the environment if it may cause “a substantial adverse change in the significance of an historical resource” (California Public Resources Code, Section 21084.1; 14 CCR 15064.5[b]). If a site is listed or eligible for listing in the CRHR, included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code, Section 5024.1[q]), it is a “historical resource” and is presumed to be historically or culturally significant for the purposes of CEQA (California Public Resources Code, Section 21084.1; 14 CCR 15064.5[a]).

In compliance with CEQA, the following properties containing built-environment resources were evaluated under the four CRHR criteria previously outlined, as well as local landmark criteria to determine eligibility for listing in the CRHR or NRHP, and accordingly, their historical significance:

- **7834 Victoria Avenue (APN 1192-281-10):** This property contained thirteen buildings including one single-family residence, two garages, eight sheds, and two horse barns. The easternmost building on the property is a heavily altered, one-story, irregular in plan residence constructed in 1927 according to the County Assessor. Extensive exterior alterations have been made to the property over time.
- **26432 6th Street (APN 1192-281-11):** This property contained nine buildings, including one single-family residence, one mobile home, three garages, three sheds, and one shade structure. The southernmost building on the property is a heavily altered, one-story, irregular in plan residence constructed in 1941 according to the County Assessor. Extensive exterior alterations have been made to the property over time.
- **7809 Grape Street (APN 1192-281-13):** This property contained four buildings including one single-family residence, one storage building, and two horse barns. The westernmost building on the property is a heavily altered, one-story, rectangular in plan residence constructed in 1950 according to the County Assessor. Extensive exterior alterations have been made to the property over time.

As detailed in Appendix C-1, neither 7834 Victoria Avenue (APN 1192-281-10), 26432 6th Street (APN 1192-281-11), nor 7809 Grape Street (APN 1192-281-13) property appear eligible for listing in the NRHP, CRHR, or City of Highland designation due to a lack of important historical associations, lack of architectural merit, and lack of integrity, nor do they appear eligible as contributors to an historic district. As such, these properties are not considered historical resources for the purposes of CEQA. These resources have been assigned a California Historical Resource Status Code of 6Z (found ineligible for the NRHP, CRHR, or local designation through survey evaluation).

No historical resources were identified within the project site as a result extensive archival research, field survey, and property significance evaluation. Only three parcel contained buildings which met the 45-year age threshold for evaluation, and neither appears eligible for NRHP, CRHR, or City of Highland designation due to a lack of significant historical associations, architectural merit, and requisite integrity to convey significance. Therefore, impacts associated with historical resources would be less than significant.

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

Less-than-Significant Impact with Mitigation Incorporated. The proposed project site is relatively flat and generally slopes from east to west with a maximum site elevation of approximately 1,148± feet above mean sea level on the western side of the site. Soils within the proposed project site consist of both Hanford coarse sandy loam at 2 to 9% slopes typically found in stream bottoms, floodplains, and alluvial fans with slopes of 0 to 15%. Other soil types within the proposed project site includes the Tujunga gravelly loamy sand at 0 to 9% slopes typically found in alluvial fans and floodplains, including urban areas. The proposed project site is within the Upper Santa Ana River Watershed and originates in San Bernardino Mountains. The proposed project site is approximately 3 miles south and west of the San Bernardino Mountains and just northwest of an unnamed channel. The unnamed channel is an intermittent riverine system that flows only part of the year and travels north to south and connects to an unnamed drainage ditch that is located at the southwestern portion of the proposed project site. The ditch receives flow from a City storm drain at Victoria Avenue, as well as runoff from Victoria Avenue before discharging flows into a 48-inch corrugated metal pipe within 6th Street. This unnamed channel travels underground, approximately 0.25 miles south and presumably connects to City Creek, which is a direct tributary to the Santa Ana River. Given that the proposed project site is within the Santa Ana River Watershed and is northwest of an unnamed intermittent riverine system that connects to City Creek and 3 miles from a mountain range, there is a potential for the proposed project site to be buried in alluvial and flood deposits. Please refer to the Archaeological Resources Assessment report prepared for the Project (Appendix C-2) for an indepth discussion of the environmental and cultural setting and of natural and human disturbances to the Project site.

While the Native American Heritage Commission's (NAHC) Sacred Lands File (SLF) search (completed April 14, 2021) result was positive, it is important to note that the results of the SLF provided by the NAHC relate to the general regional area within and surrounding the proposed project site and don't necessarily equate to the existence of resources within the specific area occupied by the proposed project site. A review of the CHRIS records search (completed May 10, 2021) indicates that 13 previous cultural resource investigations have been conducted within the records search area between 1979 and 2013. Of these 13 studies, 1 study (SB-07959) encompasses the entirety of the current proposed project site; however, the study focuses on historic built environment resources and as such, the potential of archaeological resources was likely not considered during the survey. The entirety of the proposed project site has not been subject to any previous archaeological investigations. South Central Coastal Information Center records also indicate that 23 cultural resources, all of which are historic built environment resources, have been previously recorded within 0.5 miles of the proposed project site, none of which overlap or are adjacent to the proposed project site. No record of previously recorded historic-period or prehistoric archaeological resources are on file with the South Central Coastal Information Center as being present within proposed project site.

A review of aerial photographs for all available years indicates that in general, the proposed project site has been subjected to consistent ground disturbance, shifting from open land to agricultural and/or residential use between the early to late 20th century; however, Parcel 1 shifted to operating as a poultry farm between 1957 and the mid-1960s before reverting to residential use and Parcel 5 has remained open and undeveloped. Presently, Parcels 1–3 are developed with residential buildings and Parcels 4–6 are vacant.

An intensive-level archaeological pedestrian survey of the proposed project site was conducted on May 11, 2021 and June 15, 2021. Ground visibility within the proposed project site varied between poor to excellent

(30 to 100%) due to surface coverage by vegetation, surficial refuse, ground coverage by gravel and/or concrete pads, and extant buildings and associated structures. The pedestrian survey observations determined that the site was subjected to moderate disturbance throughout the site due to livestock activity, fencing, irrigation, and the storage of vehicles. Modern refuse, consisting of building/structural, vehicular, and domestic debris, was observed scattered across the proposed project site. A review of a geotechnical report prepared for the proposed project site (Appendix C-1), stated that fill soils were encountered from 12 to 18 inches (1 to 1.5 feet) below current grade within all 15 exploratory backhoe trenching locations conducted between 5 and 15.5 feet below current grade and placed at accessible locations throughout the proposed project site. Native soils were encountered underlying the fill soils and extend to the maximum depths reached during the geotechnical testing. The presence of fill soils demonstrates that native soils within which cultural deposits might exist in context could not have been observed during the survey; this fact demonstrates that the survey findings are less than reliable. No cultural materials were observed within the proposed project site.

In consideration of all these factors, the potential to encounter intact deposits containing archaeological resources within soils between the current grade and 18 inches below is unlikely. However, the potential for intact cultural deposits to exist within soils from 18 inches below current grade to the proposed depths of disturbance is possible. Given the proximity of the proposed project site to the San Bernardino Mountains, an unnamed channel, and City Creek (a tributary of the Santa Ana River), there is a potential for cultural materials within native soils. In the event that unanticipated archaeological resources are encountered during project implementation, impacts to these resources would be potentially significant. With the implementation of mitigation measure MM-CUL-1, that requires the development of a Cultural Resources Monitoring Plan, MM-CUL-2, that requires that all project construction personnel take the Workers Environmental Awareness Program training and MM-CUL-3, that requires the retention of a qualified archaeologist to address inadvertent discoveries, conduct a pedestrian survey of native soils once they are uncovered and to monitor ground disturbing activities within native soils as well as an inadvertent discovery clause, the potential for a substantial adverse change in the significance of an archaeological resource to occur is less than significant. Therefore, impacts would be less than significant with mitigation incorporated.

MM-CUL-1: Preparation of a Cultural Resources Monitoring Plan

A qualified archaeological principal investigator, meeting the Secretary of the Interior's Professional Qualification Standards, shall prepare a Cultural Resources Monitoring Plan (CRMP) in consultation with Tribes that requested consultation under AB 52. 2. The CRMP shall include a requirement for all construction personnel to complete a WEAP training prior to commencement of construction activities as outlined in MM-CUL-2. The CRMP shall stipulate the location and timing of archaeological and Native American monitoring based on MM-CUL-3. The qualified archaeologist principal investigator shall review engineering plans for the project to determine where ground disturbing activities will exceed the depths of artificial fill within the project site to determine the timing and locations of monitoring to be included in the CRMP. The CRMP shall include monitoring protocols to be carried out during project-related construction. The CRMP shall stipulate a Native American monitor, associated with any of the Tribes that have been consulted with under AB 52, be retained to monitor project-related ground disturbance stipulated in the CRMP. The CRMP shall contain an allowance that the qualified archaeologist principal investigator, based on observations of subsurface soil stratigraphy or other factors during initial grading, and in coordination with the Native American monitor(s) and the City, may reduce or discontinue monitoring as warranted if it is determined that the possibility of encountering archaeological or tribal cultural deposits is low. The CRMP shall outline the appropriate measures to be followed in the event

of unanticipated discovery of cultural and tribal cultural resources during program implementation, including that all ground disturbance within 60 feet of an unanticipated discovery shall cease until a treatment plan is developed by the qualified archaeologist principal investigator in coordination with the City and the Native American monitor(s) and which will consider the resources archaeological and tribal value. The CRMP shall identify avoidance as the preferred manner of mitigating impacts to cultural resources. The CRMP shall establish the criteria utilized to evaluate the significance (per CEQA) of the discoveries, methods of avoidance consistent with CEQA Guidelines Section 15126.4(b)(3), as well as identify the appropriate treatment to mitigate the effect of the project if avoidance of a significant resource is determined to be infeasible. The plan shall also require the preparation of a monitoring report following the completion of all ground disturbing activities for the project. The monitoring report will be submitted to the City for review and comment and a final copy will be filed at the SCCIC. The CRMP shall be submitted to the City and the appropriate Native American representatives who have been consulted with under AB 52 for review prior to the City's issuance of a grading permit and the start of project-related ground disturbance.

MM-CUL-2 All construction personnel and monitors who are not trained archaeologists shall be briefed regarding inadvertent discoveries prior to the start of construction activities. A basic presentation and handout or pamphlet shall be prepared in order to ensure proper identification and treatment of inadvertent discoveries. The purpose of the Workers Environmental Awareness Program (WEAP) training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.

MM-CUL-3 A qualified archaeologist shall be retained and on-call to respond and address any inadvertent discoveries identified for the duration of construction activities. Additionally, in consideration of the potential to encounter intact cultural deposits beneath fill soils, the qualified archaeologist shall monitor ground disturbing activities between 12–18 inches below current grade and shall survey the project site once fill soils have been removed to ensure no cultural deposits underly the fill layer. A qualified archaeological principal investigator, meeting the Secretary of the Interior's Professional Qualification Standards, shall oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor will be responsible for maintaining daily monitoring logs.

In the event that potential prehistoric or historical archaeological resources (sites, features, or artifacts) are exposed during construction activities for the project, all construction work occurring within 60 feet of the find shall immediately stop and a qualified archaeologist must be notified immediately to assess the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work as outlined in the Cultural Resources Monitoring Plan (MM-CUL-1) may be warranted. If resources are determined to be tribal cultural resources in nature, MM-TCR-2 shall be implemented.

Within 60 days following completion of ground disturbance and submitted to the City for review. This report shall document compliance with approved mitigation, document the monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the South Central Coastal Information Center and interested consulting tribes.

c) ***Would the project disturb any human remains, including those interred outside of dedicated cemeteries?***

Less-than-Significant Impact with Mitigation Incorporated. No prehistoric or historic burials were identified within the proposed project site as a result of the CHRIS records search or pedestrian survey. Although the NAHC's SLF search result was positive, it is important to note that the results of the SLF provided by the NAHC relate to the general regional area within and surrounding the proposed project site and don't necessarily equate to the existence of resources or human remains within the specific area occupied by the proposed project site. In the event that human remains are inadvertently encountered during construction activities, such resources would be treated in accordance with state and local regulations that provide requirements with regard to the accidental discovery of human remains, including California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. No further excavation or disturbance of the project site or any nearby area reasonably suspected to overlie adjacent remains can occur until the County Coroner has determined, within 2 working days of notification of the discovery, if the remains are potentially human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she is required to notify the NAHC within 24 hours. The NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant must then complete their inspection within 48 hours of being granted access to the site. The most likely descendant would then determine, in consultation with the property owner, the disposition of the human remains. Compliance with these regulations would ensure that impacts to human remains resulting from the proposed project would be less than significant.

3.6 Energy

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|-------------------------------------|--------------------------|
| VI. Energy – Would the project: | | | | |
| a) Result in 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 checked="" type="checkbox"/> | <input type="checkbox"/> |

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

Less-than-Significant Impact. The electricity and natural gas used for construction of the proposed project would be temporary, would be substantially less than that required for project operation, and would have a negligible contribution to the project's overall energy consumption. Although the project would see an increase in petroleum use during construction and operation, vehicles would use less petroleum due to advances in fuel economy and potential reduction in VMT over time.

Construction

Electricity

Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers) would be provided by Southern California Edison. The electricity used for such activities would be temporary, would be substantially less than that required for project operation, and would have a negligible contribution to the project's overall energy consumption.

Natural Gas

Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the Petroleum subsection. Any minor amounts of natural gas that may be consumed as a result of project construction would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption.

Petroleum

Heavy-duty construction equipment associated with construction activities would rely on diesel fuel. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed in this analysis that construction workers would travel to and from the site in gasoline-powered passenger vehicles.

Heavy-duty construction equipment of various types would be used during each phase of project construction. Appendix A-1 lists the assumed equipment usage for each phase of construction.

Fuel consumption from construction equipment was estimated by converting the total carbon dioxide (CO₂) emissions from each construction phase to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. Construction is estimated to occur in 2022 based on the construction phasing schedule. The conversion factor for gasoline is 8.78 kilograms per metric ton CO₂ per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO₂ per gallon (The Climate Registry 2020). The estimated diesel fuel usage from construction equipment is shown in Table 15.

Table 15. Construction Equipment Diesel Demand

| Phase | Pieces of Equipment | Equipment CO ₂ (MT) | kg/CO ₂ /Gallon | Gallons |
|------------------|---------------------|--------------------------------|----------------------------|----------|
| Demolition | 4 | 34.23 | 10.21 | 3,352.49 |
| Site Preparation | 7 | 16.86 | 10.21 | 1,650.82 |

Table 15. Construction Equipment Diesel Demand

| Phase | Pieces of Equipment | Equipment CO ₂ (MT) | kg/CO ₂ /Gallon | Gallons |
|-----------------------|---------------------|--------------------------------|----------------------------|------------------|
| Grading | 8 | 82.46 | 10.21 | 8,076.71 |
| Building Construction | 9 | 97.91 | 10.21 | 9,589.36 |
| Paving | 6 | 20.19 | 10.21 | 1,977.42 |
| Architectural Coating | 1 | 2.56 | 10.21 | 250.48 |
| Total | | | | 24,897.29 |

Sources: Pieces of equipment and equipment CO₂ (Appendix A-1); kg/CO₂/Gallon (The Climate Registry 2020).

Notes: CO₂ = carbon dioxide; MT = metric ton; kg = kilogram.

Fuel consumption from worker and vendor trips is estimated by converting the total CO₂ emissions from each construction phase to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline and vendor vehicles are assumed to be diesel. The project also includes haul truck trips for the export of demolition waste and import of earthwork materials. Calculations for total worker, vendor truck and haul truck fuel consumption are provided in Table 16.

Table 16. Construction Worker and Vendor Gasoline and Diesel Demand

| Phase | Trips | Vehicle MT CO ₂ | kg/CO ₂ /Gallon | Gallons |
|--------------------------|--------|----------------------------|----------------------------|---------------|
| Worker (Gasoline) | | | | |
| Demolition | 320 | 1.41 | 8.78 | 160.74 |
| Site Preparation | 180 | 0.79 | 8.78 | 90.41 |
| Grading | 600 | 2.65 | 8.78 | 301.38 |
| Building Construction | 18,816 | 82.98 | 8.78 | 9,451.22 |
| Paving | 320 | 1.41 | 8.78 | 160.74 |
| Architectural Coating | 920 | 4.06 | 8.78 | 462.12 |
| Vendor (Diesel) | | | | |
| Demolition | 0 | 0.00 | 10.21 | 0.00 |
| Site Preparation | 0 | 0.00 | 10.21 | 0.00 |
| Grading | 0 | 0.00 | 10.21 | 0.00 |
| Building Construction | 7,392 | 70.12 | 10.21 | 6,867.83 |
| Paving | 0 | 0.00 | 10.21 | 0.00 |
| Architectural Coating | 0 | 0.00 | 10.21 | 0.00 |
| Haul (Diesel) | | | | |
| Demolition | 114 | 3.47 | 10.21 | 340.14 |
| Site Preparation | 0 | 0.00 | 10.21 | 0.00 |
| Grading | 20 | 0.61 | 10.21 | 59.68 |
| Building Construction | 0 | 0.00 | 10.21 | 0.00 |
| Paving | 0 | 0.00 | 10.21 | 0.00 |
| Architectural Coating | 0 | 0.00 | 10.21 | 0.00 |
| Total | | | | 42,792 |

Sources: Trips and vehicle CO₂ (Appendix A-1); kg/CO₂/Gallon (The Climate Registry 2020).

Notes: MT = metric ton; CO₂ = carbon dioxide; kg = kilogram.

In summary, construction of the project is anticipated to consume 10,627 gallons of gasoline and 32,165 gallons of diesel over the course of 9 months. The project will be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation: (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and 4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements. The project is also located in an urban area and worker, vendor, and haul truck trip lengths would be shorter compared to a suburban project location, resulting in less energy use. Therefore, impacts to energy resources during construction would be less than significant.

Operation

Electricity

The operation of the project would require electricity for multiple purposes, including cooling, lighting, appliances, and powering various equipment, such as electric forklifts. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage. Electricity consumption associated with project operation is based on the CalEEMod outputs and spreadsheet calculations for water, wastewater, and electric forklifts presented in Appendix A-1.

CalEEMod default values for energy consumption for each land use were applied for the project analysis. The energy use from non-residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the heating, ventilation, and air conditioning [HVAC] system; water heating system; and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, became effective on January 1, 2020. According to these estimations, the project would consume approximately 1,926,577 kilowatt-hours per year during operation (Appendix A-1).

Natural Gas

The operation would require natural gas for various purposes, including water heating and natural gas appliances and natural gas forklifts. Natural gas consumption associated with operation is based on the CalEEMod outputs in Appendix A-1.

CalEEMod default values for energy consumption for each land use were applied for the project analysis. The energy use from non-residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end use categories subject to Title 24 requirements (end uses associated with the

building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous “plug-in” uses).

Title 24 of the California Code of Regulations serves to enhance and regulate California’s building standards. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, became effective on January 1, 2020. According to these estimations, the project would consume approximately 617,932 thousand British thermal units per year.

Petroleum

During operations, the majority of fuel consumption resulting from the project would involve the use of forklifts and motor vehicles traveling to and from the project site.

Petroleum fuel consumption associated with motor vehicles traveling to and from the project site is a function of the VMT as a result of project operation. As shown in Appendix A-1 (calculation spreadsheets) and as discussed in Section 3.3 and Section 3.8, the annual VMT attributable to the project is expected to be 2,350,892 miles for passenger vehicles and 2,146,200 miles for trucks. Similar to the construction worker and vendor trips, fuel consumption from worker and truck trips are estimated by converting the total CO₂ emissions from operation of the project to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. Mobile source emissions were estimated using EMFAC2021. Calculations for annual mobile source fuel consumption are provided in Table 17.

Table 17. Operational Annual Mobile Source Petroleum Demand

| Fuel | Source | Vehicle MT CO₂ | kg/CO₂/Gallon | Gallons |
|--------------|---------------|----------------------------------|---------------------------------|-------------------|
| Gasoline | Vehicles | 722.63 | 8.78 | 82,304.10 |
| Diesel | Vehicles | 3,126.07 | 10.21 | 306,177.28 |
| Diesel | Forklifts | 369.58 | 10.21 | 36,197.85 |
| Total | | | | 424,679.22 |

Sources: Trips and vehicle CO₂ (Appendix A-1); kg/CO₂/Gallon (The Climate Registry 2020).

Notes: MT = metric ton; CO₂ = carbon dioxide; kg = kilogram

As shown in Table 17, total petroleum consumption for the project annually is estimated to be 424,679 gallons.²⁰

Summary

In summary, although natural gas and electricity usage would increase due to the implementation of the project, the project would be subject to the State Building Energy Efficiency Standards. Although the project would see an increase in petroleum use during construction and operation, vehicles would use less petroleum due to advances in fuel economy and potential reduction in VMT over time. Therefore, impacts to energy resources during operation would be less than significant.

Over the lifetime of the project, the fuel efficiency of the vehicles being used by the visitors and employees of the project is expected to increase. As such, the amount of gasoline consumed as a result of vehicular trips to and from the project site during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted

²⁰ For context, California as a whole is expected to consume approximately 18.0 billion gallons of petroleum per year by 2023 (CARB 2021). Countywide total petroleum use by vehicles is expected to be 123.71 million gallons per year by 2023 (CARB 2021).

a new approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the number of plug-in hybrids and zero-emission vehicles in California (CARB 2017a). Additionally, in response to Senate Bill (SB) 375, CARB has adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by the year 2020 and 13% by the year 2035 for light-duty passenger vehicles in the SCAG planning area. This reduction would occur by reducing VMT through the integration of land use planning and transportation. As such, operation of the project is expected to use decreasing amounts of petroleum over time, due to advances in fuel economy.

The project would create additional electricity and natural gas demand by adding warehouse facilities. New facilities associated with the proposed project would be subject to the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations. The efficiency standards apply to new construction of non-residential buildings and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting.

In summary, implementation of the project would increase the demand for electricity and natural gas at the project site and petroleum consumption in the region during construction and operation. However, as the project would be consistent with current regulations and policies, the project would not be wasteful, inefficient, and would not result in unnecessary energy resource consumption. The project's energy consumption demands during construction and operation would conform to the State's Title 24 standards such that the project would not be expected to wastefully use gas and electricity. Since the proposed project would comply with Title 24 conservation standards, the proposed project would not directly require the construction of new energy generation or supply facilities or result in wasteful, inefficient, or unnecessary consumption of energy. Moreover, vehicle usage associated with the project would use less petroleum due to advances in fuel economy and potential reduction in VMT over time. Therefore, impacts would be less than significant.

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

Less-than-Significant Impact. The project would be subject to and would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR, Part 6). Part 6 of Title 24 establishes energy efficiency standards for non-residential buildings constructed in California to reduce energy demand and consumption. As such, the project would comply with the California code requirements for energy efficiency.

Part 11 of Title 24 sets forth voluntary and mandatory energy measures that are applicable to the project under the California Green Building Standards, also known as CALGreen. CALGreen institutes mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, high-rise residential, state-owned buildings, schools, and hospitals, as well as certain residential and non-residential additions and alterations. On this basis, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, impacts would be less than significant.

3.7 Geology and Soils

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|-------------------------------------|
| VII. GEOLOGY AND SOILS – Would the project: | | | | |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iv) 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 off-site 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 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | <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"/> |

a) ***Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***

i) ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

No Impact. The Alquist-Priolo Zones Special Studies Act defines active faults as those that have experienced surface displacement or movement during the last 11,000 years. As shown in Figure 6-2 of the General Plan, the City of Highland is traversed by the San Andreas Fault System (City of Highland 2006). The Alquist-Priolo Earthquake Fault Zone, as identified in the General Plan, is located 2.3 miles east of the project site (City of Highland 2006). The proposed development lies outside of any Alquist Priolo Special Studies Zone and the potential for damage due to direct fault rupture is considered unlikely (Appendix D-1, Geotechnical Investigation). Additionally, based on a review of the CDOC regulatory maps, the project site is not located in a designated Fault Hazard Zone (CDOC 2021). Therefore, no impacts associated with fault rupture would occur.

ii) ***Strong seismic ground shaking?***

Less-than-Significant Impact. Similar to other areas located in the seismically active Southern California region, the City is susceptible to strong ground shaking during an earthquake. However, as previously addressed in Section 3.7(a)(i), the project site is located approximately 2.3 miles west of the San Andreas Fault Zone which is capable of producing an 8.3 Magnitude earthquake (City of Highland 2006). Pursuant to Title 15, Buildings and Construction, of the Highland Municipal Code, the project would incorporate the design recommendations included in its geotechnical report, which will be subject to review and approval by City staff prior to issuance of a grading permit. The project's geotechnical report provides specific design recommendations to ensure the structural integrity of the project in the event that seismic ground shaking is experienced at the project site. These recommendations include performing remedial grading, over-excavating existing soils, and recompacting these soils with structured fill, among other technical design recommendations (Appendix D-1). Additionally, the project's structures would be designed consistent with the most recent version of the California Building Code, which includes universal standards relating to seismic load requirements. With implementation of the recommendations of the project's geotechnical report, impacts associated with strong seismic ground shaking would be less than significant.

iii) ***Seismic-related ground failure, including liquefaction?***

Less-than-Significant Impact. Liquefaction occurs when partially saturated soil loses its effective stress and enters a liquid state, which can result in the soil's inability to support structures above. Liquefaction can be induced by ground-shaking events and is dependent on soil saturation conditions. As shown in Figure 6-3 of the General Plan, the project site is not within a High Liquefaction Susceptibility Area (City of Highland 2006), and according to the project's Geotechnical Report, liquefaction is not a concern for the project site (Appendix D-1).

The project would involve the installation of an infiltration basin to capture, treat, and infiltrate stormwater flows on the site. A detailed Infiltration Study (Appendix D-2) was prepared to evaluate the suitability of the site for such a system, taking into account the characteristics of on-site soils. The infiltration study determined that the site is suitable for stormwater infiltration without increasing the potential for settlement of both proposed and existing structures (e.g., Grape Street and retaining/basement walls adjacent to the

project site) in the project area. Therefore, impacts associated with seismic-related ground failure, including liquefaction, would be less than significant.

iv) Landslides?

No Impact. The project site is relatively flat and is not within an area susceptible to landslides as shown in General Plan Figure 6-3 (City of Highland 2006). Therefore, no impact associated with landslides would occur on the proposed project site.

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

Short-Term Construction Impacts

Less-than-Significant Impact. Ground surfaces that would be temporarily exposed during construction could result in erosion or loss of soil during storm events. Construction projects that involve the disturbance of 1 or more acres of soil, including clearing, grading, and disturbances to the ground such as stockpiling or excavation, are required to obtain coverage under the State Water Resources Control Board General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit). The Construction General Permit requires the development and implementation of a SWPP (SWRCB 2021a). Implementation of a Construction General Permit, including preparation of a SWPPP and installation of BMPs, would reduce the potential for both stormwater runoff and soil erosion impacts. Therefore, short-term construction impacts associated with soil erosion would be less than significant.

Long-Term Operational Impacts

Less-than-Significant Impact. Following construction of the project, ground surfaces would be covered by the proposed warehouse building or otherwise stabilized with landscaping and paving. The stormwater generated on site, along with any sediments contained within the stormwater, will be directed into an on-site corrugated metal pipe (CMP) infiltration system to be treated on site. Therefore, the potential for substantial soil erosion or the loss of topsoil is considered less than significant.

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

Less-than-Significant Impact. As previously discussed, the potential for the project to result in or be affected by landslides and liquefaction is low, and these issues are not anticipated at the project site. The project would be designed consistent with the specific design recommendations of the project's geotechnical report, which provides recommendations to perform remedial grading, over-excavate existing soils, and recompact these soils with structured fill, among other technical design recommendations (Appendix D-1). Implementation of these recommendations would address these potentially hazardous conditions and ensure structural integrity in the event that seismic-related issues are experienced at the project site. With implementation of the recommendations of the project's geotechnical report, impacts would be less than significant.

- d) ***Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

Less-than-Significant Impact. Expansive soils are characterized by their potential shrink/swell behavior. Shrink/swell is the change in volume (expansion and contraction) that occurs in certain fine-grained clay sediments from the cycle of wetting and drying. Much of the damage to building foundations, roads, and other structures can be caused by the swelling and shrinking of soils as a result of wetting and drying. The upper soils at the project site are very low (Expansion Index=0-20) in expansion potential (Appendix D-1). Further, compliance with California Building Code requirements would reduce the potential risk to people and structures due to unstable and expansive soils. Therefore, impacts associated with expansive soils would be less than significant.

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

No Impact. The proposed project would connect directly to the municipal sanitary sewer system and would not require septic tanks or any other alternative wastewater disposal system. Therefore, no impacts associated with the ability of soils to support septic tanks would occur.

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

Less-than-Significant Impact with Mitigation Incorporated. The geologic units underlying the project site as primarily fill soils encountered at the ground surface. The fill soils generally consist of silty sand with some gravel, rocks, and minor debris. Native soils generally consisting of silty sand with some gravel and occasional cobbles were encountered beneath the upper fill soils (Appendix D-1). As is the case with most development projects that involve earthwork activity, there is always a possibility that subsurface construction activity could unearth a potentially significant paleontological resource. MM-GEO-1 would be required to ensure that subsurface construction activity complies with the standard procedures for treatment of unanticipated discovered of paleontological resources; therefore, with incorporation of mitigation, impacts associated with paleontological resources would be less than significant.

- MM-GEO-1 *Discovery of Paleontological Resources.*** In the event that paleontological resources (i.e., fossil remains) are exposed during construction activities for the project, all construction work occurring within 50 feet of the find shall immediately stop until a qualified paleontologist, as defined by the Society of Vertebrate Paleontology's guidelines, can assess the nature and importance of the find. Depending on the significance of the find, the qualified paleontologist may record the find and allow work to continue or may recommend salvage and recovery of the resource. All recommendations shall be made in accordance with the Society of Vertebrate Paleontology's guidelines and shall be subject to review and approval by the City of Highland. Work in the area of the find may only resume upon approval of a qualified paleontologist.

3.8 Greenhouse Gas Emissions

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|--------------------------|
| VIII. GREENHOUSE GAS EMISSIONS – 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"/> |

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

Less-than-Significant Impact. Climate change refers to any significant change in measures of climate (e.g., temperature, precipitation, or wind patterns) lasting for an extended period of time (i.e., decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. The greenhouse effect is the trapping and buildup of heat in the atmosphere near the Earth's surface (the troposphere). The greenhouse effect is a natural process that contributes to regulating the Earth's temperature, and it creates a livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride (see also CEQA Guidelines Section 15364.5).²¹ The three GHGs evaluated herein are CO₂, CH₄, and N₂O because these gases would be emitted during project construction and operation.

The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO₂ equivalent (CO₂e). Consistent with CalEEMod Version 2020.4.0, this GHG emissions analysis assumed the GWP for CH₄ is 25

²¹ Climate-forcing substances include greenhouse gases (GHGs) and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in the California Health and Safety Code Section 38505; impacts associated with other climate-forcing substances are not evaluated herein.

(i.e., emissions of 1 MT of CH₄ are equivalent to emissions of 25 MT of CO₂), and the GWP for N₂O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

As discussed in Section 3.3, the project is located within SCAQMD jurisdictional boundaries. In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its Draft Guidance Document—Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008b). This document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO₂e per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (SCAQMD 2008b). The 10,000 MT CO₂e per-year threshold, which was derived from GHG reduction targets established in Executive Order (EO) S-3-05, was based on the conclusion that the threshold was consistent with achieving an emissions capture rate of 90% of all new or modified stationary source projects.

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land-use development projects. The most recent proposal issued by SCAQMD, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

- Tier 1.** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2.** Consider whether or not the project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3.** Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO₂e per-year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO₂e per year), commercial projects (1,400 MT CO₂e per year), and mixed-use projects (3,000 MT CO₂e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO₂e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Construction Greenhouse Gas Emissions

Construction of the project would result in GHG emissions, which are primarily associated with the use of off-road construction equipment, on-road haul and vendor trucks, and worker vehicles. The SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008b) recommends that “construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies.” Thus, the total construction GHG emissions were calculated, amortized over 30 years, and

added to the total operational emissions for comparison with the GHG significance threshold of 10,000 MT CO₂e per year. The determination of significance, therefore, is addressed in the operational emissions discussion following the estimated construction emissions.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 3.3. Construction of the project is anticipated to commence in February 2022, lasting a total of 9 months and reaching completion in October 2022. On-site sources of GHG emissions include off-road equipment and off-site sources include haul trucks, vendor trucks, and worker vehicles. Table 18 presents construction GHG emissions for the project from on-site and off-site emission sources.

Table 18. Estimated Annual Construction Greenhouse Gas Emissions

| | CO ₂ | CH ₄ | N ₂ O | CO ₂ e |
|--|-----------------------------|-----------------|------------------|-------------------|
| Year | <i>Metric Tons per Year</i> | | | |
| 2022 | 415.86 | 0.08 | 0.01 | 421.71 |
| Total | | | | 421.71 |
| Amortized Emissions (over 30 years) | | | | 14.06 |

Source: Appendix A-1.

Notes: CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent.

As shown in Table 18, the estimated total GHG emissions during construction of the project would be approximately 422 MT CO₂e. Estimated project-generated construction emissions amortized over 30 years would be approximately 14 MT CO₂e per year. As with project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Because there is no separate GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis in the following text.

Operational Greenhouse Gas Emissions

CalEEMod Version 2020.4.0 was used to estimate potential project-generated operational GHG emissions from area sources (landscape maintenance), natural gas combustion, electrical generation, water supply and wastewater treatment, solid waste, and off-road equipment (forklifts). As with the air quality analysis, mobile source GHG emissions were estimated using a spreadsheet model based on EMFAC2021 emission factors. Emissions from each category—area sources, energy sources, mobile sources, solid waste, water supply and wastewater treatment, and off-road equipment—are discussed in the following text with respect to the project. For additional details, see Section 3.3 for a discussion of operational emission calculation methodology and assumptions, specifically for area, energy (natural gas), and mobile sources. Operational year 2023 was assumed to be the first full year of operation following completion of construction.

Area Sources

CalEEMod was used to estimate GHG emissions from the project's area sources, including operation of gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions. It was assumed that 100% of the landscaping equipment would be gasoline powered. Consumer product use and architectural coatings result in VOC emissions, which are analyzed in air quality analysis only, and low to no GHG emissions.

Energy Sources

The estimation of operational energy emissions was based on CalEEMod land use defaults and square footage of the project's land uses. For non-residential buildings, CalEEMod energy intensity value (electricity or natural gas usage per square foot per year) assumptions were based on the California Commercial End-Use Survey database. Emissions are calculated by multiplying the energy use by the utility carbon intensity (pounds of GHGs per kilowatt-hour for electricity or 1,000 British thermal units for natural gas) for CO₂ and other GHGs.

The current Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. The current version of CalEEMod assumes compliance with the 2019 Title 24 Building Energy Efficiency Standards (CAPCOA 2021).

The CalEEMod default energy intensity factor (CO₂, CH₄, and N₂O mass emissions per kilowatt-hour) for Southern California Edison is based on the value for Southern California Edison's energy mix in 2020 reported in 2021. The Southern California Edison energy use intensity factor was adjusted consistent with SCE's 2020 Corporate Sustainability Report, which reported that 34.2% of the power mix was generated by eligible renewable sources in 2020 (SCE 2021). SB X1 2 established a target of 33% from renewable energy sources for all electricity providers in California by December 31, 2020, and SB 100 calls for further development of renewable energy, with a target of 44% by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030. As such, GHG emissions associated with project electricity demand would continue to decrease over time.

Mobile Sources

All details for criteria air pollutants discussed in Section 3.3 are also applicable for the estimation of operational mobile source GHG emissions. It was assumed that the warehouse would operate 7 days per week; therefore, 365 days of vehicle emissions were assumed. Regulatory measures related to mobile sources include Assembly Bill (AB) 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. In addition, the National Highway Traffic Safety Administration and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the project's motor vehicles. The effectiveness of fuel economy improvements was evaluated to the extent it was captured in the EMFAC2021 emission factors for motor vehicles in 2023.

The Advanced Clean Trucks Regulation was approved by CARB in 2020. The purpose of the Advanced Clean Trucks Regulation is to accelerate the market for zero-emission vehicles in the medium- and heavy-duty truck sector and to reduce air pollutant emissions generated from on-road mobile sources (CARB 2020). The regulation has two components including a (1) manufacturer sales requirement and (2) a reporting requirement:

1. Zero-emission truck sales: Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would

need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales.

2. Company and fleet reporting: Large employers including retailers, manufacturers, brokers and others will be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Solid Waste

The project would generate solid waste and therefore, would result in CO₂e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated using CalEEMod default values.

Off-Road Equipment

The SCAQMD published a summary of operational survey results from 34 operating high-cube warehouses (SCAQMD 2014). The SCAQMD survey reported an average of 0.12 forklifts/pallet jacks per 1,000 square feet of building area, which was applied to the project. Note that this estimate is for total forklifts and pallet jacks. Pallet jacks are small as they are primarily used to lift small loads in tight quarters (and are electric or manual); therefore, assuming all pieces of equipment are forklifts is conservative. For the project, a total of 35 forklifts were assumed. Of the total 35 forklifts, 15 of the forklifts were modeled as diesel powered with Tier 4 Interim compliant engines. The remaining 20 forklifts are assumed to be electric-operated. All 35 forklifts are assumed to operate 8 hours per day and 7 days per week at the project site. CalEEMod was used to estimate emissions from diesel powered forklifts while spreadsheet model was used to estimate the energy consumption and GHG emissions from the electric forklifts, see Appendix A-1.

The estimated operational (year 2023) project-generated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, water usage and wastewater generation, and off-road equipment are shown in Table 19.

Table 19. Estimated Annual Operational Greenhouse Gas Emissions

| Emission Source | CO ₂ | CH ₄ | N ₂ O | CO ₂ e |
|-----------------|-----------------------------|-----------------|------------------|-------------------|
| | <i>metric tons per year</i> | | | |
| Area | 0.01 | <0.01 | 0.00 | 0.01 |
| Energy | 202.53 | 0.01 | <0.01 | 203.39 |
| Mobile | 3,709.38 | 0.14 | 0.46 | 3,848.70 |
| Solid waste | 58.66 | 3.47 | 0.00 | 145.33 |

Table 19. Estimated Annual Operational Greenhouse Gas Emissions

| Emission Source | CO ₂ | CH ₄ | N ₂ O | CO ₂ e |
|---|-----------------------------|-----------------|------------------|-------------------|
| | <i>metric tons per year</i> | | | |
| Water supply and wastewater | 236.69 | 2.33 | 0.06 | 311.75 |
| Off-road equipment (Diesel Forklifts) | 366.62 | 0.12 | 0.00 | 369.58 |
| Off-road equipment (Electric Forklifts) | 71.19 | <0.01 | <0.01 | 71.52 |
| Project Total | | | | 4,950.28 |
| <i>Amortized Construction Emissions</i> | | | | <i>14.06</i> |
| Operation + Amortized Construction Total | | | | 4,964.34 |

Source: Appendix A-1.

Notes: CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent.

As shown in Table 19, estimated annual generated GHG emissions would be approximately 4,950 MT CO₂e per year as a result of project operation. Estimated annual project-generated operational emissions in 2023 and amortized project construction emissions of approximately 14 MT CO₂e per year would be approximately 4,964 MT CO₂e per year. Annual operational GHG emissions with amortized construction emissions would not exceed the SCAQMD recommended threshold of 10,000 MT CO₂e per year.

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

Less-than-Significant Impact. The project would result in less-than-significant impacts related to conflicts with GHG emission reduction plans, for the reasons described as follows.

Potential to Conflict with the San Bernardino County Regional GHG Reduction Plan

The San Bernardino Council of Governments (SBCOG) adopted a Regional GHG Reduction Plan in March 2021 (SBCOG 2021). The GHG Reduction Plan compiled an inventory of GHG emissions and developed reduction measures that could be adopted by the 21 Partnership cities of San Bernardino County. The regional GHG Reduction Plan serves as the basis for cities in the County to develop a more detailed community or local level climate action plan. As discussed in the GHG Reduction Plan, The City of Highland selected a goal to reduce its community GHG emissions to a level that is 40% below its 2016 emissions by 2030. The City will meet and exceed this goal subject to reduction measures that are technologically feasible and cost-effective through a combination of state (approximately 70%) and local (approximately 30%) efforts. The Pavley vehicle standards, the state's low carbon fuel standard, the renewable portfolio standard, and other state measures will reduce GHG emissions in Highland's on-road, solid waste, and building energy sectors in 2030. However, the City of Highland has not adopted a local climate action plan. Nonetheless, the project would comply with or not prevent the City from pursuing the relevant GHG reduction measures and regulations outlined in the Regional GHG reduction Plan, including compliance with applicable Title 24 building standards, and compliance with the City's off-road equipment idling ordinance. The Regional GHG Reduction Plan is not a qualified GHG reduction plan under CEQA Guidelines Section 15183.5. Therefore, this discussion is for informational purposes only and is not determinative of significance.

Potential to Conflict with the CARB Scoping Plan

The Climate Change Scoping Plan, approved by CARB in 2008 and updated in 2014 and 2017, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, and it is not intended to be used for project-level evaluations.²² Under the Scoping Plan, however, several state regulatory measures aim to identify and reduce GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area-source emissions (e.g., energy usage and high-GWP GHGs in consumer products) and changes to the vehicle fleet (e.g., hybrid, electric, and more fuel-efficient vehicles) and associated fuels, among others. Nonetheless, the project would comply with various GHG emission reduction regulations to the extent they apply to the project's emissions sources including CARB's tractor-trailer GHG regulations and Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines.

Potential to Conflict with the Southern California Association of Governments 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

The SCAG 2020–2045 RTP/SCS (Connect SoCal) is a regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks in the Southern California Region pursuant to SB 375. In addition to demonstrating the Region's ability to attain the GHG emission-reduction targets set forth by CARB, the 2020-2045 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. Thus, successful implementation of the 2020-2045 RTP/SCS would result in more complete communities with various transportation and housing choices while reducing automobile use.

The following strategies are intended to be supportive of implementing the 2020-2045 RTP/SCS and reducing GHGs: focus growth near destinations and mobility options; promote diverse housing choices; leverage technology innovations; support implementation of sustainability policies; and promote a green region (SCAG 2020). The strategies that pertain to residential development and SCAG's support of local jurisdiction sustainability efforts would not apply to the project. The project's potential to conflict with the remaining applicable strategies is presented in the following text.

Focus Growth Near Destinations and Mobility Options. One of the strategies within the 2020–2045 RTP/SCS's focuses on growth near existing transit and implementation of first/last mile strategies. The project would not conflict with this strategy of the 2020–2045 RTP/SCS as the project is located within 4.4 miles to the San Bernardino Transit Center. Omnitrans provides public transportation throughout the San Bernardino Valley and would serve as the nearest transit service to the project site. The nearest Omnitrans bus stop serves Route 15, located approximately 0.30 miles north of the project site at the intersection of Victoria Avenue/9th Street. Route 15 operates between the Fontana Metrolink Transit Center and the City of Redlands via the Cities of Rialto, San Bernardino, and Highland, with a peak service frequency of 60 minutes throughout the week

²² The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

Leverage Technology Innovations. One of the technology innovations identified in the 2020–2045 RTP/SCS that would apply to the project is the promotion and support of low emission technologies for transportation, such as alternative fueled vehicles to reduce per capita GHG emissions. The project would not conflict with SCAG’s ability to implement this strategy.

Promote a Green Region. The third applicable strategy within the 2020–2045 RTP/SCS, for individual developments, such as the project, involves promoting a green region through efforts such as supporting local policies for renewable energy production and promoting more resource efficient development (e.g., reducing energy consumption) to reduce GHG emissions. The project would support this measure by complying with the 2019 title 24 building standards.

Based on the analysis above, the project would be consistent with the SCAG 2020–2045 RTP/SCS.

Potential to Conflict with Senate Bill 32 and Executive Order S-3-05

Regarding consistency with SB 32 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and Executive Order S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future-year analysis. However, CARB has expressed optimism about both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan: Building on the Framework that “California is on track to meet the near-term 2020 GHG emissions limit and is well-positioned to maintain and continue reductions beyond 2020 as required by AB 32” (CARB 2014). Regarding the 2050 target for reducing GHG emissions to 80% below 1990 levels, CARB (2014) states the following:

This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under Assembly Bill 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally-driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and Executive Order S-3-05. This is confirmed in the 2017 Climate Change Scoping Plan Update, which states (CARB 2017b):

The Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

In addition, the specific path to compliance for the state in regards to the long-term, future goals will likely require development of new technology or other changes that are not currently known or available. As such, identifying ways that the project would be consistent with future goals would be speculative and cannot be meaningfully discussed at this time. However, the proposed project’s consistency with current goals, policies, and regulations would assist in meeting the City’s contribution to GHG emission reduction targets

in California. With respect to future GHG targets under SB 32 and EO S-3-05, CARB has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet the SB 32 40 percent reduction target by 2030 and the EO S-3-05 80 percent reduction target by 2050. This legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the trajectory toward meeting these future GHG targets.

Based on the above considerations, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be less than significant, and no mitigation is required.

3.9 Hazards and Hazardous Materials

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|-------------------------------------|-------------------------------------|
| IX. HAZARDS AND HAZARDOUS MATERIALS – 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 checked="" type="checkbox"/> | <input 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 type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter 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 materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input type="checkbox"/> |

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|------------------------------|-------------------------------------|
| 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"/> |

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

Short-Term Construction Impacts

In December 2020, a Phase I ESA and Limited Phase II Soil Investigation (Appendix E-1) and a Phase I ESA for APN 119-228-112 (Appendix E-2) were prepared by Hazard Management Consulting Inc. to characterize the potential hazards associated with the historical and current uses of the project site and surrounding areas. Historical uses of the project site included agricultural, residential land, and vacant land from as early as 1930. Additional residential structures were developed at the project site over the years. According to City records dating back to the 1970s, the site has been noted to have been used by several residential occupants. Currently, the site remains in residential use along with vacant land, livestock, automotive repair, autobody salvage, and tow truck storage.

Based on the results of the research, available data, and a site survey, the Phase I ESA (Appendix E-1) identified automotive chemicals and evidence of oil staining in the automotive repair area of 7824 Victoria Avenue and a concrete pad was observed with a significant spill of oil and evidence that the stain had reached the soil at 26462 6th Street. These two areas of staining were sampled as part of the Limited Phase II investigation.

The Limited Phase II Soil Investigation concluded that the concentrations reported in the soil samples were below screening levels, but they were elevated and of limited quantity. The estimated volume of affected soil is approximately 5 CY. To ensure this contamination does not threaten the health of future occupants of the project site, MM-HAZ-1 shall be required. MM-HAZ-1 will require the removal and disposal of the stained soil prior to grading of the site. Implementation of MM-HAZ-1 would ensure that previous contamination would not result in adverse health and safety impacts to workers during construction of the project or to future occupants of the site.

In addition, the Phase I ESA noted that due to the age of the on-site buildings and structures, it is likely that asbestos-containing materials (ACM) was used in their construction. Demolition of these buildings and structures can cause encapsulated ACM (if present) to become friable and, once airborne, would be considered a carcinogen. A carcinogen is a substance that causes cancer or helps cancer grow. Such releases could pose significant risks to persons living and working in and around the project area, as well as to project construction workers. Due to this likelihood of ACMs being present in the existing site buildings, a pre-demolition ACM survey should be conducted prior to any disturbance of suspected ACMs.

Abatement of all ACM encountered during any future building demolition activities would be required to be conducted in accordance with all applicable laws and regulations, including those of the EPA (which

regulates disposal), Occupational Safety and Health Administration (OSHA), U.S. Department of Housing and Urban Development, Cal/OSHA (which regulates employee exposure), and SCAQMD.

For example, the EPA requires that all asbestos work performed within regulated areas be supervised by a person who is trained as an asbestos supervisor (EPA Asbestos Hazard Emergency Response Act, 40 CFR 763). SCAQMD's Rule 1403 requires that buildings undergoing demolition or renovation be surveyed for ACM prior to any demolition or renovation activities. Should ACM be identified, Rule 1403 requires that ACM be safely removed and disposed of at a regulated disposal site, if possible. If it is not possible to safely remove ACM, Rule 1403 requires that safe procedures be used to demolish the building with asbestos in place without resulting in a significant release of asbestos to the environment. Additionally, during demolition, grading, and excavation, all construction workers would be required to comply with the requirements of Title 8 of the California Code of Regulations, Section 1529 (Asbestos), which provides the exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos.

Mandatory compliance with these regulatory requirements would ensure that construction workers and the public are not exposed to significant ACM health hazards during demolition and/or transport of demolition waste to an appropriate disposal facility, and would ensure that impacts related to ACM less than significant.

Upon completion of soil remediation efforts in compliance with the guidelines outlined in Appendix E-1 potentially hazardous materials would likely be handled on the project site as part of project construction. These materials would include gasoline, diesel fuel, lubricants, and other petroleum-based products required to operate and maintain construction equipment. Handling of these potentially hazardous materials would be temporary and would coincide with the short-term construction phase of the project.

Although these materials would likely be stored on the project site, storage would be required to comply with the guidelines set forth by each product's manufacturer and with all applicable federal, state, and local regulations pertaining to the storage of hazardous materials. Consistent with federal, state, and local requirements, the transport of hazardous materials to and from the project site would be conducted by a licensed contractor. Any handling, transport, use, or disposal of hazardous materials would comply with all relevant federal, state, and local agencies and regulations, including EPA, the California Department of Toxic Substances Control, OSHA, the California Department of Transportation (Caltrans), the Resource Conservation and Recovery Act, and the SCAQMD. Therefore, with compliance with applicable regulations, short-term construction impacts related to the transport, use or disposal of hazardous materials would be less than significant.

MM-HAZ-1 Prior to the issuance of building permits, the project applicant shall retain a qualified contractor to remove and dispose of contaminated soil in the vicinity of the automotive repair area at 7824 Victoria Avenue and in the vicinity of the concrete pad at 26462 6th Street, as identified in the December 2020 *Phase I Environmental Site Assessment and Limited Phase II Soil Investigation 7809 Grape Street, 7834 Victoria Avenue, 26432 6th Street, and Assessor's Parcel Numbers: 1192-281-09 and 1192-281-14, Highland, California 92346*, prepared by Hazard Management Consulting, or any updates to that report. The removal, transport, and disposal of refuse shall be done in accordance with all applicable local, state, and federal guidelines related to hazardous materials handling. A summary of the soil removal and disposal activities shall be provided to the City of Highland within a reasonable timeframe following completion of these activities.

Long-Term Operational Impacts

Potentially hazardous materials associated with project operations would include materials used during typical cleaning and maintenance activities. Although these potentially hazardous materials would vary, they would generally include household cleaning products, paints, fertilizers, and herbicides and pesticides. Many of these materials are considered household hazardous wastes, common wastes, and/or universal wastes by the EPA, which considers these types of wastes to be common to businesses and households and to pose a lower risk to people and the environment than other hazardous wastes when properly handled, transported, used, and disposed of (EPA 2021). Federal, state, and local regulations typically allow these types of wastes to be handled and disposed of with less stringent standards than other hazardous wastes, and many of these wastes do not have to be managed as hazardous waste. Additionally, any potentially hazardous material handled on the project site would be limited in both quantity and concentrations, consistent with other similar industrial uses located in the City, and any handling, transport, use, and disposal would comply with applicable federal, state, and local agencies and regulations. Further, as mandated by OSHA (OSHA n.d.), all hazardous materials stored on the project site would be accompanied by a Material Safety Data Sheet, which would inform employees and first responders as to the necessary remediation procedures in the case of accidental release. Therefore, long-term operational impacts associated with hazardous materials would be less than significant.

- 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?*

Less-than-Significant Impact. Refer to response provided in Section 3.9(a).

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

No Impact. The nearest school to the project site is Cypress Elementary School (26825 Cypress St.), which is located 0.38 miles east of the project site. Therefore, no impacts associated with emitting or handling hazardous materials within 0.25 miles of a school would occur.

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

No Impact. The project site is not included on any hazardous waste site lists, including the California Department of Toxic Substances Control's EnviroStor database, the State Water Resources Control Board's GeoTracker site, the Cortese list, or other lists compiled pursuant to Section 65962.5 of the Government Code (EPA 2021; DTSC 2021; SWRCB 2021b). Therefore, no impacts associated with hazardous materials sites would occur.

- 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?*

Less-than-Significant Impact. The San Bernardino International Airport and Trade Center (SBIA) is located approximately 0.3 miles south of the project site. The SBIA includes two distinct components: 1) the airport

portions (and related facilities) of the former Norton Air Force Base, and 2) the Trade Center, which encompasses the non-airport related portions of the former base. The project site is located within the Airport Influence Area (General Plan Figure 6-7) outlined in the City's General Plan (City of Highland 2006). As required by state law for real estate transactions within the Airport Influence Area, notification/disclosure statements are required to alert potential buyers and tenants of the presence of and potential impacts from the San Bernardino International Airport. The San Bernardino Airport Land Use Plan is currently being drafted and was not available at the time of this report. Nonetheless, the Federal Aviation Administration Regulations Title 14 Part 77 determines restrictions to obstructions and height limitations for structures taller than 200 feet or within 20,000 feet of an airport. The proposed project would be consistent with the general land use of the area. Additionally, the project would be consistent with §19.20.015 Noise Standards. Therefore, a less than significant impact would occur.

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

Less-than-Significant Impact. The City of Highland has an Emergency Operations Plan to ensure the most effective and economical allocation of resources for the maximum benefit and protection of the City in times of emergency. No revisions to this plan would occur as a result of the project. The project does not propose any changes to the geometry of evacuation route roadways to the extent that these roadways' ability to serve as emergency evacuation routes would be compromised. As a result, the project would not significantly affect emergency response or evacuation activities. Therefore, impacts would be less than significant.

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

No Impact. The City's General Plan does not designate the project site as an area that would be at risk from wildland fires. Although there are currently some isolated vacant lots in the vicinity of the project site, the area surrounding the project site is largely developed and would not likely aid the spread of wildfire. Therefore, no direct or indirect impacts due to wildfire would occur.

3.10 Hydrology and Water Quality

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|-------------------------------------|--------------------------|
| X. HYDROLOGY AND WATER QUALITY – 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 checked="" type="checkbox"/> | <input type="checkbox"/> |

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|-------------------------------------|
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| i) result in substantial erosion or siltation on or off site; | <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 type="checkbox"/> | <input checked="" 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 checked="" type="checkbox"/> | <input type="checkbox"/> |

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

Short-Term Construction Impacts

Less-than-Significant Impact. Construction of the project would include earthwork activities that could potentially result in erosion and sedimentation, which could subsequently degrade downstream receiving waters and violate water quality standards. Stormwater runoff during the construction phase may contain silt and debris, resulting in a short-term increase in the sediment load of the municipal storm drain system. Substances such as oils, fuels, paints, and solvents may be inadvertently spilled on the project site and subsequently conveyed via stormwater to nearby drainages, watersheds, and groundwater.

For stormwater discharges associated with construction activity in the State of California, the State Water Resources Control Board (SWRCB) has adopted the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) to avoid and minimize water quality impacts attributable to such activities. The Construction General Permit applies to all projects in which construction activity disturbs more than one acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation.

The Construction General Permit requires the development and implementation of a SWPP, which would include and specify water quality BMPs designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off site into receiving waters (in this case, the City Creek Channel, the Twin Creek Channel, the Prado Flood Control Basin, the Santa Ana River, and its discharge into the Pacific Ocean). Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by qualified individuals as defined by the SWRCB (SWRCB 2021a).

The City of Highland is a co-permittee under San Bernardino County's National Pollution Discharge Elimination System (NPDES) Permit (No. CAS618036), and as such is required to adhere to the County-wide NPDES permit requirements. Because land disturbance for project construction activities would exceed one acre, the project Applicant would be required to obtain coverage under the Construction General Permit issued by the SWRCB prior to the start of construction within the project site. Specifically, the Construction General Permit requires that the following be kept on site at all times: (i) a copy of the Notice of Intent to Comply with Terms of the General Permit to Discharge Water Associated with Construction Activity; (ii) a waste discharge identification number issued by the SWRCB; (iii) a SWPPP and Monitoring Program Plan for the construction activity requiring the construction permit; and (iv) records of all inspections, compliance and non-compliance reports, evidence of self-inspection, and good housekeeping practices.

The SWPPP requires the construction contractor to implement water quality BMPs to ensure that water quality standards are met, and that stormwater runoff from the construction work areas do not cause degradation of water quality in receiving water bodies. The SWPPP must describe the type, location, and function of stormwater BMPs to be implemented, and must demonstrate that the combination of BMPs selected are adequate to meet the discharge prohibitions, effluent standards, and receiving water limitations are contained in the Construction General Permit. Therefore, short-term construction impacts associated with water quality, stormwater drainage, and stormwater runoff would be less than significant.

Long-Term Operational Impacts

Less-than-Significant Impact. The project would be subject to the municipal stormwater permit, the Municipal Separate Storm Sewer System (MS4) Permit, issued to San Bernardino County and incorporated cities within the County by the Santa Ana Regional Water Quality Control Board. The MS4 Permit requires implementation of LID BMPs to prevent pollutants from being discharged off site by mimicking pre-development site hydrology and feasible source control. The LID Ordinance is designed to reduce runoff from impervious surfaces, including new development, through landscape design that promotes water retention, permeable surface design, natural drainage systems, and on-site retention where feasible (RWQCB 2010). These project-specific designs would reduce impacts to water quality associated with redevelopment.

As required by the San Bernardino County Municipal Separate Stormwater Sewer System NPDES Permit, a preliminary Water Quality Management Plan (WQMP) was prepared for the project in April 2021 (Appendix F-1). The WQMP is a post-construction management program that outlines implementation measures to ensure water quality standards are met, including implementation of source control and operational BMPs such as designing landscape to minimize irrigation and runoff; utilizing covered and leak proof trash dumpsters; and sweeping and litter control of loading areas in order to prevent pollutants from entering runoff. The WQMP would be implemented prior to the issuance of grading/building permits as required by the San Bernardino County Municipal Separate Stormwater Sewer System NPDES Permit. The project would

not violate any water quality standards or waste discharge requirements during long-term operation through compliance with the WQMP. Therefore, long-term operational impacts associated with water quality, stormwater drainage, and stormwater runoff would be less than significant.

In summary, project grading and construction would be completed in accordance with an NPDES-mandated SWPPP, which would include standard BMPs to reduce potential off-site water quality impacts related to erosion and incidental spills of petroleum products and hazardous substances from equipment. Surface water runoff during project operations would be managed through the use of a proposed underground infiltration/detention system on the west side of the project site. Therefore, the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality and water quality impacts would be less than significant.

- 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?***

Groundwater Supplies

Less-than-Significant Impact. The project site is located within the service area of the EVWD. EVWD's main water supply is from the Bunker Hill Basin which has the capacity to provide 70,000 acre-foot per year from groundwater and surface water resources. The proposed project would include a 2-inch water service line that would connect to the existing 6-inch EVWD water line located along Victoria Avenue. The proposed project also includes the construction of an on-site underground infiltration/detention basin on the west side of the project site for treatment. During a 100-year storm event, the underground system would be able to capture 100% of the storm event.

Additionally, according to the geotechnical investigation (Appendix D-1), groundwater was not encountered during test excavations, which extended to a maximum depth of 15.5 feet. Historic high groundwater in the vicinity has been recorded greater than 65 feet below grade at nearby wells (Appendix D-1). As such, the project's subsurface construction activities, which would only extend a few feet below grade, are highly unlikely to encounter groundwater, and dewatering activities are not anticipated to be necessary. Therefore, impacts associated with groundwater supplies would be less than significant.

Groundwater Recharge

Less-than-Significant Impact. While not fully developed, the project site is highly disturbed and does not contain a groundwater recharge basin or other facilities that promote groundwater recharge. Thus, under the existing condition, the project site is not considered an important location for groundwater recharge.

Following construction, the project site would contain landscape areas and other pervious surfaces that would allow for water to percolate into the subsurface soils compared to the existing conditions. In addition, the project would include a detention/infiltration basin on the west side of the property to capture and infiltrate runoff. The WQMP "Infiltration BMP Feasibility" section concludes that the proposed project, including the infiltration/detention basin, would not pose a significant risk for groundwater and/or increase the risk of geologic hazards. Therefore, impacts associated with groundwater recharge would be less than significant.

- c) ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

- i) ***result in substantial erosion or siltation on or off site;***

Less-than-Significant Impact. Under the existing conditions, the project site consists of residential uses and vacant land. The project would result in the demolition and removal of the existing structures on the project site and the construction of new paved surfaces, a warehouse building, and landscape areas. Existing on-site runoff sheet flows westerly to Grape Street. Off-site runoff is collected by an existing drainage ditch along Victoria Avenue on the project site and conveyed to an existing 48" CMP at the southeast corner of the project site. The existing drainage ditch would be removed and replaced by a proposed 42" storm drain and connected to the existing 48" CMP. The project would also include a new engineered storm drainage system that would feature structural BMPs, including an infiltration/detention system to treat and manage on-site stormwater flows. The proposed infiltration/detention system would be designed to capture 100% of a 100-year storm event and would minimize the potential for siltation or erosion on or off site. The project's proposed storm drain system would be designed to conform with all applicable federal, state and local requirements related to drainage, hydrology, and water quality, including the current MS4 Permit adopted by the Santa Ana RWQCB. Additionally, the project's structural BMPs would be designed such any potential sediments collected on site are captured in retention facilities so that they would not be conveyed to downstream waters and result in siltation.

As such, altering the on-site drainage pattern would be conducted in a manner consistent with all applicable standards related to the collection and treatment of stormwater, such that they would not result in substantial erosion or siltation on or off site. Therefore, impacts associated with altering the existing drainage pattern of the project site would be less than significant.

- ii) ***substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;***

Less-than-Significant Impact. As discussed in Section 3.10(c)(i), the project would increase the amount of impervious surfaces on the project site and inevitably alter the existing on-site drainage pattern. Runoff generated by the project site would be routed to the proposed underground infiltration/detention system on the western side of the project site through a combination of roof drains, storm drains, curbs, and gutters. The development of the existing site into the proposed project would not create any adverse impacts downstream for storm events up to the 100-year storm. There would not be an increase in the existing discharge from the site in both the 10-year and 100-year events due to the proposed infiltration basin that would be sized to capture and infiltrate the 100-year rainfall event. Discharge from the site would greatly decrease from the existing condition.

Under existing conditions, stormwater runoff sheet flows west to Grape Street. There are currently no existing storm drain facilities on the western side of the project site to capture surface runoff. As such, the proposed project would not increase the amount of surface runoff and impacts would be less than significant.

- iii) ***create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or***

Less-than-Significant Impact. As discussed in Section 3.10(c)(i), the project would increase the amount of impervious surfaces on the project site and inevitably alter the existing on-site drainage pattern. Runoff generated by the project site would be routed to the proposed underground infiltration/detention system on the western side of the project site through a combination of roof drains, storm drains, curbs, and gutters.

The proposed on-site underground infiltration/detention system was designed to infiltrate 100% of the 100-year storm event. However, if the proposed underground infiltration/retention chamber system reaches capacity, flows would then be discharged through a proposed 4-foot parkway culvert on the corner of 6th Street and Grape Street that would serve as an emergency spillway. According to the Preliminary Drainage Report (Appendix F-2) prepared for the project, the underground infiltration/detention system has the capacity to retain 51,437.5 cubic feet of stormwater before any stormwater is allowed to discharge from the project site, which is large enough to accommodate a 100-year storm event. The analysis concluded that the drainage and storm drain facilities are adequately sized to handle a 100-year design storm event, consistent with the methodology outlined in the San Bernardino County Flood Control District (SBCFCD) Hydrology Manual. Therefore, impacts associated with the project creating or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff would be less than significant.

- iv) ***impede or redirect flood flows?***

No Impact. According to the Federal Emergency Management Agency Flood Insurance Rate Map No. 06071C8701J (FEMA 2016), the project site is located in Zone X which is located outside of the 0.2% Annual Chance Flood Hazard Zone (500-year floodplain). The project's on-site storm drain systems would adequately provide flood protection for the 100-year storm event. Implementation of the project would not substantially impede or redirect flood flows. Therefore, no impacts associated with flooding would occur.

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

Less-than-Significant Impact. The project site is located approximately 70 miles east of the Pacific Ocean. Because of the project site's inland location, the project would not be subject to tsunami. Additionally, due to the lack of a larger adjacent perennial waterbody such as a reservoir or lake, the project site would not be susceptible to seiche. Further, the project site's relatively flat topography and lack of nearby hillside would eliminate any impact-related mudflow. However, the project site, along with most of the City of Highland, is within the limit of flooded area with dam failure of the Seven Oaks Dam and 500-Year floodplain (City of Highland 2006). The Seven Oaks Dam has been designed to resist an earthquake measuring 8.0 on the Richter scale and is designed to provide flood protection during 350-year storm events. Based on these design characteristics and ongoing maintenance of the dam's structural integrity, it is highly unlikely that the project site would be subject to inundation due to a failure of the Seven Oaks Dam. Therefore, due to the low likelihood that the Seven Oaks Dam would be subject to failure and because the project would not involve the uncontained storage of pollutants outside of the proposed building, the project would not

risk release of pollutants due to inundation associated with the these natural phenomena, and impacts would be less than significant.

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

Less-than-Significant Impact. Refer to responses provided in Section 3.10(a) and 3.10(b). The project would comply with regional and local regulations requiring preparation of a SWPPP and would not obstruct existing water quality control plans or groundwater sustainable management plans. In addition, the project applicant would comply with the project specific WQMP during operation activities. The proposed project would provide an on-site infiltration/detention basin, which would help the City sustainably manage groundwater levels. Therefore, impacts associated with conflict with a water quality control plan or sustainable groundwater management plan would be less than significant.

3.11 Land Use and Planning

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|-------------------------------------|
| XI. LAND USE AND PLANNING – 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?***

No Impact. The physical division of an established community is typically associated with the construction of a linear feature, such as a major highway or railroad tracks, or removal of a means of access, such as a local road or bridge, which would impair mobility within an existing community or between a community and an outlying area. Currently, the project site is located within an area of the City that is primarily zoned for business park and industrial uses, and thus, is not used as a connection between two established communities.

Instead, connectivity in the surrounding project area is facilitated via local roadways and pedestrian facilities. Despite the nearby scattered residential uses, the project would not impede movement between these residences within the project area, within an established community, or from one established community to another. Therefore, no impacts associated with division of an existing community would occur.

- 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?*

Less-than-Significant Impact. The City's Zoning Map designates the project site as BP. According to Section 16.24.020 (A), the primary purpose of the BP District is to provide appropriate regulations and suitable locations for light industrial, research and development, and office-based firms seeking pleasant and attractive working environments, and for business support services and commercial uses requiring large parcels (City of Highland 2021). The Municipal Code identifies Warehousing and Wholesaling as permitted, subject to a conditional use permit application (City of Highland 2021). As part of the City's site-plan review process, the City would thoroughly review all plans for the proposed project to ensure compliance with all applicable development standards set forth in the Municipal Code and other relevant land use plans, policies, and regulations. As part of the City's site-plan review process, the City has determined that the project would be consistent with all development standards required for the BP Zone, with the exception of Section 16.24.040 Employment district development standards, of the City's Municipal Code, which states that building heights are not to exceed 35 feet within the BP District. The project proposes a building height of 45. However, with the processing of a variance consistent with the procedures outlined in Section 16.08.870, which states that the City may permit such modification of the height regulations as are necessary to secure an appropriate improvement on a lot. As such, upon approval of Variance No. 21-001, the project's height could be allowed within in the BP District.

The City's General Plan Land Use Map designates the project site as BP within the Victoria Avenue Corridor (City of Highland 2006). The BP land use permits a variety of light industrial, research and development, and office uses. The maximum floor area ratio permitted within the BP designation is 0.6 (City of Highland 2006). The proposed project would include construction of an industrial warehouse with a floor area ratio of 0.57. As such, the proposed project is consistent with the permitted land use and maximum density permitted by the City.

The Victoria Avenue Corridor is located along Victoria Avenue from Highland Avenue to 3rd Street. The purpose of the Victoria Avenue Corridor is to establish new land use patterns to take advantage of future commercial opportunities, improve traffic, and provide future development opportunities along Victoria Avenue (City of Highland 2006). Development of a light industrial warehouse would introduce additional processing and distribution opportunities in close proximity to the San Bernardino International Airport.

As such, the project would be consistent with local plans, policies, and regulations governing land use decisions. Therefore, impacts associated with applicable land use plans, policies, and regulations would be less than significant.

3.12 Mineral Resources

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|--------------------------|
| XII. MINERAL RESOURCES – 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 checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input 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?***

Less-than-Significant Impact. According to the City's General Plan, the project site is within an MRZ-2, meaning significant mineral deposits or likelihood of significant mineral deposits exist; however, the significance of the deposit is undetermined.

The project site is located in an urbanized portion of the City and is bound by existing residential, commercial, and industrial development in all directions. Mineral resource mining is not a compatible use with these land uses. The project site is not large enough to effectively extract mineral resources. Considering the existing surrounding land uses and the incompatibility of mineral resource extraction activities in the project area, potential significant mineral resources within the project area are considered unavailable for extraction. Therefore, impacts associated with mineral resources would be less than significant.

- 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?***

Less-than-Significant Impact. Refer to the response provided in Section 3.11(a).

3.13 Noise

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|-------------------------------------|--------------------------|
| XIII. NOISE – 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 checked="" type="checkbox"/> | <input type="checkbox"/> |

Noise and Vibration Characteristics

Noise is defined as unwanted sound. Sound may be described in terms of level or amplitude (measured in decibels [dB]), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the amplitude of sound is the decibel. Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel (dBA) scale performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear. Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise, on a community. These descriptors include the equivalent noise level over a given period (L_{eq}), the statistical sound level, the day-night average noise level (L_{dn}), and the Community Noise Equivalent Level (CNEL). Each of these descriptors uses units of dBA. Table 20 provides examples of A-weighted noise levels from common sounds. In general, human sound perception is such that a change in sound level of 3 dBA is barely noticeable, a change of 5 dBA is clearly noticeable, and a change of 10 dBA is perceived as doubling or halving the sound level.

Table 20. Typical Sound Levels in the Environment and Industry

| Common Outdoor Activities | Noise Level (dBA) | Common Indoor Activities |
|---|-------------------|--|
| — | 110 | Rock band |
| Jet flyover at 300 meters (1,000 feet) | 100 | — |
| Gas lawn mower at 1 meter (3 feet) | 90 | — |
| Diesel truck at 15 meters (50 feet), at 80 kilometers per hour (50 mph) | 80 | Food blender at 1 meter (3 feet) Garbage disposal at 1 meter (3 feet) |

Table 20. Typical Sound Levels in the Environment and Industry

| Common Outdoor Activities | Noise Level (dBA) | Common Indoor Activities |
|---|-------------------|--|
| Noisy urban area, daytime gas lawn mower at 30 meters (100 feet) | 70 | Vacuum cleaner at 3 meters (10 feet) |
| Commercial area Heavy traffic at 90 meters (300 feet) | 60 | Normal speech at 1 meter (3 feet) |
| Quiet urban daytime | 50 | Large business office Dishwasher, next room |
| Quiet urban nighttime | 40 | Theater, large conference room (background) |
| Quiet suburban nighttime | 30 | Library |
| Quiet rural night time | 20 | Bedroom at night, concert hall (background) |
| — | 10 | Broadcast/recording studio |
| Lowest threshold of human hearing | 0 | Lowest threshold of human hearing |

Source: Caltrans 2013.

Note: dBA = A-weighted decibel.

L_{eq} is a sound energy level averaged over a specified period (typically no less than 15 minutes for environmental studies). L_{eq} is a single numerical value that represents the amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour L_{eq} measurement would represent the average amount of energy contained in all the noise that occurred in that hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors.

Unlike the L_{eq} metrics, L_{dn} and CNEL metrics always represent 24-hour periods, usually on an annualized basis. L_{dn} and CNEL also differ from L_{eq} because they apply a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when speech and sleep disturbance is of more concern). “Time weighted” refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m.–7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m.–10:00 p.m.) is penalized by adding 5 dB, while nighttime (10:00 p.m.–7:00 a.m.) noise is penalized by adding 10 dB. L_{dn} differs from CNEL in that the daytime period is defined as 7:00 a.m.–10:00 p.m., thus eliminating the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 dB to 1 dB and, as such, are often treated as equivalent to one another.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion’s amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earthmoving equipment.

Several different methods are used to quantify vibration. Peak particle velocity is defined as the maximum instantaneous peak of the vibration signal. Peak particle velocity is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square amplitude is most

frequently used to describe the effect of vibration on the human body and is defined as the average of the squared amplitude of the signal. Decibel notation is commonly used to measure root mean square. The decibel notation acts to compress the range of numbers required to describe vibration.

High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of vibration can damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise and vibration sensitive and may warrant unique measures for protection from intruding noise. Sensitive receptors in the vicinity of the project site consist of legal non-conforming residential uses (i.e., non-residentially zoned) located to the north and southeast of the project site, legal conforming residences to the west, and a school located to the northeast. These sensitive receptors represent the nearest sensitive land uses with the potential to be impacted by construction and/or operation of the project.

Existing Noise Conditions

Noise measurements were conducted in the vicinity of the project site on April 27, 2021, to characterize the existing noise levels. Table 21 provides the locations, dates, and times the noise measurements were taken. The noise measurements were taken using a Soft dB Piccolo sound level meter equipped with a 0.5-inch, pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute standard for a Type 2 (General Use) sound level meter. The accuracy of the sound level meter was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.

Table 21. Measured Noise Levels

| Receptor | Location | Date | Time | L _{eq} (dBA) | L _{max} (dBA) |
|----------|--|-----------|-----------------------|--------------------------|---------------------------|
| ST1 | Northwest corner of project site, adjacent to a residence (7809 Grape Street) | 4/27/2021 | 10:17 a.m.–10:32 a.m. | 60 | 75.7 |
| ST2 | West of project site, adjacent to residence at 7864 Grape Street | 4/27/2021 | 10:35 a.m.–10:51 a.m. | 63.9 | 84.2 |
| ST3 | Southeast of project site, at vacant lot adjacent to residence at 7933 Victoria Avenue | 4/27/2021 | 11:09 a.m.–11:24 a.m. | 68.2 | 91.4 |
| ST4 | North of project site, adjacent to residence at 7770 Victoria Avenue | 4/27/2021 | 11:37 a.m.–11:52 a.m. | 69 | 88.3 |

Source: Appendix G-1.

Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels; L_{max} = maximum sound level during the measurement interval.

Four short-term noise measurement locations (ST1–ST4) were conducted in the vicinity of the project site, as shown in Figure 17, Noise Measurement Locations. The measured L_{eq} and maximum noise levels are provided in Table 21. The field noise measurement data sheets are provided in Appendix G-1, Field Data Noise Sheets. The primary noise sources at the sites identified in Table 21 consisted of traffic on local roadways; other, secondary noise sources included occasional construction activities, distant mechanical equipment, distant aircraft, and distant barking dogs. As shown in Table 21, the measured sound levels ranged from approximately 60 dBA L_{eq} at ST1 to approximately 69 dBA L_{eq} at ST4.

Regulatory Setting

Federal

There are no federal noise standards that would directly regulate environmental noise during construction and operation of the project. The following is provided because guidance summarized herein is used or pertains to the analysis.

Federal Transit Administration

In its Transit Noise and Vibration Impact Assessment guidance manual, the Federal Transit Administration (FTA) recommends a daytime construction noise level threshold of 80 dBA L_{eq} over an 8-hour period (FTA 2018) when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project. Although this FTA guidance is not a binding regulation, it is provided here for comparison purposes in the absence of such limits at the state and local jurisdictional levels.

Federal Interagency Committee on Noise

Some guidance regarding the determination of a substantial permanent increase in ambient noise levels in the project vicinity above existing levels is provided by the 1992 findings of the Federal Interagency Committee on Noise (FICON) (FICON 1992), which assessed the annoyance effects of changes in ambient noise levels resulting from aircraft operations. The FICON recommendations are based upon studies that relate aircraft and traffic noise levels to the percentage of persons highly annoyed by the noise. Annoyance is a qualitative measure of the adverse reaction of people to noise that generates speech interference, sleep disturbance, or interference with the desire for a tranquil environment.

The rationale for the FICON recommendations is that it is possible to consistently describe the annoyance of people exposed to transportation noise in terms of L_{dn} . The changes in noise exposure that are shown in Table 22 are expected to result in equal changes in annoyance at sensitive land uses. Although the FICON recommendations were specifically developed to address aircraft noise impacts, they are used in this analysis to define a substantial increase in community noise levels related to all transportation noise sources and permanent non-transportation noise sources.

Table 22. Measures of Substantial Increase for Community Noise Sources

| Ambient Noise Level Without Project (L_{dn}) | Significant Impact Assumed to Occur if the Project Increases Ambient Noise Levels by: |
|--|---|
| <60 dBA | + 5 dBA or more |
| 60-65 dBA | + 3 dBA or more |
| >65 dBA | + 2 dBA or more |

Source: FICON 1992.

Notes: L_{dn} = day–night average noise level; dBA = decibels.

State

California Government Code

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of “normally acceptable,” “conditionally acceptable,” “normally unacceptable,” and “clearly unacceptable” noise levels for various land use types. Single-family homes are “normally acceptable” in exterior noise environments up to 60 dBA CNEL and “conditionally acceptable” up to 70 dBA CNEL.²³ Multiple-family residential uses are “normally acceptable” up to dBA 65 CNEL and “conditionally acceptable” up to dBA 70 CNEL. Schools, libraries, and places of worship are “normally acceptable” up to 70 dBA CNEL, as are office buildings and business, commercial, and professional uses.

Local

City of Highland Municipal Code

Operational Noise Standards

Pursuant to Chapter 8.50 (Noise Control) of the Highland Municipal Code, allowable daytime (between the hours of 7:00 AM and 10:00 PM) and nighttime (between the hours of 10:00 PM and 7:00 AM) noise levels are as follows:

- Residential – 60 dBA daytime, 55 dBA nighttime.
- Commercial – 70 dBA daytime, 65 dBA nighttime.
- Industrial Zone – 75 dBA at any time.

Construction Noise Standards

Pursuant to Section 8.50.060 (Exemptions), noise associated with “construction, repair, or excavation work performed pursuant to a valid written agreement with the city or any of its political subdivisions, which agreement provides for noise mitigation measures”, is exempt. Because the proposed project does not include a Development Agreement or other agreement with the City or any of its political subdivisions, it is not exempt from performing a construction noise analysis and providing adequate mitigation measures. The following includes an analysis of the project’s construction noise impacts.

City of Highland General Plan

The City’s General Plan Noise Element (City of Highland 2006) references the Municipal Code’s noise standards as guidelines to evaluate the acceptability of noise impacts. These standards are used to assess long-term noise impacts on land uses. The Noise Element identifies noise problems in the community, quantifies existing and projected noise levels, addresses excessive noise exposure, and provides regulations to control noise. The General Plan Noise Element contains the following goals and policies that address noise and are applicable to the project:

²³ A “conditionally acceptable” designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a “normally acceptable” designation indicates that standard construction can occur with no special noise reduction requirements.

Goal 7.1. Protect sensitive land uses and the citizens of Highland from annoying and excessive noise through diligent planning and regulation.

Policies:

- 1) Enforce the City's Noise Control Ordinance consistent with health and quality of life goals and employ effective techniques of noise abatement through such means as a noise ordinance, building codes and subdivision and zoning regulations.
- 2) Encourage the use of site planning and architectural techniques such as alternative building orientation and walls combined with landscaping to mitigate noise to levels consistent with interior and exterior noise standards.
- 3) Require mitigation where sensitive uses are to be placed along transportation routes to ensure compliance with interior and exterior noise standards.
- 4) Consider the compatibility of proposed land uses with the noise environment when preparing, revising or reviewing development proposals.
- 7) Require that site-specific noise studies be conducted by a qualified acoustic consultant utilizing acceptable methodologies while reviewing the development of sensitive land uses or development that has the potential to impact sensitive land uses. Also require a site-specific noise study if the proposed development could potentially violate the noise provisions of the General Plan or City ordinance.

Actions:

- 3) When site and architectural design features cannot sufficiently reduce adverse noise levels, or cannot be economically provided, require the provision of noise barriers/berms, provided that noise barriers:
 - are sufficiently massive to prevent significant noise transmission and high enough to shield receiver from noise source;
 - noise barriers exhibit a minimum acceptable density of four pounds per square foot (equivalent to 3/4-inch plywood);
 - contain no cracks or openings; and
 - minimize the effect of flanking by bending the barrier back from the noise source at the end of the barrier.
- 4) Require landscaping treatment to be provided in conjunction with noise barriers to provide visual relief and to reduce aesthetic impacts.
- 6) Maintain a noise complaint file to document areas of excessive noise in the City.

Goal 7.3. Protect residents from the effects of "spill over" or nuisance noise.

Policies:

- 1) Enforce the City's Noise Control Ordinance so that new projects located in commercial or entertainment areas do not exceed stationary-source noise standards at the property line of proximate residential or commercial uses, as appropriate.
- 2) Prohibit new industrial uses from exceeding commercial or residential stationary-source noise standards at the most proximate land uses, as appropriate. (Industrial noise may spill over to proximate industrial uses so long as the combined noise does not exceed the appropriate industrial standards.)

- 3) Require that construction activities employ feasible and practical techniques to minimize noise impacts on adjacent uses. Particular emphasis shall be placed on the restriction of hours in which work other than emergency work may occur.
- 4) Require that the hours of truck deliveries to commercial properties abutting residential uses be limited unless there is no feasible alternative or there are overriding transportation benefits by scheduling deliveries at another hour.
- 5) Ensure that buildings are constructed to prevent adverse noise transmission between differing uses located in the same structure and individual residences in multi-family buildings.

Actions:

- 1) As a condition of approval, limit non-emergency construction activities adjacent to existing noise-sensitive uses to daylight hours between 7:00 a.m. and 6:00 p.m. Discourage construction on weekends or holidays except in the case of construction proximate to schools where these operations could disturb the classroom environment.
 - 2) Ensure that the design and placement of air conditioning units and pool equipment within residential areas is accomplished in a manner that does not intrude upon the peace and quiet of adjacent noise-sensitive uses.
 - 3) Encourage the use of portable noise barriers for heavy equipment operations performed within 100 feet of existing residences or make applicant provide evidence as to why the use of such barriers is infeasible.
- 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?***

Short-Term Construction Noise

Less-than-Significant Impact. Construction noise is considered a short-term impact and would be considered significant if construction activities were to exceed the allowable hours of operation, as permitted by the City. Noise-sensitive land uses in the vicinity of the project include a legal non-conforming residences to the north²⁴ (within approximately 30 feet of the construction boundary), legal conforming residences to the west (within approximately 50 feet of the construction boundary), and legal non-conforming residences to the southeast (within approximately 150 feet of the construction boundary). The construction noise assessment focused on noise levels that would occur at the nearest residences; construction noise levels at greater distances from the site would be lower. Modeling assumptions and output calculations are provided in Appendix G-2, Construction Noise Modeling Inputs and Outputs.

Project-generated construction noise will vary depending on the construction process, the type of equipment involved, the location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week), and the duration of the construction work. A likely worst-case construction noise scenario using information provided by the project applicant and equipment identified by CalEEMod (see Section 3.3, Air Quality) for this type and size of project was calculated using the Federal Highway Administration's Roadway Construction Noise Model (FHWA 2008). Table 5 in Section 3.3 presents the equipment list used for the construction noise analysis.

²⁴ Based upon the City of Highland Zoning Map (<http://maps.digitalmapcentral.com/production/VECommunityView/cities/highland/index.aspx?>), the proposed project site as well as the entire block (from Sixth St. and Cypress St. in the north-south direction and Victoria Ave. and Grape St. in the east-west direction) is zoned BP: Business Park. Similarly, the block at the southeast corner of Victoria Ave. and Sixth St. is zoned BP: Business Park.

Using the provided construction information, the Roadway Construction Noise Model was used to predict noise from on-site construction activities. The results are summarized in Table 23 (see Appendix E-2 for model results). Table 23 provides construction noise estimates for both a “typical worst-case” 1-hour average scenario in which construction equipment may be operating in proximity to any one receiver for extended periods, as well as an 8-hour average workday in which it is assumed that typically the equipment would be in motion and working both near and far from any one receiver, equating to approximately twice as far compared to the 1-hour scenario. The resulting 8-hour levels are thus 6 decibels lower than the 1-hour levels, based upon a noise attenuation rate of 6 decibels per doubling of distance.

As shown, the highest noise levels from construction are predicted to range from approximately 63 dBA L_{eq} 1-hour (during the architectural coating phase) to 86 dBA L_{eq} 1-hour (during demolition) at the nearest receivers. These maximum noise levels are considered to be a peak exposure, applicable to not more than 10%–15% of the total construction period, only while the construction activity is taking place along the property boundary closest to these nearest off-site receivers. In terms of a typical 8-hour workday, the highest noise levels from construction are predicted to range from approximately 57 dBA L_{eq} 8-hour (during the architectural coating phase) to 80 dBA L_{eq} 8-hour (during demolition) at the nearest receivers. The average construction noise levels (for construction taking place at a range of locations on site and modeled at the acoustical center for analysis purposes) range from approximately 52 dBA L_{eq} 1-hour (during architectural coating) to approximately 68 dBA L_{eq} 1-hour (during grading and site preparation) at the closest residences and are also shown in Table 23. The average noise levels (based upon the acoustic center²⁵) are considered a better representation of the overall noise exposure experience for adjacent receivers over the duration of each construction phase. Noise levels, while relatively high when equipment is operating near the project boundaries, would not exceed the FTA’s 80 dBA L_{eq} 8-hour threshold.

Table 23. Construction Noise Summary of Results (dBA L_{eq} 1-hour/ dBA L_{eq} 8-hour)

| Receiver Location (Distance)/ Description | Zoning Designation | Construction Noise Level by Construction Phase ¹ | | | | | |
|---|-----------------------|---|-----------------------|----------------|----------------------------|---------------|--------------------------|
| | | <i>Demo.</i> | <i>Site Prep.</i> | <i>Grading</i> | <i>Building Const.</i> | <i>Paving</i> | <i>Arch. Coating</i> |
| North Neighbor (30 feet) / Legal Non-Conforming Residence | Business Park | 86/80 | 85/79 | 79/73 | 82/77 | 83/76 | 74/68 |
| West Neighbor (50 feet) / Legal Conforming Residence | Residential | 84/78 | 82/76 | 78/72 | 79/74 | 79/73 | 70/64 |
| Southeast Neighbor (150 feet) / Legal Non- Conforming Residence | Business Park | 76/70 | 74/68 | 73/67 | 71/67 | 71/65 | 63/57 |
| Acoustic Center North Neighbor (400 feet) / Legal Non-Conforming Residence | Business Park | 68/68 | 68/68 | 66/66 | 64/64 | 64/64 | 56/56 |
| Acoustic Center East Neighbor (450 feet) / Legal Conforming Residence | Residential | 67/67 | 67/67 | 65/65 | 63/63 | 63/63 | 55/55 |

²⁵ The acoustic center is the combination of all construction work occurring on-site, near and far, and is considered to be equivalent to the geometric center, for the purposes of this analysis.

Table 23. Construction Noise Summary of Results (dBA L_{eq} 1-hour/ dBA L_{eq} 8-hour)

| Receiver Location (Distance)/ Description | Zoning Designation | Construction Noise Level by Construction Phase ¹ | | | | | |
|---|-----------------------|---|---------------|---------|--------------------|--------|------------------|
| | | Demo. | Site Prep. | Grading | Building Const. | Paving | Arch. Coating |
| Acoustic Center South Neighbor (620 feet) / Legal Non-Conforming Residence | Business Park | 65/65 | 64/64 | 62/62 | 60/60 | 60/60 | 52/52 |

Source: Appendix G-2.

Notes: dBA = A-weighted decibels; L_{eq} 1-hour = equivalent continuous sound level (time-averaged sound level) during a 1-hour period near the project boundary; L_{eq} 8-hour = equivalent continuous sound level (time-averaged sound level) during an 8-hour construction work day; Demo. = Demolition; Site Prep. = Site Preparation; Building Const. = Building Construction; Arch. Coating = Architectural Coating.

¹ See Section 3.3, Air Quality.

Based on the Roadway Construction Noise Model analysis (FHWA 2008; Appendix G-2), average noise levels from construction activities are calculated to create noise levels at sensitive residential receivers that would equal but would not exceed the FTA construction noise threshold of 80 dBA L_{eq} 8-hour at nearby sensitive receiver locations. The project would be required to adhere to City of Highland General Plan limitations on construction noise through restrictions on allowable construction hours (Goal 7.3, Action 1):

“As a condition of approval, limit non-emergency construction activities adjacent to existing noise-sensitive uses to daylight hours between 7:00 a.m. and 6:00 p.m. Discourage construction on weekends or holidays except in the case of construction proximate to schools where these operations could disturb the classroom environment.”

Thus, with incorporation of the City’s standard conditions, impacts associated with short-term construction noise would be less than significant and no mitigation measures would be required.

Long-Term Operational Noise

Less-than-Significant Impact. Operation of the project would result in the generation of noise both on and off site. Consistent with similar warehouse and light industrial uses, business operations supported by the project would primarily be conducted within the enclosed buildings, except for traffic movement, parking, and loading and unloading of trucks at designated loading bays. As such, on-site operational noise sources are expected to include roof-top air conditioning units, parking lot activity, and truck loading dock activity. Off-site noise could be generated by vehicles, including heavy trucks, accessing the project site and contributing to vehicular roadway noise. As detailed below, these operational project activities would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies.

On-Site Operational Noise

Implementation of the project would result in changes to existing noise levels on and around the project site by developing new stationary sources of noise, including introduction of outdoor HVAC equipment. These sources may affect noise-sensitive vicinity land uses off the project site.

The proposed warehouse space overall would not be served by heating or air conditioning equipment. However, the floor plan includes an office with an associated mezzanine space at the northwest building corner and at the

southeast building corner. For the analysis of noise from HVAC equipment operation, a York Model ZF-048 package HVAC unit was used as a reference. Based upon the square footage of the office and mezzanine spaces (10,000 square feet total), it was assumed that two such units would be required for each of the office/mezzanine locations. The York Model ZF-048 package HVAC unit has a sound power rating of 80 dBA (Johnson Controls 2015). Based on the warehouse roof design provided, there will be a 2.8-foot-high parapet extending along the perimeter of the roof, which would minimize sound from the HVAC unit at nearby noise-sensitive land uses.

Assuming all the HVAC equipment is operating simultaneously for a minimum period of 1 hour, the worst-case calculated noise level at each property line and at the nearby residences is presented in Table 24. The maximum hourly noise level for all the HVAC equipment operating at each examined point along the property would range from 25 to 31 dBA L_{eq} , which is well below the City's noise standard for both commercial zoning (70 dBA L_{eq} daytime, 65 dBA L_{eq} nighttime) and residences (60 dBA L_{eq} daytime, 55 dBA L_{eq} nighttime). The noise level calculation spreadsheets for the HVAC package units are included in Appendix G-3, Equipment Specifications and Noise Calculations. Table 24, Mechanical Equipment Operation Noise Summary of Results

Table 24. Mechanical Equipment Operation Noise Summary of Results

| Equipment | Noise Level at Property Boundary | |
|-----------|--------------------------------------|-------------------------------------|
| | Receiver Location | Average Noise Level (dBA L_{eq}) |
| HVAC | N1 (northern property boundary) | 30 |
| HVAC | W1 (western property boundary) | 31 |
| HVAC | SE1 (southeastern property boundary) | 25 |

Source: Appendix G-3.

Note: dBA = A-weighted decibels; L_{eq} = equivalent continuous sound level (time-averaged sound level); CNEL = Community Noise Equivalent Level; HVAC = heating, ventilation, and air conditioning.

¹ Assumes 8:00 a.m. to 5:00 p.m. operation of HVAC unit for office occupancy.

The results of the mechanical equipment operations noise analysis indicate that the project would comply with City and State of California noise standards.

Parking Lot Activity

A comprehensive study of noise levels associated with surface parking lots was published in the Journal of Environmental Engineering and Landscape Management (Baltrėnas et al. 2004). The study found that average noise levels during the peak period of use of the parking lot (generally in the morning with arrival of commuters and in the evening with the departure of commuters) were 47 dBA at 1 meter (3.3 feet) from the outside boundary of the parking lot. The parking area would function as a point source for noise, which means that noise would attenuate at a rate of 6 dBA with each doubling of distance. The employee parking lots are proposed to be situated on the north, east and west sides of the warehouse, no closer than 33 feet from the property line of the project site (from center of drive-aisle to fence) on the western side 45 feet on the northern side, and approximately 60 feet at the southeastern corner. At a distance of 33 feet, parking lot noise levels would be approximately 37 dBA L_{eq} at the western property boundary. At a distance of 45 feet, parking lot noise levels would be approximately 36 dBA L_{eq} at the northern property boundary. At a distance of 60 feet, parking lot noise levels would be approximately 22 dBA L_{eq} at the southeastern property boundary. This noise level is slightly higher than the noise levels from the HVAC equipment operation along the northern and western property boundaries (approximately 30 dBA L_{eq}). Adding together the parking lot noise (36 dBA L_{eq}) and HVAC equipment noise levels (30 dBA L_{eq}), the combined noise level would be approximately 37 dBA L_{eq} , at

the boundary to the north of the project site, which is still well below the City's noise standards for both commercial and residential land uses. Parking lot activity noise levels are summarized in Table 25.

Truck Loading Dock Activity

The parking lot study (Baltrėnas et al. 2004) also examined noise levels associated with cargo truck delivery activity, including noise produced by backup alarms and forklift/yard hostler operations. The study concluded that average noise levels from truck loading/unloading areas was 96 dBA at 1 meter (3.3 feet) from the boundary of the truck activity area. The truck loading dock area (i.e., the truck court) would be located on the northern side of the proposed warehouse building. The loading docks would be located approximately 135 feet from the northern property line and over 200 feet from the western property line. At the southeast property corner, the noise and view of the loading docks would be entirely obstructed by the warehouse building and would be more than 380 feet away. Using the outdoor attenuation rate of 6 dBA with each doubling of distance, truck loading activity along the northern property line would produce noise levels of approximately 63 dBA L_{eq} while noise levels along the western property boundary from truck loading activity would average approximately 58 dBA L_{eq} , not accounting for the shielding effects from the proposed 8-foot high, approximately 6-inches wide, perimeter, concrete wall at the northern boundary and from the building's configuration for receivers to the west. Accounting for this acoustical shielding, the truck loading dock noise at the northern project boundary is estimated to be approximately 54 dBA L_{eq} , at the western project boundary the truck loading dock noise is estimated to be approximately 43 dBA L_{eq} . At the southeastern corner the truck loading dock activity noise (accounting for distance and acoustical shielding) would be approximately 35 dBA. Truck loading dock activity noise levels are summarized in Table 25, along with the other on-site noise sources.

Table 25. Combined On-Site Noise Summary of Results – Noise Levels (dBA L_{eq}) at Property Boundaries

| Receiver Location | Zoning / Use | Applicable Noise Standard - Daytime (7 a.m. to 10 p.m.) / Nighttime (10 p.m. to 7 a.m.) | HVAC | Parking Lot Activity | Truck Loading Dock Activity | Combined HVAC, Parking Lot and Truck Loading Dock Activities Noise | Applicable Noise Standard Exceeded? |
|--------------------------------------|--|---|------|----------------------|-----------------------------|--|-------------------------------------|
| N1 (northern property boundary) | Business Park / Non-conforming residential | 70/65 60/55 | 30 | 36 | 54 | 54 | No |
| W1 (western property boundary) | Residential/ Residential | 60/55 | 31 | 37 | 43 | 44 | No |
| SE1 (southeastern property boundary) | Business Park / Non-conforming residential | 70/65 | 25 | 22 | 35 | 36 | No |

Source: Appendix G-3.

As shown in Table 25, on-site noise sources associated with the proposed project would not exceed applicable noise standards. Thus, on-site operational noise would be less than significant.

Project-Generated Off-Site Traffic Noise

The project is expected to generate 535 daily trips to the roadway system; in terms of passenger car equivalent (PCE), which accounts for truck percentages, the project would generate 762 daily trips. The project would not result in a doubling of trips on any particular road segment, per existing (Year 2021) and future (Year 2040) traffic data provided by the Project's transportation engineers (Appendix G-4). Typically, a doubling of the energy of a noise source, such as a doubling of traffic volume, would increase noise levels by 3 dBA.²⁶ Given that it would result in only a modest increase in traffic on local and regional roadways, the project is not expected to result in an increase of 3 dBA or greater on roadways in the study area. The change in noise level due to the project would not be audible. Therefore, impacts associated with off-site project-generated traffic noise would be less than significant.

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

Less than Significant Impact. The main concern associated with groundborne vibration is annoyance; however, in extreme cases, vibration can cause damage to buildings, particularly those that are old or otherwise fragile. Some common sources of groundborne vibration are trains and construction activities such as blasting, pile-driving, and heavy earth-moving equipment. The primary source of groundborne vibration occurring as part of the proposed project is construction activity.

Groundborne vibration information related to construction/heavy equipment activities has been collected by Caltrans. Information from Caltrans indicates that transient vibrations (such as from construction activity) with approximately 0.035 inches per second peak particle velocity (PPV) may be characterized as barely perceptible, and vibration levels of 0.24 inches per second PPV may be characterized as distinctly perceptible (Caltrans 2020). The heavier pieces of construction equipment, such as large bulldozers or hoe rams, would register up to approximately 0.089 inches per second PPV at a distance of 25 feet, and a clam shovel drop would measure up to approximately 0.202 inches per second PPV at a distance of 25 feet (FTA 2018).

Groundborne vibration is typically attenuated over relatively short distances. At the nearest existing noise/vibration-sensitive use, distance to the nearest construction area (approximately 30 feet) and with the anticipated construction equipment, the vibration level would be approximately 0.068 inches per second PPV. This vibration level would be above the threshold of "barely perceptible" of 0.035 inches per second PPV but would be below the threshold of "distinctly perceptible" of 0.24 inches per second PPV.

Therefore, the major concern with construction vibration is related to building damage. Construction vibration as a result of the proposed project would not result in structural building damage, which typically occurs at vibration levels of 0.5 inches per second PPV or greater for buildings of reinforced-concrete, steel, or timber construction. There would be no impacts related to groundborne vibration.

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?

Less-than-Significant Impact No private airstrips are located in the project vicinity. The SBIA is located approximately 0.3 miles south of the project site. The project site is located within the Airport Influence

²⁶ Under normal circumstances (i.e., outside of a controlled setting such as a listening laboratory), a 3 dBA increase in noise levels is considered to be the smallest increase that is audible to the human ear; whereas a less than 3 dBA increase in noise levels is considered to be a barely or non-audible increase.

Area (General Plan Figure 6-7) outlined in the City's General Plan (City of Highland 2006). As required by state law for real estate transactions within the Airport Influence Area, notification/disclosure statements are required to alert potential buyers and tenants of the presence of and potential impacts from the San Bernardino International Airport. According to Exhibit 4H (Existing and Ultimate Noise Contours) of the Airport Layout Plan Narrative Report for San Bernardino International Airport (San Bernardino International Airport Authority 2010), the SBIA's 65 dBA CNEL ultimate noise contour would be located more than 0.5 miles south of the project site.

Policy 1 of Goal 11.1 ("Reduce exposure of people to aircraft noise and overflights, and ensure adequate public notification through buyer awareness measures") within the City's General Plan (City of Highland 2006) states: "Limit the development of sensitive land uses located within the 65 decibel (dB) Community Noise Equivalent Level (CNEL)". The City considers residential dwellings and institutional uses such as hospitals, convalescent homes and churches to be sensitive noise receptors, while retail and office uses are considered to be relatively insensitive land uses. Other land use types, including industrial and manufacturing, are considered to be least impacted by noise. Because the proposed project is not noise-sensitive, and because the project site is located well outside the 65 dBA CNEL noise contour, the proposed project would not expose people residing or working in the project area to excessive noise levels. Thus, aircraft and airport-related noise would be less than significant.

3.14 Population and Housing

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|-------------------------------------|--------------------------|
| XIV. POPULATION AND HOUSING – Would the project: | | | | |
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <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 checked="" type="checkbox"/> | <input 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)?***

Less-Than-Significant Impact. The project would require a temporary construction workforce and a permanent operational workforce, both of which could potentially induce population growth in the project area. The temporary workforce would be needed to construct the proposed warehouse building and associated improvements. The number of construction workers needed during any given period would

largely depend on the specific stage of construction but will likely average a few dozen workers at any given time throughout the workday. These short-term positions are anticipated to be filled primarily by workers who reside in the project area vicinity. Therefore, construction of the project would not generate a permanent increase in population within the project area.

In terms of operational employees, because the future tenant is not yet known, the number of jobs that the project would generate cannot be precisely determined, but it can be estimated. For purposes of analysis, employment estimates are calculated using average employment density factors reported by SCAG. SCAG reports that for every 1,195 square feet of warehouse space in San Bernardino County, the average numbers of jobs supported is one employee (SCAG 2001). The proposed warehouse would be 305,617 square feet, and as such, the estimated number of employees required for operation would be approximately 256 people.

According to the SCAG Demographics and Growth Forecast, employment in the City is anticipated to grow from 6,900 employees in 2016 to 11,100 employees in 2045 (SCAG 2020). The project-related increase in employment would be minimal in comparison to the anticipated increase in the SCAG Demographics and Growth Forecast.

Additionally, as of March 2021, the California Employment Development Department found that the unemployment rate for Riverside-San Bernardino-Ontario Metropolitan Statistical Area, including the City of Highland, is at 7.7%, which is similar to the state average (8.3%) and higher than the national average (6.0%) for the same period (EDD 2021). Therefore, the project's temporary and permanent employment requirements could likely be met by the City's existing labor force without the need for people to relocate to the project region. The project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans. Therefore, impacts associated with population growth would be less than significant.

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

Less-Than-Significant Impact. The eastern and northern portions of the project site are currently developed with three single-family residences. The remainder of the project site is vacant. Development of the proposed project would result in displacement of three existing households. Although it is speculative where the previous on-site residents would ultimately be relocated, assuming that they would be relocated in the project area, vacant housing opportunities are available within the City. The City has approximately 16,854 housing units with a vacancy rate of 5.8% (DOF 2021). As such, there are approximately 978 vacant housing units in the City. Therefore, impacts associated with displacement of housing would be less than significant.

3.15 Public Services

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|-------------------------------------|
| XV. PUBLIC SERVICES | | | | |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: | | | | |
| Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

Fire protection?

Less-than-Significant Impact. The California Department of Forestry and Fire Protection (CAL FIRE) provides fire protection and emergency medical services to the City of Highland, including the project site, through a cooperative agreement that provides for CAL FIRE employees to staff City-owned facilities and apparatus (City of Highland 2006). The City of Highland also has available fire protection services from other area agencies such as the cities of Redlands and Yucaipa, and the U.S. Forest Service (City of Highland 2006). The City also participates in the Statewide Master Mutual Aid Agreement, which provides additional assistance from San Bernardino City and County Fire Departments and the San Manuel Fire Department (City of Highland 2006).

The closest fire station to the project is Highland Fire Department Station No. 543 (7649 Sterling Ave), located approximately 0.9 miles west of the project site. Considering the proximity of the project site to Station No. 543, and given the fact that the project site is already located within CAL FIRE's service area, the project could be adequately served by the various fire departments without adversely effecting personnel-to-resident ratios, response times, or other performance objectives.

In addition, the project would not directly or indirectly induce population growth in the City. Although the project could potentially result in a slight, incremental increase in calls for service to the project site in comparison to the existing conditions, this increase is expected to be nominal and would not result in the need for new CAL FIRE facilities. Nonetheless, similar to other development projects in the City, the project applicant would still be required to pay their fair share of development impact fees to help offset

incremental impacts to fire protection services. Therefore, impacts associated with CAL FIRE facilities and response times would be less than significant.

Police protection?

Less-than-Significant Impact. The City of Highland contracts with the San Bernardino County Sheriff's Department (SBSD) to provide police protection to the City, including the project site (City of Highland 2006). The SBSD has one patrol station in the City of Highland, located at 26985 East Base Line, approximately 0.8 miles northeast of the site.

The project would not directly or indirectly induce population growth in the City. While the project would potentially result in a slight, incremental increase in calls to the SBSD for service to the project site in comparison to the existing conditions, this increase is expected to be nominal and would not result in the need for new SBSD facilities. In addition, the project site is already located within SBSD's service area and would not require an expansion of service area, which could otherwise result in longer response time. Overall, it is anticipated that the project would be adequately served by existing SBSD facilities, equipment, and personnel. Nonetheless, similar to other development projects in the City, the project applicant would still be required to pay their fair share of development impact fees to help offset incremental impacts to police protection services. Therefore, impacts associated with SBSD facilities and response times would be less than significant. In addition, the applicant will be required to follow the City of Highland's Development Impact Fee Ordinance (Fee Ordinance). The Fee Ordinance requires the applicant submit a fee payable to the City which will apply to the funding of public facilities, including law enforcement facilities. Therefore, impacts to police protection resources resulting from the proposed project would be less than significant.

Schools?

No Impact. The project site is located within the San Bernardino City Unified School District. It is not anticipated that people would relocate to the City as a result of the project, and an increase in school-age children requiring public education is not expected to occur as a result of the project. Nonetheless, all residential and non-residential development projects are subject to SB 50, which requires payment of mandatory impact fees to offset any impact to school services or facilities. The provisions of SB 50 are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other state or local laws (Government Code Section 65996). In accordance with SB 50, the project applicant would pay its fair share of impacts fees based on the number/type of dwelling units. These impact fees are required of most residential, commercial, and industrial development projects in the City. Therefore, no impacts associated with school facilities would occur.

Parks?

No Impact. Given the lack of population growth as a result of the project, neither construction nor operation of the project would generate new residents to the extent that new or expanded park facilities would be required. Therefore, no impacts associated with park facilities would occur.

Other public facilities?

No Impact. The project would not directly or indirectly induce substantial population growth in the City. As such, it is unlikely that the project would increase the use of other public facilities such as libraries. Therefore, no impacts associated with libraries and other public facilities would occur.

3.16 Recreation

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-------------------------------------|
| XVI. RECREATION | | | | |
| 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?**

No Impact. The project would construct a new warehouse building and associated improvements. The project does not propose any residential uses and would not directly or indirectly result in a substantial and unplanned increase in population growth within the project area. As such, the project would not increase the use of existing neighborhood parks or regional parks in the City and surrounding area. Therefore, no impacts associated with the use of existing residential facilities would occur.

- 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?**

No Impact. The project would construct a new warehouse building and associated improvements. The project does not propose any recreational facilities. As an industrial use, the project would not require the construction or expansion of recreational facilities. Therefore, no impacts associated with the construction of new or expansion of existing recreational facilities would occur.

3.17 Transportation

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|--------------------------|
| XVII. TRANSPORTATION – 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 type="checkbox"/> |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (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 checked="" type="checkbox"/> | <input type="checkbox"/> |

The following analysis prepared consistent with the requirements of the City of Highland Public Works Policies, Procedures and Standards for traffic studies (Traffic Study Guidelines) (September 2016), as well as SB 743 and the current CEQA Guidelines for potential impacts to VMT.

Trip Generation Analysis

Trip generation estimates for the project are based on daily and AM and PM peak hour trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Handbook, 10th Edition (ITE 2017), using the warehousing land use (ITE Code 150).

Additionally, of the six parcels that comprise the project site, three parcels are developed with residential uses and the remaining three parcels are undeveloped. A portion of the undeveloped parcels is used for equine activities (i.e., horseback riding and grazing). Barns, horse stalls, and a horse corral are located throughout the site. While these residential and equine land uses exist, trip generation estimates for the existing uses could not be determined by available ITE trip rates as specific operations of these existing uses are unknown. In addition to various equine facilities, the residential uses also appear to include potential home-based light-industrial operations. No trip credits for the existing land uses have been assumed in this analysis; therefore, the project's net trip generation estimates are conservative.

PCE factors were also applied to the trip generation estimates to account for truck traffic. The City of Highland indicates that projects with high truck percentages should convert project trips to PCE. A 1.5 PCE factor was applied to 2-axle trucks, 2.0 PCE for 3-axle trucks, and a 3.0 PCE factor was applied to 4-axle trucks per the San Bernardino County Congestion Management Program (CMP). Table 26 presents the project's daily, and AM and PM peak hour trip generation estimates.

Table 26. Project Trip Generation Summary

| Land Use | ITE Code | Size/Units | Daily | AM Peak Hour | | | PM Peak Hour | | | |
|--------------------------------------|----------|-------------------------|-------|--------------|------|-------|--------------|------|-------|----|
| | | | | In | Out | Total | In | Out | Total | |
| Trip Rates ¹ | | | | | | | | | | |
| Warehousing | 150 | TSF | 1.74 | 0.13 | 0.04 | 0.17 | 0.05 | 0.14 | 0.19 | |
| Trip Generation | | | | | | | | | | |
| 6th & Victoria Avenue Warehouse | 150 | 307.445 | TSF | 535 | 40 | 12 | 52 | 16 | 43 | 58 |
| Trip Generation (PCE Adjustments) | | | | | | | | | | |
| Warehousing Vehicle Mix ² | | Percent ² | | | | | | | | |
| Passenger Vehicles | | 72.5% | | 388 | 29 | 9 | 38 | 11 | 31 | 42 |
| 2-Axle Trucks | | 4.6% | | 25 | 2 | 1 | 2 | 1 | 2 | 3 |
| 3-Axle Trucks | | 5.7% | | 30 | 2 | 1 | 3 | 1 | 2 | 3 |
| 4+-Axle Trucks | | 17.2% | | 92 | 7 | 2 | 9 | 3 | 7 | 10 |
| Project Trip Generation (Non-PCE) | | | | 535 | 40 | 12 | 52 | 16 | 43 | 58 |
| | | PCE Factor ³ | | | | | | | | |
| Passenger Vehicles | | 1.0 | | 388 | 29 | 9 | 38 | 11 | 31 | 42 |
| 2-Axle Trucks | | 1.5 | | 37 | 3 | 1 | 4 | 1 | 3 | 4 |
| 3-Axle Trucks | | 2.0 | | 61 | 5 | 1 | 6 | 2 | 5 | 7 |
| 4+-Axle Trucks | | 3.0 | | 276 | 21 | 6 | 27 | 8 | 22 | 30 |
| Project Trip Generation (PCE) | | | | 762 | 57 | 17 | 74 | 22 | 61 | 83 |

Notes: TSF = Thousand Square Feet

¹ Trip rates from the Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition, 2017.

² Vehicle Mix and Percent from SCAQMD, Warehouse Truck Trip Study Data Results and Usage, July 2014.

³ Passenger Car Equivalent (PCE) factors per the San Bernardino County Congestion Management Program (CMP), 2016.

As detailed above, the project would generate 535 daily trips, 52 AM peak hour trips (40 inbound and 12 outbound), and 58 PM peak hour trips (16 inbound and 43 outbound). Applying PCE factors for truck traffic, the project would generate 762 daily PCE trips, 74 AM peak hour PCE trips (57 inbound and 17 outbound), and 83 PM peak hour PCE trips (22 inbound and 61 outbound).

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

Less-than-Significant Impact. As detailed in the following text, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Roadway Facilities

The project is located within the jurisdiction of the City of Highland; therefore, the following consistency requirements would apply.

San Bernardino Associated Governments Congestion Management Plan

The City of Highland is located in San Bernardino County and therefore, the San Bernardino County Transportation Authority CMP applies to the City. To address the increasing public concern that traffic congestion is impacting the quality of life and economic vitality of the State of California, Proposition 111 created the CMP in 1990. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program process. In 1990, the San Bernardino Associated Governments was designated the Congestion Management Agency (CMA) for San Bernardino County. Although implementation of the CMP was made voluntary by the passage of AB 2419 (Bowler 1996), the CMP requirement has been retained in San Bernardino County.

The LOS at each CMP location is monitored by local jurisdictions in order to implement the statutory requirements of the CMP. If LOS standards deteriorate, then local jurisdictions must prepare a deficiency plan to meet conformance standards outlined by the countywide plan. The local CMP requires that a TIA report be prepared when a project's trip generation exceeds 250 two-way peak hour trips and expects to add at least 50 two-way peak hour trips to a State highway facility. For the CMP roadway system, the LOS standard shall be E for all segments and intersections except those designated LOS F, as listed in Table 2-1 of the CMP (SANBAG 2016). The nearest CMP facility is the intersection of Victoria Avenue/5th Street.

Based on the project's trip generation estimates as described above, development of the proposed project would not be likely to result in degradation of the nearby CMP facilities due to the low volume of vehicular traffic (less than 250 peak hour trips, and less than 50 peak hour trips to a State highway facility, per the CMP). Therefore, impacts associated with project-related traffic on both the local and regional circulation system would be less than significant.

City of Highland

Traffic Study Guidelines

The City of Highland Traffic Study Guidelines are included in Chapter 9 of the City's Public Works Policies, Procedures and Standards Manual. Although changes in CEQA regarding SB 743 implementation shifts the primary metric for traffic analyses from LOS to VMT, the City has not yet adopted updated guidelines or thresholds related to VMT. As such, the City continues to require a Traffic Report to analyze the surrounding transportation network to evaluate the project's effect on the City's transportation infrastructure, and identify improvements required to maintain consistency with the City's LOS standards. Per the Traffic Study Guidelines, a Traffic Report would be required if a project exceeds the CMP thresholds (250 two-way peak hour trips) or generates more than 1,000 new two-way daily trips, or 100 two-way peak hour trips. Additionally, the City may require a Traffic Report if there are concerns regarding access, roadway structural impacts or level of service on intersection or roadway segments adjacent to the project. Trip generation estimates for the project are summarized above.

Based on the project's trip generation estimates as described above, development of the proposed project would likely not result in degradation of the nearest intersections of Grape Street/6th Street, Victoria Avenue/6th Street, or other nearby intersections due to the low volume of vehicular traffic (less than 100 peak hour trips). However, the scoping of a focused Traffic Report is in progress with the City and is subject to review and approval by the City prior to project approval. By proceeding with scoping of a Traffic Report,

the project complies with and would not conflict with the City's Traffic Study Guidelines. Therefore, impacts would be less than significant.

General Plan Circulation Element

The City of Highland adopted its most recent version of the General Plan in March 2006. The General Plan Circulation Element takes into consideration transit, bicycle, pedestrian, and other multimodal uses. The Circulation Element primarily utilizes volume-to-capacity LOS as a measurement in the rating of the performance of streets. The Circulation Element establishes the following LOS criteria:

- *LOS D or better for major intersections in the City.*
- *LOS D is considered acceptable for peak operating periods.*
- *Any City of Highland intersection operating at LOS "E" or "F" is considered deficient.*

As the proposed project is forecast to generate 74 AM peak hour trips and 83 PM peak hour trips (PCE-adjusted), the proposed project would not exceed the 250 two-way peak hour trip threshold for the preparation of a TIA per the CMP or the 100 two-way peak hour trip threshold for preparation of a Traffic Report per the City's Traffic Study Guidelines. Therefore, a TIA and further LOS analysis would not be required, unless requested by the City for a focused analysis of specific facilities as noted above.

Additionally, the project site is bordered by 6th Street to the south, Grape Street to the west, and Victoria Avenue to the east. Grape Street does not have a designated Circulation Element roadway classification; however, 6th Street as a Collector Street and Victoria Avenue is designated as a Major Highway. Per the Circulation Element, a Collector Street is generally a two-lane roadway intended to carry traffic between residential and commercial land uses, with a 44-foot, curb-to-curb width within a 66-foot ROW. The project would not conflict with the right-of-way along 6th Street.

Per the Circulation Element, a Major Highway is generally designed as a four-lane roadway intended to provide nonlocal through trips and limited local access, with an 88-foot curb-to-curb width (with a 12-foot median), within a 104-foot ROW. Although Victoria Avenue is not currently built out to its ultimate ROW, and does not include a 12-foot center median, the Circulation Element notes that Victoria Avenue is designated as a Major Highway to preserve adequate ROW for the Airport entry and accommodate future traffic. Additionally, the Circulation Element notes the potential for a new interchange for I-210 at Victoria Avenue to the north, as Victoria Avenue is identified as the "major entryway into the San Bernardino International Airport and [serves] as a the linkage between the Airport and San Manuel Indian Casino and Bingo facility." The project would provide the required 52-foot half-width required to satisfy the ultimate ROW and would not conflict with future build-out of the roadway. Therefore, impacts related to project consistency with the General Plan Circulation Element would be less than significant.

Pedestrian and Bicycle Facilities

Although the General Plan Circulation Element includes several bicycle classifications, the City of Highland Active Transportation Plan, adopted February 2021, provides a more comprehensive and updated overview of the City's current and future recommendations to enhance multi-modal facilities:

Class I Shared-Use Paths are paths completely separated from motor vehicle traffic used by people for walking and biking. These paths are typically located immediately adjacent and parallel to a roadway or in its own independent ROW, such as within a park or along a body of water.

Class II Bicycle Lanes are dedicated lanes for bicycle travel adjacent to traffic. A painted white line separates the bicycle lane from motor vehicle traffic.

Class IIB Buffered Bicycle Lane are dedicated lanes for bicycle travel separated from vehicle traffic by a painted buffer. The buffer provides additional comfort for users by providing space from motor vehicles or parked cars.

Class III Bicycle Routes are signed bike routes that people biking share with motor vehicles, which can include pavement markings.

Class IIIB Bicycle Boulevards are calm, local streets where bicycles have priority but share roadway space with motor vehicles. These boulevards include shared roadway bicycle markings on the pavement as well as traffic calming features such as speed humps and traffic diverters to keep these streets more comfortable for bicycles.

No existing bicycle facilities exist adjacent to the project site. The nearest proposed facility would include a Class II Bicycle Lane along Victoria Avenue, adjacent to the project site, extending from 5th Street to Sparks Street. The proposed project would provide the frontage required of the ultimate ROW of Victoria Avenue (52 feet), designated as a Major Highway in the Circulation Element. The Major Highway roadway cross section allocates 8 feet to bike lanes on both sides of the roadway. As such, the project would not conflict with existing or proposed bicycle facilities, and impacts would be less than significant.

Site analysis of the project area does not indicate existing sidewalk and pedestrian facilities along the full extents of adjacent and nearby streets in the vicinity of the project site. However, the Active Transportation Plan includes proposed recommendations for the buildout of sidewalks and paths along Grape Street and Victoria Avenue adjacent to the project site, along with curb treatments at the intersections of Grape Street/6th Street and Victoria Avenue/6th Street. Additionally, the project includes frontage improvements, including sidewalks and paths along all project frontages. As such, development of the project would not conflict with the existing pedestrian facilities, and impacts would be less than significant.

Transit Facilities

Omnitrans provides public transportation throughout the San Bernardino Valley and would serve as the nearest transit service to the project site. The nearest Omnitrans bus stop serves Route 15, located approximately 0.30 miles north of the project site at the intersection of Victoria Avenue/9th Street. Route 15 operates between the Fontana Metrolink Transit Center and the City of Redlands via the Cities of Rialto, San Bernardino, and Highland, with a peak service frequency of 60 minutes throughout the week. Development of the proposed project would not conflict with the existing bus routes or bus stops. Therefore, impacts to transit would be less than significant.

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

Less-than-Significant Impact. As shown in the analysis below, based on City's recommended thresholds, the Project generated VMT and the Project's effect on VMT would result in a less than significant impact.

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which created a process to change the way that transportation impacts are analyzed under CEQA. SB 743 required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Under the transportation guidelines, LOS, or vehicle delay, will no longer be considered an environmental impact under CEQA. The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. These guidelines identify VMT as the most appropriate measure of transportation impacts under CEQA as of July 1, 2020.

VMT Screening

The following screening criteria were analyzed per the San Bernardino County Transportation Authority (SBCTA) Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (SBCTA Guidelines), per direction from the City in lieu of formally adopted City VMT guidelines. Any one of the following criteria would need to be satisfied in order to screen-out of significant VMT impacts:

- **Projects generating less than 110 daily trips:** The proposed Project is the construction and development of 307,445 SF of warehousing buildings, estimated to generate 535 ADT as shown in Table 3.17-1. Therefore, the Project would not fall under the threshold for projects generating less than 110 ADT.
- **Local serving retail less than 50,000 SF:** The proposed Project does not include retail components. Therefore, the Project is not considered a local serving retail project and cannot be screened out from further VMT analysis using this criterion.
- **Local Serving Projects:** The proposed Project would not be categorized as a local serving land use. Therefore, the Project cannot be screened out from further VMT analysis using this criterion.
- **Affordable Housing (100 percent of units):** The proposed Project does not include affordable housing units. Therefore, the Project cannot be screened out from further VMT analysis using this criterion.
- **Transit Priority Area (TPA) Screening:** Projects located within a TPA²⁷ as determined by the most recent RTP/SCS. As shown in Appendix G, the proposed Project is not located within a TPA. Therefore, it cannot be screened out using this criterion.
- **Low VMT Area Screening:** Per the SBCTA Guidelines, "Residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population (SP) that is similar to the existing land uses in the low VMT area."

The SBCTA VMT Screening Tool (Screening Tool) was used to determine whether the proposed Project would be in a low VMT-generating area. The City's recommend guidance defines a low VMT generating area as one in which the proposed Project is located within a Traffic Analysis Zone (TAZ) where the VMT per service population is lower than City of Highland future buildout VMT per SP. TAZs are geographic polygons similar to Census block groups used to represent areas of

²⁷ Per Public Resources Code section 21099(a)(7) a "Transit priority area" means an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations. For purposes of SB 743, a transit priority area also includes major transit stops that are scheduled to be completed within the planning horizon of the RTP/SCS.

homogenous travel behavior. Based on the Screening Tool results and as shown in Table 4.10-2 (Appendix H), the Project would be located within a low VMT generating zone as compared to the City recommended threshold.

Table 4.10-2. Summary of Project TAZ VMT

| Base Year (2021) | VMT |
|--|----------------|
| PA VMT Per Service Population | |
| Project TAZ | 15.0 |
| City Future Buildout | 22.5 |
| % Difference (Project TAZ – City) | -33.43% |
| Threshold | 28.2 |

Source: SBCTA VMT Screening Tool (Appendix H)

Note: TAZ = Traffic Analysis Zone; VMT = vehicle miles traveled; OD = origin-destination

As shown in the table, the PA VMT per SP for the Project TAZ is 15.0, and the County's OD VMT per SP is 33.2. Therefore, the TAZ would be 33.43% below the City's threshold, and would meet the low VMT screening criteria. However, the TAZ for which the Project resides does not include any industrial employment and therefore would not be reflective of the Project's proposed land use. Therefore, the Project cannot be screened out using the low VMT area screening criterion.

As the proposed Project would not meet the City's recommended screening criteria, a Project level detailed VMT analysis is required.

VMT Analysis

The City requires the evaluation of project generated VMT as well as project's effect on VMT to be analyzed in detail for projects that do not meet any of their screening criteria. The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle. The SBCTA Guidelines identify the San Bernardino Transportation Analysis Model (SBTAM) as the appropriate tool to conduct a detailed VMT analysis for land use projects. The technical memorandum describing the SBTAM model run for VMT by sub-consultant Urban Crossroads is included in Appendix H.

Project VMT

The SBTAM is trip-based regional travel demand model that considers interaction between different land uses based on socio-economic data such as population, households, and employment. Project VMT has been calculated using the most current version of SBTAM. Adjustments in socio-economic data (i.e., employment) were made to the appropriate TAZ within the SBTAM model to reflect the Project's proposed warehousing land use. The Project socio-economic data is consistent with the employment density factors for San Bernardino County from the SCAG Employment Density Survey (October 31, 2001). Based on number of employees estimated using Table II-B of the SCAG study (1 employee per 1,195 square feet), the Project was coded with 257 employees.

The Project generated VMT is defined as the VMT attributed to vehicle trips to and from the Project zone or zones. Based on the City's recommended thresholds, if a project generated VMT per service

population exceeds City of Highland average VMT per service population, the Project would create significant impact under CEQA.

Project generated VMT is extracted from the SBTAM model using the production attraction (PA) trip matrices. The PA matrices are then multiplied by the final assignment (distance) skims. Project generated baseline VMT was calculated from the baseline travel forecasting model which was also used to establish the City's VMT threshold. Additionally, the project generated VMT was calculated in the cumulative travel forecasting model to estimate VMT in cumulative conditions. Project VMT was then normalized by dividing by the Project's service population (SP) (i.e., estimated number of employees for industrial type uses) for their respective baseline and cumulative conditions. This calculation changes the raw VMT value into an efficiency metric for ease of comparison. As the Project does not contain residential land uses, the service population consists entirely of the Project's employment. Project generated VMT was calculated for both the base year model (2016) and cumulative year model (2040) and linear interpolation was used to determine the baseline (2021) project generated VMT. Table 4.10-3 summarizes the findings of this evaluation.

Table 4.10-3. Summary of Project VMT per SP

| | Base year (2016) | Cumulative (2040) | Baseline (2021) |
|-------------------------|------------------|-------------------|-----------------|
| Service Population (SP) | 257 | 257 | 257 |
| VMT | 5,647 | 5,344 | 5,605 |
| VMT/SP | 22.07 | 20.87 | 21.90 |

Note: VMT = vehicle miles traveled

Source: SBTAM Model Results; (Appendix H)

VMT Impact Determination

As noted above, the City of Highland has not adopted VMT-specific guidelines or thresholds as of June 2021. In lieu of available guidelines, City Staff have identified the following recommended threshold for findings of less than significant:

- The baseline project-generated VMT per service population below future buildout City of Highland VMT per service population, or
- The cumulative project-generated VMT per service population below future buildout City of Highland VMT per service population.

As shown in the Table 4.10-4 below, the City average VMT is 22.51 VMT/SP under future buildout (Year 2040) conditions. As shown, the Project's VMT per SP would be 2.71 percent below the City's impact threshold for baseline conditions and 7.29 percent below the City's impact threshold for cumulative conditions. Because the Project generated VMT per SP does not exceed the future buildout City of Highland VMT per SP in either the baseline or cumulative conditions, the Project generated VMT impact would be less than significant.

Table 4.10-4. Project VMT per SP Comparison

| | Base year (2021) | Cumulative (2040) |
|---------------------------------|------------------|-------------------|
| City Future Buildout VMT per SP | 22.51 | 22.51 |
| Project-generated VMT per SP | 21.90 | 20.87 |

Table 4.10-4. Project VMT per SP Comparison

| | Base year (2021) | Cumulative (2040) |
|--------------------------|------------------|-------------------|
| Percent Change | -2.71% | -7.29% |
| Potentially Significant? | No | No |

Note: VMT = vehicle miles traveled; SP = Service Population

Source: SBTAM Model Results; (Appendix H)

While the project's VMT impacts would be less than significant, several regulatory requirements, project design features, and existing conditions would further facilitate a reduction in project VMT. First, the project would provide bicycle facilities (i.e., permanently anchored bike racks) on the project site and along Victoria Avenue (i.e., dedication of land for the future construction of an 8-foot bike lane) to facilitate bike travel to and from the project site in lieu of single-passenger automobile trips. The project would also facilitate carpooling and vanpooling by providing parking spaces designated for low-emitting, fuel-efficient and carpool/van pool vehicles, as required by Title 24. Additionally, the project site is located along Omnitrans Route 15. Together, these measures would provide future employees of the project several alternative modes to using single-passenger vehicles to access the project site.

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

Less-than-Significant Impact. Access to the project site would be provided by two driveways along Grape Street and two driveways along Victoria Avenue. The northernmost driveways along each street would serve as truck access driveways, with the southernmost driveways dedicated to passenger vehicle access only. Passenger vehicles would also be permitted to utilize the northern driveways. Per discussion with the City, both the northern and southern Victoria Avenue driveway would be restricted to right-in/right-out only access due to its proximity to the Victoria Avenue/6th Street intersection, and future plans for a center median along Victoria Avenue.

As discussed previously, Victoria Avenue is not yet built to its ultimate ROW and does not have an existing 12-foot center median along the project frontage.

The project would construct frontage improvements of existing segments of Grape Street, 6th Street, Victoria Avenue, and new driveways for project access.

During site plan review, the internal roadway and driveway widths, curb radii to facilitate passenger car and truck turning and movement would be reviewed, designed, and constructed per City standards and applicable street design requirements.

For on-site construction and any improvements required within the public ROW, the proposed project would be required to comply with standards set forth by the City to ensure that the project does not introduce an incompatible design feature that would impede traffic flow on roadway facilities. There would be no incompatible or hazardous uses associated with the proposed project and impacts would be less than significant.

d) *Would the project result in inadequate emergency access?*

Less-than-Significant Impact. Site access would be provided via two driveways along Grape Street and two driveways along Victoria Avenue. Emergency vehicle access will be available at all driveways and facilitated

within the entirety of the project site. The project site would be accessible to emergency responders during construction and operation of the project. Therefore, impacts associated with an emergency response plan or emergency evacuation plan would be less than significant.

3.18 Tribal Cultural Resources

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|------------------------------|--------------------------|
| XVIII. TRIBAL CULTURAL RESOURCES | | | | |
| Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| 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 Resource 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"/> |

The evaluation of potential impacts to Tribal Cultural Resources is based on the findings resulting from tribal consultation conducted by City of Highland (City), as the lead agency, as well as the findings of the Archaeological Resources Assessment conducted by Dudek in 2021 (Appendix C-2). Background research conducted to inform this analyses and provide data upon request of interested Native American representatives included a Native American Heritage Commission (NAHC) Sacred Land Files (SLF) search, ethnographic research, archival research and California Historical resources Information System (CHRIS) database records search all of which are briefly provided in this section.

Existing Setting – Ethnohistoric

The history of the Native American communities prior to the mid-1700s has largely been reconstructed through later mission-period and early ethnographic accounts. The first records of the Native American inhabitants of the region come predominantly from European merchants, missionaries, military personnel, and explorers. These brief, and generally peripheral, accounts were prepared with the intent of furthering respective colonial and economic aims and were combined with observations of the landscape. They were not intended to be unbiased accounts regarding the cultural structures and community practices of the newly encountered cultural groups. The

establishment of the missions in the region brought more extensive documentation of Native American communities, though these groups did not become the focus of formal and in-depth ethnographic study until the early twentieth century (Bean and Shipek 1978; Boscana 1846; Harrington 1934; Laylander 2000; Sparkman 1908; White 1963). The principal intent of these researchers was to record the precontact and culturally specific practices, ideologies, and languages that had survived the destabilizing effects of missionization and colonialism. This research, often understood as “salvage ethnography,” was driven by the understanding that traditional knowledge was being lost due to the impacts of modernization and cultural assimilation. Alfred Kroeber applied his “memory culture” approach (Lightfoot 2005, p. 32) by recording languages and oral histories within the region. Ethnographic research by Dubois, Kroeber, Harrington, Spier, and others during the early twentieth century seemed to indicate that traditional cultural practices and beliefs survived among local Native American communities.

It is important to note that even though there were many informants for these early ethnographies who were able to provide information from personal experiences about native life before the Europeans, a significantly large proportion of these informants were born after 1850 (Heizer and Nissen 1973); therefore, the documentation of precontact, aboriginal culture was being increasingly supplied by individuals born in California after considerable contact with Europeans. As Heizer (1978) stated, this is an important issue to note when examining these ethnographies, since considerable culture change had undoubtedly occurred by 1850 among the Native American survivors of California.

Based on ethnographic information, it is believed that at least 88 different languages were spoken from Baja California Sur to the southern Oregon state border at the time of Spanish contact (Johnson and Lorenz 2006, p. 34). The distribution of recorded Native American languages has been dispersed as a geographic mosaic across California through six primary language families (Golla 2007).

Golla contended that one can interpret the amount of variability within specific language groups as being associated with the relative “time depth” of the speaking populations (Golla 2007, p. 80). A large amount of variation within the language of a group represents a greater time depth than a group’s language with less internal diversity. One method that he has employed is by drawing comparisons with historically documented changes in Germanic and Romantic language groups. Golla observed that the “absolute chronology of the internal diversification within a language family” can be correlated with archaeological dates (2007, p. 71). This type of interpretation is modeled on concepts of genetic drift and gene flows that are associated with migration and population isolation in the biological sciences.

The tribes of this area have traditionally spoken Takic languages that may be assigned to the larger Uto–Aztecan family (Golla 2007, p. 74). These groups include the Gabrielino, Cahuilla, and Serrano. Golla interpreted the amount of internal diversity within these language-speaking communities to reflect a time depth of approximately 2,000 years. Other researchers have contended that Takic may have diverged from Uto–Aztecan ca. 2600 BC–AD 1, which was later followed by the diversification within the Takic speaking tribes, occurring approximately 1500 BC–AD 1000 (Laylander 2000).

Serrano

Traditionally, the Serrano lived in an area east of the Gabrielino and north of the Cahuilla, near present-day western San Bernardino County and northeastern Los Angeles County (Laylander 2000). The Serrano occupied an area in and around the San Bernardino Mountains between approximately 1,500 and 11,000 feet above mean sea level. Their territory extended west along the northern slope of the San Gabriel Mountains, east as far as Twentynine Palms, north along the Mojave River, and south to the San Jacinto area. Kroeber (1925) divided the Serrano into four distinct groups within the

western Mojave Desert: the Kitanemuk, Tataviam, Serrano, and Vanyume. Each group held a distinct territory within the region (Kroeber 1925). According to Bean and Smith (1978a, p. 570), “the Serrano resided in an area that extended east of the Cajon Pass, located in the San Bernardino Mountains, to Twenty-nine Palms, the north foothills of the San Bernardino Mountains and south to include portions of the Yucaipa Valley.”

Serrano social organization was based on patrilineal and patrilocal lineages. Exogamy rules required that a man could not marry a woman related to them within five generations. Women moved to their husband’s village, but kept their identity as a member of their natal lineage (Cultural Systems Research 2005:15).

The Serrano were mainly hunters and gatherers who occasionally fished. Game hunted included mountain sheep, deer, antelope, rabbits, small rodents, and various birds, particularly quail. Vegetable staples consisted of acorns, piñon nuts, bulbs and tubers, shoots and roots, berries, mesquite, barrel cacti, and Joshua tree (Bean and Smith 1978a; Cultural Systems Research 2005:15). A variety of materials was used for hunting, gathering, and processing food, as well as for shelter, clothing, and luxury items. Shells, wood, bone, stone, plant materials, and animal skins and feathers were used for making baskets, pottery, blankets, mats, nets, bags and pouches, cordage, awls, bows, arrows, drills, stone pipes, musical instruments, and clothing (Bean and Smith 1978a).

The majority of the Serrano lived in small villages, close to sources of fresh water (Benedict 1924). Houses and ramadas were round, dome-shaped, and constructed of poles covered with bark and tule mats (Benedict 1924; Kroeber 1925). The Serrano also had sweat houses and ceremonial houses for religious activities. Further, according to Benedict (1924), a typical Serrano settlement was a village with multiple small satellite camps surrounding it. Most Serrano villages also had a ceremonial house used as a religious center. Other structures within the village might include granaries and sweathouses (Bean and Smith 1978a). According to DeBarros (2004), one of the more prominent Serrano villages was called Guapiabit, and it was located in Summit Valley.

Gabrieliño/Tongva

The archaeological record indicates that the Gabrielino arrived in the Los Angeles Basin around 500 B.C. Surrounding native groups included the Chumash and Tataviam to the northwest, the Serrano and Cahuilla to the northeast, and the Juaneño and Luiseño to the southeast.

The names by which Native Americans identified themselves have, for the most part, been lost and replaced by those derived by the Spanish people administering the local Missions. These names were not necessarily representative of a specific ethnic or tribal group, and traditional tribal names are unknown in the post-Contact period. The name “Gabrieliño” or “Gabrieleño” was first established by the Spanish from the San Gabriel Mission and included people from the established Gabrielino area as well as other social groups (Bean and Smith 1978b; Kroeber 1925). Some contemporary Gabrieliño identify themselves as descendants of the indigenous people living across the plains of the Los Angeles Basin and refer to themselves as the Tongva (King 1994, p. 12). This term is used in the remainder of this section in addition to the name “Gabrieleño” to refer to the precontact inhabitants of the Los Angeles Basin and their descendants.

The Gabrieleño/Tongva established large, permanent villages along rivers and streams, and lived in sheltered areas along the coast. Gabrieleño/Tongva lands included the greater Los Angeles Basin and three Channel Islands—San Clemente, San Nicolas, and Santa Catalina—and stretched from the foothills of the San Gabriel Mountains to the Pacific Ocean. Archaeological sites composed of villages with various sized structures have been identified through the Los Angeles Basin. A total tribal population has been estimated of at least 5,000 (Bean and Smith 1978b, p.540), but recent ethnohistoric work suggests a number approaching 10,000 seems more likely (O’Neil 2002). At

least one Gabrieleño/Tongva village was located near Glendora: Ashuukshanga (also Azucsagna), located near the mouth of the San Gabriel River in present-day Azusa (McCawley 1996, p. 44). Within the permanent village sites, the Gabrieleño/Tongva constructed large, circular, domed houses made of willow poles thatched with tule, each of which could hold upwards of 50 people (Bean and Smith 1978b). Other structures constructed throughout the villages probably served as sweathouses, menstrual huts, ceremonial enclosures, and communal granaries. Cleared fields for races and games, such as lacrosse and pole throwing, were created adjacent to Tongva villages (McCawley 1996).

The Gabrieleño/Tongva subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, and deserts as well as riparian, estuarine, and open and rocky coastal eco-niches. Like most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate Horizon). Acorns were supplemented by the roots, leaves, seeds, and fruits of a variety of flora (e.g., islay, cactus, yucca, sages, and agave). Freshwater and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed (Bean and Smith 1978b, p. 546; Kroeber 1925, pp. 631–632; McCawley 1996, pp. 119–123, 128–131).

The Gabrieleño/Tongva participated in an extensive exchange network, trading coastal goods for inland resources. They exported Santa Catalina Island steatite products, roots, seal and otter skins, fish and shellfish, red ochre, and lead ore to neighboring tribes, as well as to people as far away as the Colorado River. In exchange, they received ceramic goods, deerskin shirts, obsidian, acorns, and other items. This burgeoning trade was facilitated by the use of craft specialists, a standard medium of exchange (Olivella bead currency), and the regular destruction of valuables in ceremonies, which maintained a high demand for these goods (McCawley 1996, pp. 112–115).

Assembly Bill 52

AB 52 of 2014 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that tribal cultural resources must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. PRC Section 21074 describes a tribal cultural resource as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American Tribe. A tribal cultural resource (TCR) is either:

- On the CRHR or a local historic register;
- Eligible for the CRHR or a local historic register; or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in (c) of PRC Section 5024.1.

AB 52 formalizes the lead agency–tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with the project area, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report by contacting those tribal groups who have previously provided formal written request for notification of projects under the agency’s jurisdiction.

Section 1 (a)(9) of AB 52 establishes that “a substantial adverse change to a tribal cultural resource has a significant effect on the environment.” Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures “capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource.” Further, if a California Native American tribe requests consultation

regarding project alternatives, mitigation measures, or significant effects to TCRs, the consultation shall include those topics (PRC Section 21080.3.2[a]). Finally, the environmental document, for which the tribal consultation is focused, and the mitigation monitoring and reporting program (where applicable), developed in consideration of information provided by tribes during the formal consultation process, shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

Assembly Bill 52 Consultation

The project is subject to compliance with AB 52 (PRC 21074), which requires consideration of impacts to TCRs as part of the CEQA process, and that the lead agency notify California Native American Tribal representatives (that have requested notification) who are traditionally or culturally affiliated with the geographic area of the proposed project. All NAHC-listed California Native American Tribal representatives that have requested project notification pursuant to AB 52 were sent letters by the City on June 17, 2021, via USPS certified mailing and email. The notification letters contained a project description, outline of AB 52 timing, an invitation to consult, a project site plan, and contact information for the appropriate lead agency representative. Table 28 summarizes the results of the AB 52 process for the project.

Table 28. Assembly Bill 52 Native American Heritage Commission–Listed Native American Contacts

| Native American Tribal Representatives | Response Received |
|--|---|
| Andrew Salas, Chairman Gabrieleno Band of Mission Indians – Kizh Nation | <p>June 18, 2021: City Associate Planner Salvador Quintanilla sent a follow up email to Brandy Salas, Admin Specialist, for the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation). Ms. Salas responded the same day acknowledging receipt of the email from Mr. Quintanilla.</p> <p>June 22, 2021: Mr. Quintanilla sent a follow up email to Ms. Salas and provided a copy of the project site plan for reference and also followed up with a phone call.</p> <p>June 23, 2021: Ms. Salas responded to Mr. Quintanilla's outreach and offered two dates for a phone consultation: August 12th and 18th, 2021.</p> <p>August 5, 2021: Ms. Salas reached out to Mr. Quintanilla indicating that there would be a delay due to Chairman Salas' availability. City Assistant Community Development Director, Kim Stater, responded confirming that an electronic submittal of documents from the Kizh Nation was acceptable.</p> <p>August 6, 2021: Ms. Salas responded to Ms. Stater and stated that the Kizh Nation would provide information requested by Ms. Stater. Ms. Salas also requested the project address.</p> <p>August 9, 2021: Ms. Stater responded to Ms. Salas and stated that the project includes more than one address and provided a general breakdown of the project site location and attached the project site plan and information on the proposed project.</p> |

**Table 28. Assembly Bill 52 Native American Heritage Commission–Listed
Native American Contacts**

| Native American Tribal Representatives | Response Received |
|--|---|
| | <p>August 13, 2021: Ms. Salas responded to Ms. Stater, acknowledging receipt of the previous email and again stated that the Kizh Nation would provide the information requested by Ms. Stater.</p> <p>September 24: Ms. Stater followed up with Ms. Salas and requested the promised electronic files.</p> <p>September 24, 2021: Ms. Salas responded to Ms. Stater acknowledging receipt of the previous email and stated that the Kizh Nation would provide the information requested by Ms. Stater. Ms. Salas provided Ms. Stater with mitigation language and requested the City's concurrence.</p> <p>October 4, 2021: Ms. Salas provided Ms. Stater with additional files, including screenshots of two historical maps overlaid on Google Earth and the pinned location of the project site and screen shots of text from five literary sources and explanatory text for each file provided. The files provided references to rancherias, trade routes and hydrographs or waterways around the project area as well as information regarding a Gabrieleno community.</p> <p>Additional documents provided to the City include a letter from Dr. E. Gary Stickel to Chairman Salas dated August 22, 2018 regarding Cultural Resource Management (CRM) monitoring. In this letter, Dr. Stickel discusses the inadequacy of an archaeological pedestrian survey for the identification of subsurface cultural material, the use of ground penetrating radar (GPR) to detect unknown burials prior to project construction, and the reliability of the use of a GPR, and a statement of the use of a monitoring program for project compliance. Additionally, Dr. Stickel states that the only exception of a monitoring program would be when a subject property has been extensively disturbed and all soil deposits to contain cultural material has been removed and/or destroyed. The Kizh Nation also included a screenshot of an email from NAHC analyst, Frank Lienert, which stated that negative SLF searches do not preclude the existence of sites within the search area, which is explicitly stated on all negative SLF search results. The NAHC email also states that they recommend that the SLF search requestor contact all tribes on the consultation lists. Additionally, the Kizh Nation provided a letter from the SCCIC noting that the absence of archaeological resources within a specific area does not mean that no such resources exists and that there is always a chance that there are unrecorded archaeological resources on the surface or buried within an area.</p> <p>Based on the provided information, the Kizh Nation believes that there is a higher than average potential to impact tribal cultural resources within the project site. As such, the Kizh Nation provided the City with proposed mitigation measures for the</p> |

**Table 28. Assembly Bill 52 Native American Heritage Commission–Listed
Native American Contacts**

| Native American Tribal Representatives | Response Received |
|---|---|
| | <p>project, which includes the requirement for a Native American Monitor to be present during all ground disturbing activities and the implementation of various protocols and procedures in the event that tribal cultural resources, archaeological resources, and/or human remains are identified within the project site.</p> <p>To date, no additional responses have been received by the City from the Kizh Nation.</p> |
| Joseph Ontiveros Cultural Resources Director Soboba Band of Luiseno Indians | No response has been received to date. |
| <p>Lee Clauss, Director Cultural Resources Management Department San Manuel Band of Mission Indians (SMBMI)</p> | <p>June 22, 2021: An email response was received by City Associate Planner Salvador Quintanilla from Ryan Nordness, Cultural Resource Analyst for the SMBMI via email. Mr. Nordness provided mitigation language and requests that it be included for the project permit and planning.</p> <p>June 24, 2021: Mr. Nordness sent a follow-up email to Mr. Quintanilla and stated that the proposed project area is within Serrano ancestral territory and requested to review the cultural and geotechnical report for the project, including project plans showing the depths of proposed ground disturbance. Mr. Quintanilla provided the cultural and geotechnical report on June 29, 2021.</p> <p>A second email was sent to the City on this date by Mr. Nordness referencing consultation under SB 18 and stating that no additional consultation under SB 18 would be required. It is important to note that the project does not include any amendments to the General or Specific Plan and therefore, SB 18 does not apply to the project. Nonetheless, this record is documented to ensure all communication received by the City as part of the consultation process is provided.</p> <p>August 3, 2021: After reviewing the project materials, Mr. Nordness sent a follow-up email to Mr. Quintanilla and stated that the proposed project area is within Serrano ancestral territory, however, due to the nature and location of the project and the CRM Department's present knowledge, the SMBMI does not have any concerns with the project as planned at this time. Mr. Nordness then provided mitigation language and requested that it be included for the project permit and planning. Mr. Nordness also requested to be provided a final copy of the project permit and planned to review the included language.</p> <p>To date, no additional responses have been received by the City from the SMBMI.</p> |
| <p>Dan Little Chief Intergovernmental Affairs Officer San Manuel Band of Mission Indians</p> | No response has been received to date. |

Table 28. Assembly Bill 52 Native American Heritage Commission–Listed Native American Contacts

| Native American Tribal Representatives | Response Received |
|--|--|
| Michelle Hickey VP/Associate General Counsel San Manuel Band of Mission Indians | No response has been received to date. |
| Peter Mateo Director of Tribal Planning & Development San Manuel Band of Mission Indians | No response has been received to date. |

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

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

Less-than-Significant Impact with Mitigation Incorporated. As described under Section 3.5 of this document, a CHRIS records search and NAHC SLF search were conducted for the project site. The SLF was completed with positive results; however, it should be noted that the results relate to the general regional area do not necessarily equate to the existence of resources within the specific area occupied by the proposed project site. The results of the CHRIS records search identified 23 historic built environment resources within the records search area. No prehistoric resources were identified as a result of the records search. South Central Coastal Information Center records also indicate that that 13 previous cultural resources investigations have been conducted within one-half mile of the proposed project site between 1979 and 2013. No cultural resources were identified within the project site as a result of the previous investigations. Additionally, as discussed in Section 3.5, based on the intensive-level archaeological pedestrian survey and research conducted as part of the Archaeological Resource Assessment (Appendix C-2), it was determined that the potential to encounter intact deposits containing archaeological resources within soils between the current grade and 18 inches below is unlikely. However, the potential for intact cultural deposits to exist within soils from 18 inches below current grade to the proposed depths of disturbance is unknown. Given the proximity of the proposed project site to the San Bernardino Mountains, an unnamed channel, and City Creek (a tributary of the Santa Ana River), there is a potential for cultural materials to exist that may be buried in alluvial and flood deposits beneath the layer of fill soils. Therefore, MM-CUL-1 through MM-CUL-4, as well as MM-TCR-1 and MM-TCR-2 shall be required. With incorporation of these mitigation measures, impacts would be less than significant.

As previously mentioned above and summarized in Table 28, the City notified California Native American Tribal representatives (that have requested notification) who are traditionally or culturally affiliated with the geographic area of the project pursuant to AB 52 on June 17, 2021. As a result of the notification letters, the City received responses from the SMBMI and the Kizh Nation. The SMBI stated that the project is within the Serrano ancestral territory, but did not have any concerns and provided mitigation language. The Kizh Nation provided screenshots of historical maps and

literary excerpts, including the explanatory text for each file. The files provided references to rancherias, trade routes and hydrographys or waterways around the project area as well as information regarding a Gabrieleno community. A review of the comments, maps, text, and letters/statements submitted by the Kizh Nation determined that the information does not constitute substantial evidence that the project could potentially cause a substantial adverse change in the significance of any tribal cultural resources. Therefore, the proposed project would not adversely affect known TCRs that are listed or eligible for listing in the state or local register. No mitigation is required.

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

Less-than-Significant Impact with Mitigation Incorporated. The project is subject to compliance with AB 52 (PRC 21074), which requires consideration of impacts to tribal cultural resources as part of the CEQA process and requires lead agencies to provide notification of proposed projects to California Native American Tribal representatives that have requested such notifications.

As discussed above, the SMBMI consulted with the City under AB 52, and stated that due to the nature and location of the project and the CRM Department's present knowledge, the SMBMI does not have any concerns with the project as planned at this time. Nonetheless, the SMBMI requested that mitigation measures be included for the project permit and planning.

The Kizh Nation also consulted with the City under AB 52 and during the course of consultation, the Kizh Nation provided the City with screenshots of historical maps and literary excerpts, including the explanatory text for each file. The 1901 topographic map overlaid on Google Earth was provided by the Kizh Nation to show trade routes around the project area and includes a pin on a railroad. According to the historical topographic map review section in Appendix C-2, the 1901-1951 and 1958 topographic maps show Highlands Motor Railroad as bisecting the project site; however, it is not depicted in the 1930 and 1938 aeriels and is no longer extant. Moreover, the aerial photographs review within Appendix C-2, the proposed Project site has been subjected to consistent ground disturbance, shifting from open land to agricultural and/or residential use; however, Parcel 1 shifted to operating as a poultry farm between 1957 and the mid-1960s, before reverting to residential use and Parcel 5 has remained open and undeveloped. Furthermore, a review of a geotechnical report prepared for the project site determined that fills soils were encountered between 12 to 18 inches (1 to 1.5 feet) from the existing ground surface within all 15 exploratory backhoe trenching locations (see Appendix C-2). Based on the information provided, any potential to encounter intact subsurface cultural deposits associated with a trade route is unlikely. The 1938 map provided by the tribe (also discussed in Appendix C-2), was provided to show the location of a Gabrieleno community, trade routes, and hydrographys or waterways. Based on a review of this map, the nearest mapped Native American village is more than 2 miles southeast of the project site and is unnamed and the map does not show the place name of the Gabrieleno community referenced by the Kizh Nation. In addition, the project site is over 2.5 miles southeast of the confluence of 6 roads: Later Stage Road, Old Stage Road, Old Salt Road (Camino Para Sal), Spanish Town Road, and the road closest to the project site, is the northwest-southeast-

trending “Old Salt Road,” which is approximately 1- mile to the southeast of the project site. Additionally the nearest waterway to the project site is approximately 1.3 miles north/northwest and is a tributary that links with the Santa Ana River to the southwest. Therefore, the 1901 and 1938 maps provided by the Kizh Nation do not provide substantial evidence that the project could potentially impact a tribal cultural resource.

The Kizh Nation also provided screenshots of a statement from the NAHC and a letter from the SCCIC regarding the potential to encounter subsurface archaeological resources regardless of the negative SLF and CHRIS records search results. As discussed in Section 3.5 Cultural Resources, no prehistoric resources or resources of Native American origin have been identified within the project site or the surrounding 0.5-mile search radius through the records search at the SCCIC (completed May 10, 2021). Although the NAHC SLF search results were positive, it is important to note that Sacred Land Files maintained by the NAHC represent a curation of “ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California” (nahc.gov 2021) provided by Tribal entities and Native American representatives. For various reasons, Tribal entities and Native American representatives do not always report sacred lands or TCRs to the NAHC; as such, the NAHC’s SLF is not necessarily a comprehensive list of known TCRs and searches of the SLF must be considered in concert with other research and not used as a sole source of information regarding the presence of TCRs. Additionally, results of the SLF provided relate to the general regional area within and surrounding the project site and don’t necessarily equate to the existence of resources within the specific area occupied by the project site.

Based on the analysis above, the comments, maps, text, and letters/statements submitted by the Kizh Nation do not constitute substantial evidence that the project could potentially cause a substantial adverse change in the significance of any tribal cultural resources. As such, there are no resources in the project site, as presented during AB 52 consultation, that have been determined by the City to be significant pursuant to the criteria set forth in Public Resources Code Section 5020.1(k).

TCRs have not been identified through tribal consultation under AB 52, the City, acting as lead agency, has not identified any TCRs within the project site that would warrant discretionary designation of a resource as a TCR. However, the City, in an abundance of caution, has considered the information provided for review through consultation and determined to implement mitigation measures to ensure if unknown subsurface tribal cultural resources were inadvertently encountered, they would be addressed properly. Therefore, in addition to the cultural resources mitigation measures (MM-CUL-1, MM-CUL-2, and MM-CUL-3), tribal cultural resources mitigation measures have been included to provide for the retention of a Native American monitor by the applicant to monitor ground disturbing activities within native soils. As stipulated within mitigation prepared for Cultural Resources - appropriate handling of human remains will be completed in compliance with PRC 5097.98 and Health and Safety Code 7050.5. This includes establishing a process of respectful treatment through discussions with the identified MLD. Implementation of MM-TCR-1 would ensure that potential construction impacts related to an unknown tribal cultural resource would be reduced to a level less than significant.

MM-TRC-1: Retain a Native American Monitor Prior to Commencement of Ground Disturbing Activities

The project applicant shall make a good faith effort to retain a Native American monitor prior to the start of any project-related ground-disturbing activities. The Native American monitor shall be notified by the project applicant of the time and location of the Worker Environmental Awareness Program (WEAP) training no more than 72 hours prior to its scheduled occurrence.

3.19 Utilities and Service Systems

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|-------------------------------------|--------------------------|
| XIX. UTILITIES AND SERVICE SYSTEMS – 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?***

Less-than-Significant Impact. The proposed project involves the construction of a warehouse building, as well as paved parking areas and landscape areas. The project site currently consists of single-family

residences and vacant land. As such, the proposed project would increase demand for water supply compared to existing land uses.

As part of the project, utility service lines, including those for water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications services, would be extended from their current locations in the public ROW surrounding the project site for operation of the proposed warehouse building. The proposed project would include the addition of a 2-foot domestic water line and a 6-foot sewer line connecting to existing utility lines within Victoria Avenue, as well as various underground pipes to convey stormwater to a 96-foot CMP Infiltration System. In addition, existing above-ground utility lines on the eastern project boundary would be re-routed underground, consistent with the City's Municipal Code Section 16.40.380.

Given that the activity of connecting utilities from their current locations within the public right-of-way would require ground disturbance and the use of heavy machinery associated with trenching, the connection of these utility services to the proposed warehouse building could potentially result in environmental effects. However, the extension of these utility lines is part of the proposed project analyzed herein. As such, any potential environmental impacts related to these components of the project are already accounted for in this IS/MND as part of the impact assessment conducted for the entirety of the project. No adverse physical effects beyond those already disclosed in this IS/MND would occur as a result of implementation of the project's utility system connections. Additionally, the project would constitute a nominal increase in utility usage, which has already been accounted for in growth projections for the City and by each utility provider. No modifications to utility infrastructure would be necessary outside of the immediate project area. As such, impacts associated with the construction or expansion of utility line connections would be less than significant.

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?*

Less-than-Significant Impact. Domestic water would be provided to the project site by the EVWD. The EVWD provides domestic water for the City and for portions of both the City and County of San Bernardino. The primary water source for EVWD is groundwater from the Bunker Hill Basin. The Bunker Hill Basin has the capacity to provide 70,000 acre-foot per year of water from groundwater and surface water sources (City of San Bernardino 2005). The San Bernardino Valley Regional Urban Water Management Plan contains existing and projected water supplies for the region, including the EVWD. Table 29 shows projected water supplies during single- and multiple-dry year conditions, which represents "worst-case" conditions during extended periods of drought when supplies would be reduced.

Table 29. Projected Multiple Dry Year Supply and Demand Comparison (Acre-Feet)

| Multiple Dry Year Scenario | 2020 | 2025 | 2030 | 2035 | 2040 |
|----------------------------------|--------|--------|--------|--------|--------|
| <i>First Year</i> | | | | | |
| Supply Totals | 37,270 | 42,050 | 42,050 | 42,050 | 42,050 |
| Demand Totals | 25,060 | 27,006 | 29,000 | 29,616 | 29,900 |
| Difference (supply minus demand) | 12,210 | 15,044 | 13,050 | 12,434 | 12,150 |
| <i>Second Year</i> | | | | | |
| Supply Totals | 37,270 | 42,050 | 42,050 | 42,050 | 42,050 |
| Demand Totals | 25,060 | 27,006 | 29,000 | 29,616 | 29,900 |

Table 29. Projected Multiple Dry Year Supply and Demand Comparison (Acre-Feet)

| Multiple Dry Year Scenario | 2020 | 2025 | 2030 | 2035 | 2040 |
|----------------------------------|--------|--------|--------|--------|--------|
| Difference (supply minus demand) | 12,210 | 15,044 | 13,050 | 12,434 | 12,150 |
| Third Year | | | | | |
| Supply Totals | 37,270 | 42,050 | 42,050 | 42,050 | 42,050 |
| Demand Totals | 25,060 | 27,006 | 29,000 | 29,616 | 29,900 |
| Difference (supply minus demand) | 12,210 | 15,044 | 13,050 | 12,434 | 12,150 |

Source: SBVMWD, 2016.

Table 29 demonstrates that EVWD anticipates adequate supplies for years 2020 to 2040 under multiple dry year conditions based on current land use projections. However, in the unlikely event of a drought, natural disaster such as earthquake, a regional power outage, the San Bernardino Valley Municipal Water District has prepared a water shortage contingency plan for the region (SBVMWD 2016). This plan provides specific actions that should be taken to ensure critical water needs of the region are met during a period in which water supplies are cut by 50%. Based on the future and existing capacity, and water management measures, it is anticipated there are sufficient water supplies to serve the proposed project. Therefore, impacts associated with water supplies would be less than significant.

- 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?***

Less-than-Significant Impact. Highland's sewer system is maintained by the EVWD, which has joint powers with the City of San Bernardino to accept all sewage generated within the EVWD's boundaries. The project would coordinate with the EVWD to meet sewer requirements established by the DHS to ensure the continued sewer services in Highland, which has the potential to be impacted with continued growth within the City. However, water recycling programs, such as the project's CMP Infiltration System, assist in reducing the amount of wastewater conveyed to the sewage system. The sewage from Highland is treated at the San Bernardino WRP, operated by the San Bernardino City Municipal Water District (City of Highland 2006). The WRP treats residential and industrial wastewater generated in the City of San Bernardino, the City of Loma Linda, and EVWD (City of San Bernardino 2005). The WRP processes an average sewage flow of approximately 26 to 27 mgd and has a total sewage capacity of 33 mgd (City of Highland 2006). Table 30, Current and Projected Wastewater Collection and Treatment, shows existing and anticipated wastewater collection and treatment at the WRP..

Table 30. Current and Projected Wastewater Collection and Treatment

| Facility | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | Disposal Method | Treatment Level |
|--------------------------|--------|--------|--------|--------|--------|--------|------------------------------|-----------------|
| San Bernardino WRP (AFY) | 29,000 | 30,294 | 31,645 | 32,793 | 33,983 | 35,216 | Flow to RIX | Secondary |
| RIX Facility (AFY) | 33,000 | 34,472 | 36,010 | 37,316 | 38,670 | 40,073 | Discharge to Santa Ana River | Tertiary |

Source: SBMWD 2015

Notes: WRP = Wastewater Reclamation Plant; AFY = acre-feet per year; RIX = Rapid Infiltration Extraction

SBMWD forecasts adequate capacity to treat wastewater in the upcoming years. As noted above in Section 3.19(a), the proposed project is consistent with the existing zoning designation established by the City. As such, anticipated wastewater generation for an industrial use has already been accounted for in growth projections for the City. Existing infrastructure is adequate to convey wastewater without requiring the expansion of the facilities. In addition, the project applicant would pay applicable connection fees and monthly charges which offset the need for incremental wastewater conveyance and treatment. Therefore, impacts associated with wastewater capacities would be less than significant.

EVWD is currently constructed a new wastewater treatment plan, Sterling Natural Resources Plan, at the intersection of Del Rosa Avenue and 5th Street. Once online, this new facility will provide improved and expanded service to all sewer clients in Highland

- d) ***Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?***

Less-than-Significant Impact. Solid waste generated in the City is collected and transported by the City's contract waste hauler, Burrtec Waste Industries (Burrtec) (City of Highland 2018). Solid waste from demolition and construction would be collected and sent to the East Valley Transfer and Recycling Materials Recovery Facility, located at 1150 and 1250 S. Tippecanoe Ave, San Bernardino, California 92408, where it is separated from recyclable materials. Solid waste is then shipped to the Mid-Valley Sanitary Landfill at 2390 N. Adler Avenue in the City of Rialto. The California Department of Resources Recycling and Recovery (CalRecycle) publishes solid waste generation rates based on land use types. According to CalRecycle, manufacturing/warehouse uses generate 1.42 pounds per 100 square feet per day (CalRecycle n.d.). Based on these generation rates, construction of the proposed 305,617-square-foot warehouse building could generate solid waste at a rate of approximately 2.17 tons of solid waste per day.²⁸

The Mid-Valley Sanitary Landfill currently has a daily permitted throughput of 7,500 tons a day and a remaining capacity of 61,219,377 CY (CalRecycle 2019). As a result, solid waste generated by the proposed project would represent a nominal percentage of the collective maximum daily throughput permitted for this landfill. Therefore, impacts associated with permitted landfill capacity would be less than significant.

- e) ***Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?***

Less-than-Significant Impact. All collection, transportation, and disposal of solid waste generated by the project would comply with all applicable federal, state, and local statutes and regulations. The City of Highland contracts Burrtec for the residential and commercial refuse collection program, which is designed to efficiently collect trash, recyclables, and green waste, and to assist the City in meeting mandated diversion goals established by the State of California. Solid waste is disposed of at the Colton, Mid-Valley, and San Timoteo landfills (City of Highland 2006).

Waste from construction activities, including demolition and construction, would comply with the City's requirement to submit and obtain an approved construction waste diversion plan to help divert construction and demolition waste from landfills, as outlined in Section 8.12.285 of the City's Municipal Code, and also to comply with mandates of CalRecycle. The City diversion requirement, as outlined in Section 16.40.400

²⁸ This estimate does not account for diversion of recyclables from the solid waste stream and, thus, should be considered a conservative projection.

of the City's Municipal Code, is 50%, which means that projects that involve construction and demolition (such as the proposed project), are required to divert 50% of the construction and demolition waste tonnage at a project site from landfills.

Burrtec operated five material recovery facilities in Southern California, which sort and process recyclables; the remaining waste is then taken to the nearby Mid-Valley Sanitary Landfill (Burrtec n.d.). As of the most recent capacity inspection completed in 2019, the remaining capacity at Mid-Valley Sanitary Landfill currently has a maximum permitted throughput of 7,500 tons per day and a remaining capacity of 61,219,377 CY (CalRecycle 2019).

As required by existing regulations, any hazardous materials collected on the project site during demolition, construction, or operational activities would be transported and disposed of by a permitted and licensed hazardous materials service provider at a facility permitted to accept such hazardous materials. Therefore, impacts associated with permitted landfill capacity and solid waste statutes and regulations would be less than significant.

3.20 Wildfire

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|------------------------------|-------------------------------------|
| XX. WILDFIRE – 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 downslope 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) ***Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?***

No Impact. The project is not located within a Fire Hazard Severity Zone or a Very High Hazard Severity Zone according to the Local Responsibility and State Responsibility Area maps by CAL FIRE (CAL FIRE 2007, 2008). In addition, the project site is currently comprised of vacant and developed land and is located in a developed portion of the City. The City's General Plan outlines major evacuation routes within the San Bernardino Valley as I-10, 15, and 215, and State Highway 30, 31, 60, 66, and 71 (City of Highland 2006). In the case of an emergency, 6th Street and Victoria Avenue may be used as evacuation routes, but these roads are not explicitly outlined as evacuation routes by the City. As discussed in Section 3.9, the project would not significantly affect emergency response or evaluation activities. Therefore, no impacts associated with an emergency response or evacuation plan would occur.

b) ***Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

No Impact. The project site is not located within a Fire Hazard Severity Zone or a Very High Fire Hazard Severity Zone according to the Local Responsibility and State Responsibility Area maps by CAL FIRE (CAL FIRE 2007, 2008). In addition, the project site is currently partially developed and located within a developed portion of the City. Further, the project site is relatively flat and contains only limited amounts of ornamental vegetation associated with existing landscaping and does not contain extensive amounts of vegetation or wildfire fuel. Therefore, it is not anticipated that the project, due to slope, prevailing winds, and other factors, would exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Thus, the project would not expose people or structures to significant risk involving wildfires, exacerbate wildfire risks, or otherwise result in wildfire-related impacts. Therefore, no impacts associated with wildfire would occur.

c) ***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?***

No Impact. The project site is not located within a Fire Hazard Severity Zone or a Very High Fire Hazard Severity Zone according to the Local Responsibility and State Responsibility Area maps by CAL FIRE (CAL FIRE 2007, 2008). In addition, the project site is currently developed and located within a developed portion of the City that is not prone to wind hazard (City of San Bernardino 2005). The project would construct surface parking lots, new internal circulation roadways, and infrastructure for the proposed development. It is not anticipated that installation or maintenance of internal driveways would exacerbate fire risk, as the driveways would be surrounded by developed land. Further, the project site is in a predominately developed area and would connect to existing utilities. The project would not require installation or maintenance of other associated infrastructure such as fuel breaks, power lines, or other utilities that would exacerbate fire risk. As such, the project would not expose people or structures to significant risk involving wildland fires, exacerbate wildfire risks, or otherwise result in wildfire-related impacts. Therefore, no impacts associated with wildfire would occur.

- d) ***Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

No Impact. The project site is not located within a Fire Hazard Severity Zone or a Very High Fire Hazard Severity Zone according to the Local Responsibility and State Responsibility Area maps by CAL FIRE (CAL FIRE 2007, 2008). As discussed in Section 3.7, Geology and Soils, and Section 3.10, Hydrology and Water Quality, the project would not result in significant risks associated with flooding, landslides, runoff, or drainage changes, and the project does not propose the use of fire (such as for a controlled vegetation burn) that would result in post-fire instability. Further, the project site is located within a developed portion of the City that is not susceptible to wildland fires, given its considerable distance from open, natural areas. Thus, the project would not expose people or structures to significant risk involving wildland fires, exacerbate wildfire risks, or otherwise result in wildfire-related impacts. Therefore, no impacts with wildfire would occur.

3.21 Mandatory Findings of Significance

| | Potentially Significant Impact | Less Than Significant Impact With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|--------------------------|
| XXI. MANDATORY FINDINGS OF SIGNIFICANCE | | | | |
| 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project 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?***

Less Than Significant With Mitigation Incorporated. As described throughout this IS/MND, with the incorporation of the identified mitigation measures, the project would not degrade the quality of the environment; would not substantially reduce the habitats of fish or wildlife species; would not cause a fish or wildlife population to drop below self-sustaining levels; would not threaten to eliminate a plant or animal; and would not eliminate important examples of major periods of California history or prehistory. Therefore, impacts would be 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)?***

Less Than Significant With Mitigation Incorporated. When evaluating cumulative impacts, it is important to remain consistent with Section 15064(h) of the CEQA Guidelines, which states that an EIR must be prepared if the cumulative impact may be significant and the project’s incremental effect, though individually limited, is 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, the effects of other current projects, and the effects of probable future projects.

Alternatively, a lead agency may determine that a project’s incremental contribution to a cumulative effect is not cumulatively considerable through mitigation measures set forth in an MND or if the project will comply with the requirements in a previously approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located.

The proposed project would potentially result in project related air quality, biological, cultural and tribal cultural, and geological impacts that could be potentially significant without the incorporation of mitigation. Thus, when coupled with air quality, biological, cultural and tribal cultural, and geological impacts related to the implementation of other related projects throughout the broader project area, the project would potentially result in cumulative-level impacts if these significant impacts are left unmitigated.

However, with the incorporation of mitigation identified herein, the project’s impacts to air quality, biological resources, cultural and tribal cultural resources, and geological resources would be reduced to less-than-significant levels and would not considerably contribute to cumulative impacts in the greater project region. In addition, these other related projects would presumably be bound by their applicable lead agency to (1) comply with all applicable federal, state, and local regulatory requirements; and (2) incorporate all feasible mitigation measures, consistent with CEQA, to further ensure that their potentially cumulative impacts would be reduced to less-than-significant levels.

Although cumulative impacts are always possible, the project, by incorporating all mitigation measures outlined herein, would reduce its contribution to any such cumulative impacts to less than cumulatively

considerable; therefore, the project would result in individually limited, but not cumulatively considerable, less-than-significant impacts with mitigation incorporated.

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

Less Than Significant With Mitigation Incorporated. As evaluated throughout this IS/MND, with incorporation of mitigation identified herein, all environmental impacts associated with the project would be reduced to less-than-significant levels. Thus, the project would not directly or indirectly cause substantial adverse effects on human beings. Impacts would be less than significant with mitigation incorporated.

4 References and Preparers

4.1 References Cited

- 14 CCR 15000–15387 and Appendices A through L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- Baltrėnas, P., D. Kazlauskas, and E. Petraitis. 2004. “Testing on Noise Level Prevailing at Motor Vehicle Parking Lots and Numeral Simulation of its Dispersion.” *Journal of Environmental Engineering and Landscape Management* 12(2): 63-70.
- Bean, Lowell J., and Florence C. Shipek. 1978. “Luiseño,” in *California*, Robert F. Heizer (ed.), pp. 550-563, Handbook of North American Indians, Vol. 8, W.C. Sturtevant (general editor), Smithsonian Institution, Washington, D.C.
- Bean, L.J., and C.R. Smith. 1978a. “Serrano,” in *California*, edited by Robert F. Heizer, 570–574. Vol. 8 in Handbook of North American Indians, edited by William C. Sturtevant. Washington, D.C.: Smithsonian Institution.
- Bean, Lowell J., and Charles R. Smith. 1978b. “Gabrielino,” in *California*, edited by Robert F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, William G. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Benedict, R.F. 1924. “A Brief Sketch of Serrano Culture.” *American Anthropologist* 26(3): 366–392.
- Boscana, G. 1846. “Chinigchinich; A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta California.” In *Life in California*, by Alfred Robinson, 227–341. New York, New York: Wiley & Putnam.
- Burrtec (Burrtec Waste Industries). n.d. “Material Recovery Facilities”. Accessed June 2021. <https://www.burrtec.com/material-recovery-facilities/>.
- Caltrans (California Department of Transportation). 2013. *Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol*. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. Sacramento, California. September 2013.
- Caltrans. 2018. California State Scenic Highway System Map. Accessed May 2021. <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983>
- California Public Resources Code, Section 21000–21177. California Environmental Quality Act, as amended.
- CalEPA (California Environmental Protection Agency). 2021. “Cortese List: Section 65962.5(a)”. Accessed May 2021. <https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/>.

- CAL FIRE (California Department of Forestry and Fire Protection). 2007. "Fire Hazard Severity Zones in SRA" [map of SW San Bernardino County]. Scale 1:100,000. November 7, 2007. Accessed May 2021. https://osfm.fire.ca.gov/media/6781/fhszs_map62.pdf.
- CAL FIRE. 2008. "Very High Fire Hazard Severity Zones in LRA" [map of Highland]. Scale 1:24,000. October 29, 2008. Accessed May 2021. <https://osfm.fire.ca.gov/media/5946/highland.pdf>.
- CalRecycle (California Department of Resources Recycling and Recovery). 2019. "SWIS Facility/Site Activity Details, Mid-Valley Sanitary Landfill (36-AA-0055)". Accessed May 2021. <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1880?siteID=2662>.
- CalRecycle. n.d. "Estimated Solid Waste Generation Rates". Accessed May 2021. <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>
- CAPCOA (California Air Pollution Control Officers Association). 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. January 2008. Accessed <https://www.contracosta.ca.gov/DocumentCenter/View/34122/CAPCOA-2008-CEQA-and-Climate-Change-PDF>.
- CAPCOA. 2017. "California Emissions Estimator Model (CalEEMod) User's Guide Version 2016.3.2". Prepared by Trinity Consultants and the California Air Districts. November 2017. Accessed <http://www.caleemod.com/>.
- CAPCOA. 2021. "California Emissions Estimator Model (CalEEMod) User's Guide Version 2020.4.0". Prepared by Trinity Consultants and the California Air Districts. May 2021. <http://www.caleemod.com/>.
- CARB (California Air Resources Board). 2005. "Air Quality and Land Use Handbook". April 2005. Accessed August 2016. <http://www.arb.ca.gov/ch/landuse.htm>.
- CARB. 2014. *First Update to the Climate Change Scoping Plan Building on the Framework Pursuant to AB 32 – The California Global Warming Solutions Act of 2006*. May 2014. http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.
- CARB. 2017a. *California's 2017 Climate Change Scoping Plan*. November 2017. Accessed December 2019. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.
- CARB. 2017b. *The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target*. January 20, 2017. Accessed February 27, 2021. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.
- CARB. 2019. "Maps of State and Federal Area Designations." Last reviewed October 24, 2019. Accessed <http://www.arb.ca.gov/desig/adm/adm.htm>.
- CARB. 2020. Advanced Clean Trucks [fact sheet]. Last updated: June 25, 2020. Accessed https://ww2.arb.ca.gov/sites/default/files/2020-06/200625factsheet_ADA.pdf.
- CARB. 2021. EMFAC 2021 Web Database (v1.0.0). Accessed June 2021. <https://arb.ca.gov/emfac/emissions-inventory>.

- CDOC (California Department of Conservation). 2016. California Important Farmland Finder. <https://maps.conservation.ca.gov/DLRP/CIFF/>.
- CDOC. 2021. California Geologic Service Seismic Hazards Program: Alquist-Priolo Fault Hazard Zones.
- City of Highland. 2006. *General Plan*. March 2006. Accessed May 2021. <https://www.cityofhighland.org/191/General-Plan>.
- City of Highland. 2012. "Zoning" [map]. May 4, 2012. Accessed May 2021. <https://www.cityofhighland.org/DocumentCenter/View/191/Zoning-Map-PDF?bidId=>.
- City of Highland. 2018. "Trash Services". September 2018. Accessed May 2021. <https://www.cityofhighland.org/197/Trash-Services>.
- City of Highland. 2021. Municipal Code. January 2021.
- City of Inglewood. 2019. *Inglewood Basketball and Entertainment Center Project*. Accessed June 25, 2021. <https://files.ceqanet.opr.ca.gov/60191-3/attachment/a-wQrPYfgqX6rH7PlozmRPEvEaRCdDy9wtEOIK6Lkzx9y2kM5Y76yA2pvLOh1Nhm4o1xu79V9PavU-kk0>.
- City of San Bernardino. 2005. *General Plan*. November 1, 2005. Accessed May 2021. <http://sbcity.org/civicax/filebank/blobdload.aspx?blobid=26199>.
- City of San Jose. 2020. *Integrated Final Environmental Impact Report, Amendment to Normoan Y. Mineta San Jose International Airport Master Plan*. Accessed June 25, 2021. <https://www.sanjoseca.gov/home/showpublisheddocument/61640/637304476542130000>.
- CNPS. 2021. Inventory of Rare and Endangered Plants (online edition, v8-03 0.45). Sacramento, California: California Native Plant Society. Accessed May 2021. www.rareplants.cnps.org.
- CNRA (California Natural Resources Agency). 2009. *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97*. December 2009. Accessed June 25, 2021. https://files.resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf.
- CSU Dominguez Hills (California State University Dominguez Hills). 2019. *California State University Dominguez Hills Campus Master Plan EIR*. <https://www.csudh.edu/Assets/csudh-sites/fpcm/docs/campus-master-plan/csudh-cmp-deir-feb-2019.pdf>.
- Cultural Systems Research. 2005. *Inland Feeder Project: Final Report, Native American Ethnography and Ethnohistory*. Prepared for Metropolitan Water District of Southern California, Los Angeles. Cultural Systems Research, Inc., Menlo Park. On File at the EIC.
- DeBarros, Phil. 2004. Cultural Resources Overview and Management Plan Rancho Las Flores Project, Hesperia, San Bernardino County, California. On File at the SCCIC.

- DOF (State of California, Department of Finance). 2021. "E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with Census Benchmark". Sacramento, California. May 2021. Accessed . <https://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>
- DTSC (Department of Toxic Substances Control). 2021. EnviroStor. <https://envirostor.dtsc.ca.gov/public/>.
- EDD (California Employment Development Department). 2021. Riverside-San Bernardino-Ontario Metropolitan Statistical Area (MSA) (Riverside and San Bernardino Counties). May 2021. Accessed June 2021. <https://data.edd.ca.gov/w/7qx7-ercp/98fh-2xv7?cur=F5L7ERsZG9m&from=uwHIA4c1orF>
- EPA (U.S. Environmental Protection Agency). 2008. *Final Ozone NAAQS Regulatory Impact Analysis*. Research Triangle Park, North Carolina. March 2008. Accessed June 25, 2021. https://www3.epa.gov/ttnecas1/regdata/RIAs/452_R_08_003.pdf.
- EPA. 2015. *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas - Appendices*. Transportation and Climate Division, Office of Transportation and Air Quality. November 2015. Accessed October 21, 2020. <https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P100NN22.pdf>.
- EPA. 2017. "Support Center for Regulatory Atmospheric Modeling (SCRAM): Photochemical Air Quality Modeling". Accessed June 25, 2021. <https://www.epa.gov/scram/photochemical-air-quality-modeling>.
- EPA. 2018a. *AERMOD Implementation Guide*. Research Triangle Park, North Carolina. April 2018. Accessed June 25, 2021. https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_implementation_guide.pdf.
- EPA 2018b. *Environmental Benefits Mapping and Analysis Program – Community Edition, User’s Manual*. July 2018. Last updated April 2021. Accessed June 25, 2021. https://www.epa.gov/sites/production/files/2015-04/documents/benmap-ce_user_manual_march_2015.pdf.
- EPA. 2020. "Outdoor Air Quality Data: Monitor Values Report". Last updated May 28, 2020. Accessed June 25, 2021. <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>.
- EPA. 2021. "Household Hazardous Waste (HHW)." Last updated March 22, 2021. Accessed May 2021. <https://www.epa.gov/hw/household-hazardous-waste-hhw>.
- FEMA (Federal Emergency Management Agency). 2016. FEMA Flood Map Service Center. Accessed June 2021. <https://msc.fema.gov/portal/search?AddressQuery=7824%20Victoria%20Avenue%2C%20Highland%2C%20CA#searchresultsanchor>.
- FHWA (Federal Highway Administration). 2008. *Roadway Construction Noise Model (RCNM), Software Version 1.1*. U.S. Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center, Environmental Measurement and Modeling Division. Washington, D.C. December 8, 2008.
- FICON (Federal Interagency Committee on Noise). 1992. *Federal Agency Review of Selected Airport Noise Analysis Issues*. Prepared by the Federal Interagency Committee on Noise. August 1992. https://fican1.files.wordpress.com/2015/10/reports_noise_analysis.pdf.

- FTA (Federal Transit Administration). 2018. *Transit Noise and Vibration Impact Assessment Manual*. FTA Report No. 0123. Prepared by John A. Volpe National Transportation Systems Center. September 2018. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.
- Golla, V. 2007. "Linguistic Prehistory." In *California Prehistory: Colonization, Culture, and Complexity*, edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.
- Harrington, J.P. 1934. "A New Original Version of Boscana's Historical Account of the San Juan Capistrano Indians of Southern California." *Smithsonian Miscellaneous Collections* 92(4).
- Heizer, R. 1978. "Introduction." In *California*, edited by R.F. Heizer, 1–6. *Handbook of North American Indians*, Vol. 8, edited by W.C. Sturtevant. Washington, D.C.: Smithsonian Institution.
- Heizer, R. and K.M. Nissen. 1973. *The Human Sources of California Ethnography*. Berkeley, California: University of California Archaeological Research Facility, Berkeley.
- IPCC (Intergovernmental Panel on Climate Change). 2007. *Climate Change 2007: Synthesis Report*. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. New York, New York: Cambridge University Press. Accessed October 2016. <https://www.ipcc.ch/report/ar4/syr/>.
- ITE (Institute of Transportation Engineers). 2017. *Trip Generation Handbook*, 10th Edition.
- Johnson Controls. 2015. *York Technical Guide*. R-410A ZE/ZF/ZR/XN/XP SERIES, 3 - 6 TON 60 Hertz. 251933-YTG-Y-0715.
- Johnson, J.R., and J.G. Lorenz. 2006. "Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages." *Journal of California and Great Basin Anthropology* 26:33–64.
- King, Chester D. 1994. *Native American Placenames in the Santa Monica Mountains National Recreation Area, Agoura Hills*. Topanga Anthropological Consultants, California.
- Kroeber, Alfred J. 1925. *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. Dover Publications, Inc., New York.
- Laylander, D. 2000. *Early Ethnography of the Californias, 1533-1825*. Salinas, California: Coyote Press Archives of California Prehistory.
- Lightfoot, K.G. 2005. *Indians, missionaries, and merchants: the legacy of colonial encounters on the California frontiers*. Berkeley, California: University of California Press.
- March JPA (March Joint Powers Association). 2019. *K4 Warehouse and Cactus Channel Improvements Project*. Accessed June 25, 2021. https://files.ceqanet.opr.ca.gov/125156-2/attachment/Ehqb2eUJImRQOIgiGAAWSHmDkaoZPmyRK24UyOs3tld8G3lOWxuuhU_a7PpSB6ecz1qP5JgNptOuCa120.
- McCawley, William 1996. *The First Angelinos, the Gabrielino Indians of Los Angeles*. Malki Museum Press, Banning.
- nahc.gov (Native American Heritage Commission). *About the Native American Heritage Commission*. State of California Native American Heritage Commission, 2021, <http://nahc.ca.gov/about/>. Accessed April 22, 2021

- NRC (National Research Council). 2005. *Interim Report of the Committee on Changes in New Source Review Programs for Stationary Sources of Air Pollutants*. Washington, DC: The National Academies Press. Accessed June 25, 2021. <https://doi.org/10.17226/11208>.
- OEHHA (Office of Environmental Health Hazard Assessment). 2015. Air Toxics Hot Spots Program. *Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments*. February 2015. Last updated March 6, 2015. Accessed June 25, 2021. http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf.
- O'Neil, Stephen. 2002. The Acjachemen in the Franciscan Mission System: Demographic Collapse and Social Change. Masters thesis, Department of Anthropology, California State University, Fullerton.
- OSHA (Occupational Safety and Health Administration). n.d. "Hazard Communication Standard: Safety Data Sheets." Accessed May 2021. <https://www.osha.gov/sites/default/files/publications/OSHA3514.pdf>.
- RWQCB (Regional Water Quality Control Board Santa Ana Region). 2010. National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements for the San Bernardino County Flood Control District, the County of San Bernardino, and the Incorporated Cities of San Bernardino County within the Santa Ana Region. January 29, 2010.
- San Bernardino International Airport Authority. 2010. *Airport Layout Plan Narrative Report for San Bernardino International Airport*. Prepared by Coffman Associates, Inc. for San Bernardino International Airport Authority. November 2010. Accessed May 2021. <http://www.sbiaa.org/wp-content/uploads/2015/10/ALP-Narrative-Report-Complete.pdf>.
- SBCAPCD (Santa Barbara County Air Pollution Control District). 2020. *Modeling Guidelines for Air Quality Impact Assessments*. Prepared by Robin Cobbs and Charlotte Mountain for the Santa Barbara County Air Pollution Control District. June 2020. Accessed March 2021. <https://www.ourair.org/wp-content/uploads/aqia.pdf>.
- SBCOG (San Bernardino Council of Governments). 2021. *San Bernardino County Regional Greenhouse Gas Reduction Plan*. Final Draft. Prepared by ICF International and LSA. San Bernardino, California. March 2021. Accessed June 25, 2021. https://www.gosbcta.com/wp-content/uploads/2019/09/San_Bernardino_Regional_GHG_Reduction_Plan_Main_Text_Mar_2021.pdf.
- SBVMWD (San Bernardino Valley Municipal Water District). 2016. *2015 San Bernardino Valley Regional Urban Water Management Plan*. Prepared by Water Systems Consulting, Inc. June 2016. Amended June 2017. Accessed May 2021. https://wuedata.water.ca.gov/public/uwmp_attachments/4817304313/SBV_RUWMP_rev_with_appendices.pdf.
- SCAG (Southern California Association of Governments). 2001. *Employment Density Study Summary Report*. Prepared by The Natelson Company, Inc. Yorba Linda, California. October 31, 2001. Accessed June 25, 2021. <http://www.mwcog.org/file.aspx?A=QTTITR24P000Ulw5mPNzK8F4d8djdJe4LF9Exj6lXOU%3D>.
- SCAG. 2016. *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life*. Adopted April 7, 2016. Accessed May 2021. <https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs.pdf?1606005557>.

- SCAG. 2020. *Connect SoCal: The 2040-2045 Regional Transportation Plan/ Sustainable Communities Strategy of the Southern California Association of Governments*. May 7, 2020. Accessed July 2020. <https://www.connectsocal.org/Documents/Adopted/fConnectSoCal-Plan.pdf>.
- SCAQMD (South Coast Air Quality Management District). 1993. "CEQA Air Quality Handbook (1993)". Accessed June 25, 2021. [http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-\(1993\)](http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)).
- SCAQMD. 2003a. *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*. August 2003. Accessed June 25, 2021. <http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf?sfvrsn=2>.
- SCAQMD. 2003b. *Final 2003 AQMP Appendix V Modeling and Attainment Demonstrations*. August 2003. Accessed June 25, 2021. <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2003-air-quality-management-plan/2003-aqmp-appendix-v.pdf?sfvrsn=2>.
- SCAQMD. 2003c. "Mobile Source Toxics Analysis". August 2003. Accessed October 2018. <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.
- SCAQMD. 2008a. *Final Localized Significance Threshold Methodology*. Revised July 2008. Accessed June 25, 2021. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>.
- SCAQMD. 2008b. *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. October 2008. Accessed October 2020. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgattachmente.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf).
- SCAQMD 2010. "Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15." September 28, 2010. Accessed June 25, 2021. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2).
- SCAQMD. 2014. *SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results*. June 2014. Accessed September 2020. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/business-survey-summary.pdf>.
- SCAQMD. 2015. Brief of Amicus Curiae in Support of Neither Party, *Sierra Club v. County of Fresno*, Case No. S219783 (filed Apr. 13, 2015). Accessed June 25, 2021. <https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf>.
- SCAQMD. 2016. Rule 1113 Architectural Coatings. Amended February 5, 2016. Accessed October 2020. <https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=24>.
- SCAQMD. 2017. *Final 2016 Air Quality Management Plan*. March 2017. Accessed December 2019. <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15>.

- SCAQMD. 2018. "SCAQMD Modeling Guidance for AERMOD." Accessed April 2018. <http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance>.
- SCAQMD. 2019. "South Coast AQMD Air Quality Significance Thresholds." Originally published in CEQA Air Quality Handbook, Table A9-11-A. Revised April 2019. Accessed June 25, 2021. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>.
- SCAQMD. 2021a. "SCAQMD Modeling Guidance for AERMOD." Accessed March 2021. <https://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance>.
- SCAQMD. 2021b. "Meteorological Data for Dispersion Modeling." Accessed March 2021. <http://www.aqmd.gov/home/air-quality/meteorological-data>.
- SCE (Southern California Edison). 2021. Edison International 2020 Sustainability Report. Accessed June 25, 2021. <https://www.edison.com/content/dam/eix/documents/sustainability/eix-2020-sustainability-report-scorecard.pdf>.
- SDSU (San Diego State University). 2019. *Draft, San Diego State University Mission Valley Campus Master Plan Environmental Impact Report*. Accessed June 25, 2021. <https://missionvalley.sdsu.edu/pdfs/eir/0000-draft-eir-combined.pdf>.
- SJVAPCD (San Joaquin Valley Air Pollution Control District). 2006. *Guidance for Air Dispersion Modeling*. Draft. Accessed July 2018. http://www.valleyair.org/busind/pto/tox_resources/Modeling%20Guidance.pdf.
- SJVAPCD. 2015. Brief of Amicus Curiae in Support of Defendant And Respondent, County Of Fresno, And Real Party In Interest And Respondent, Friant Ranch, L.P., Sierra Club v. County of Fresno, Case No. S219783 (filed Apr. 13, 2015). Accessed June 25, 2021. <https://www.courts.ca.gov/documents/7-s219783-ac-san-joaquin-valley-unified-air-pollution-control-dist-041315.pdf>.
- Sparkman, Philip. 1908. The Cultural of the Luiseño Indians. *University of California Publications in American Archaeology and Ethnology* 8:187–234. Berkeley.
- SWRCB (State Water Resources Control Board). 2021a. "Construction Stormwater Program". Updated January 11, 2021. Accessed May 2021. https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html.
- SWRCB. 2021b. GeoTracker. <https://geotracker.waterboards.ca.gov/>.
- The Climate Registry. 2020. "2020 Default Emission Factors." April 2020. Accessed June 25, 2021. <https://www.theclimateregistry.org/wp-content/uploads/2020/04/The-Climate-Registry-2020-Default-Emission-Factor-Document.pdf>.
- USDA (U.S Department of Agriculture) 2021. Natural Resource Conservation Service (NRCS) Web Soil Survey. Accessed January 2021. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.
- USFWS (U.S. Fish and Wildlife Service). 2020a. Information for Planning and Consultation (iPaC). <https://ecos.fws.gov/ipac/> Last accessed December 2020.
- USFWS. 2020b. National Wetlands Inventory website. Washington, D.C.: U.S. Department of the Interior, Fish and Wildlife Service. Last accessed January 2021. <http://www.fws.gov/wetlands/>

White, Raymond. 1963. Luiseño Social Organization. University of California Publications in American Archaeology and Ethnology 48:91-194. Berkeley.

4.2 List of Preparers

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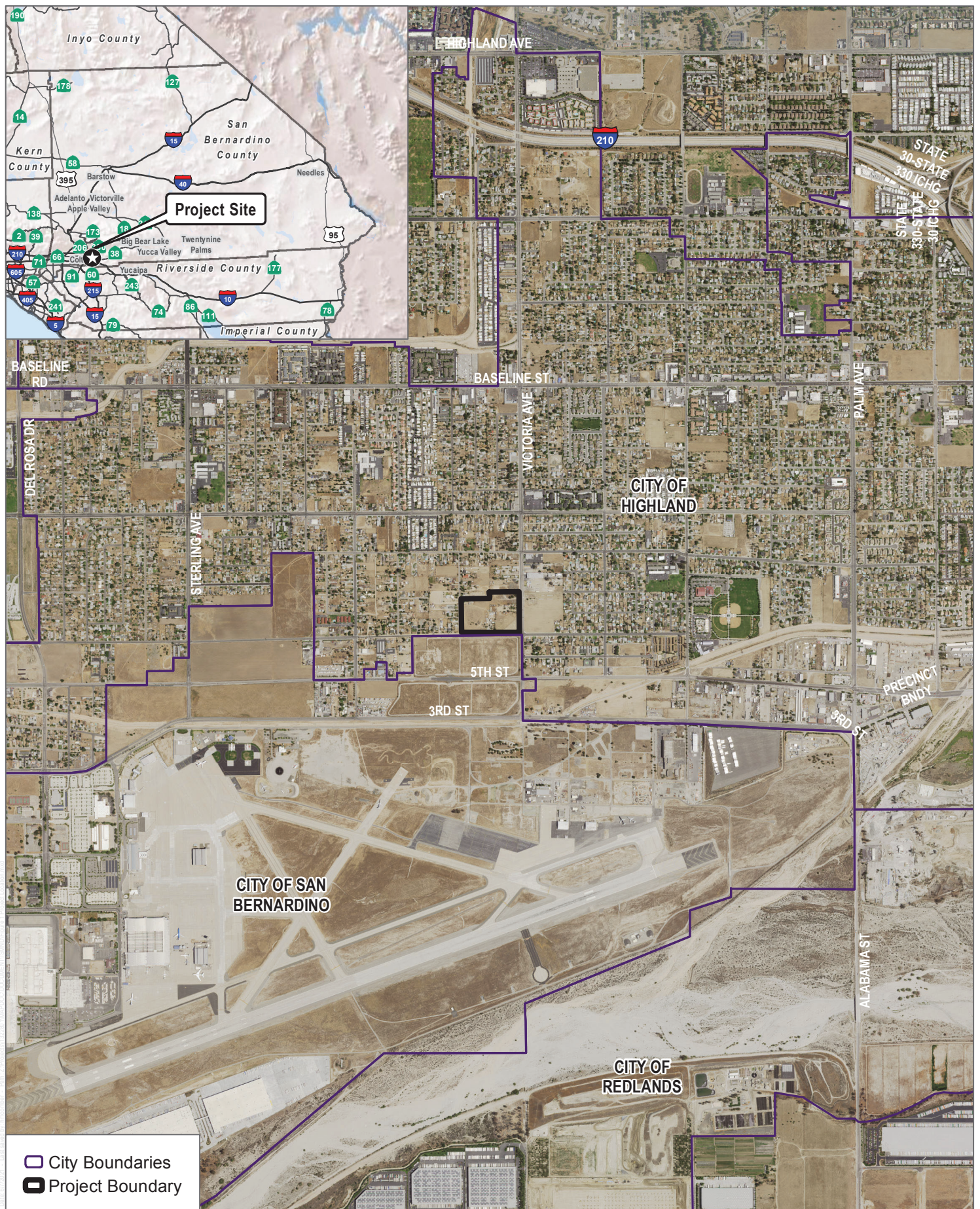
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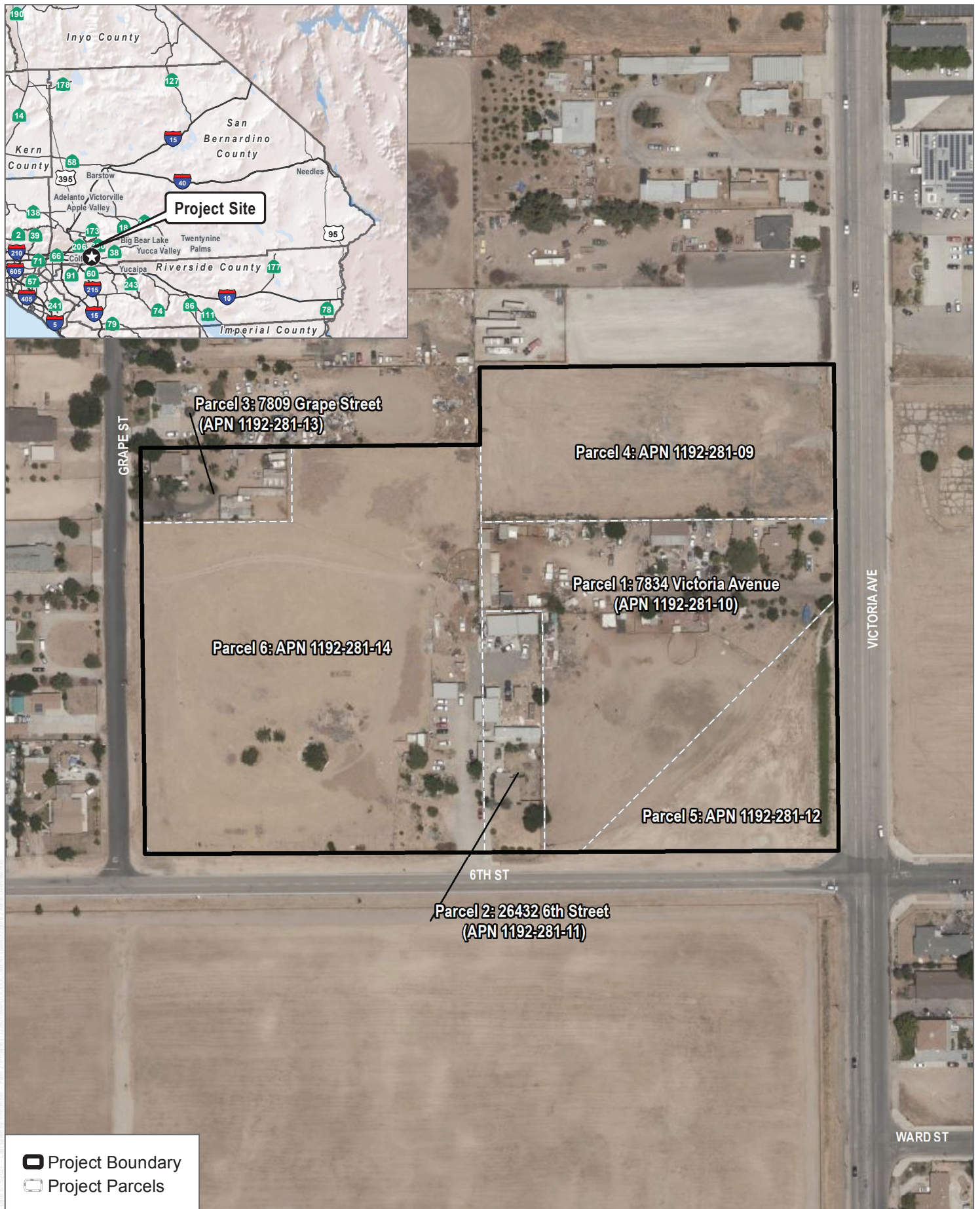
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SOURCE: Bing Maps, USGS Topo Map Series

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SOURCE: Bing Maps

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FIGURE 2

Aerial Overview

6th Street and Victoria Avenue Warehouse Project

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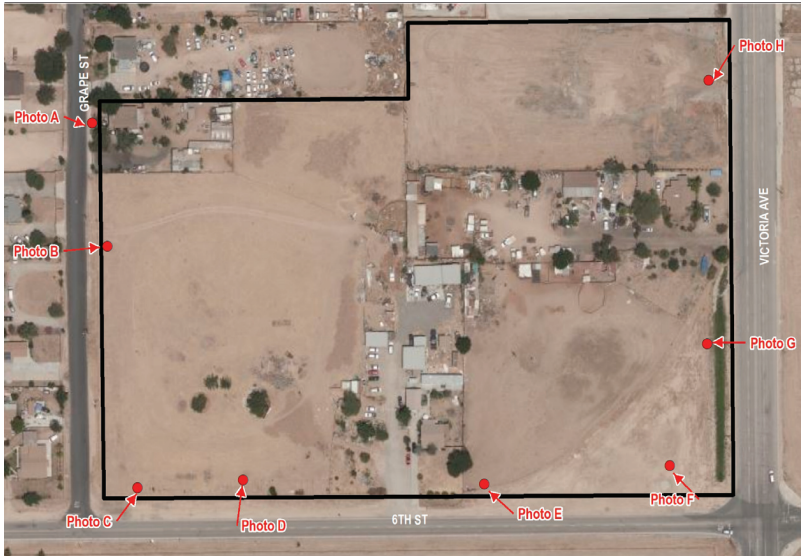


Photo Key



Photo B: Photo taken from Grape Street facing east. A dirt road provides the residential property in the central portion of the site with access to Grape Street. Horse fencing is visible in the right portion of the photo.



Photo A: Photo taken from Grape Street facing east towards the single family residence at 7809 Grape Street (APN 1192-281-13). This property contains four buildings including one single-family residence, one storage building, and two horse barns.



Photo C: Photo taken from the intersection of Grape Street and 6th Street facing northeast towards land that is used for horseback riding and grazing.

SOURCE: Dudek 2021

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FIGURE 3A-A
Existing Conditions

6th Street and Victoria Avenue Warehouse Project

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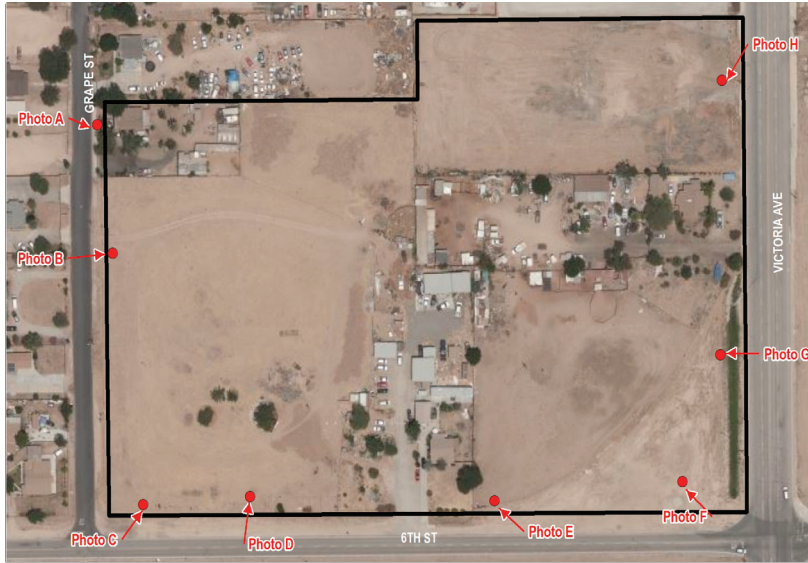


Photo Key



Photo D: Photo taken from 6th Street facing northeast towards land that is used for horseback riding and grazing.



Photo E: Photo taken from 6th Street facing northwest towards 26432 6th Street (APN 1192-281-11). An area used for horse grazing is in the foreground.



Photo F: Photo taken from the intersection of 6th street and Victoria Avenue facing northwest. The foreground contains land that is used for stockpiling soils. A horse corral, barns, sheds, and residences are visible in the background.

SOURCE: Dudek 2021

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FIGURE 3A-B Existing Conditions

6th Street and Victoria Avenue Warehouse Project

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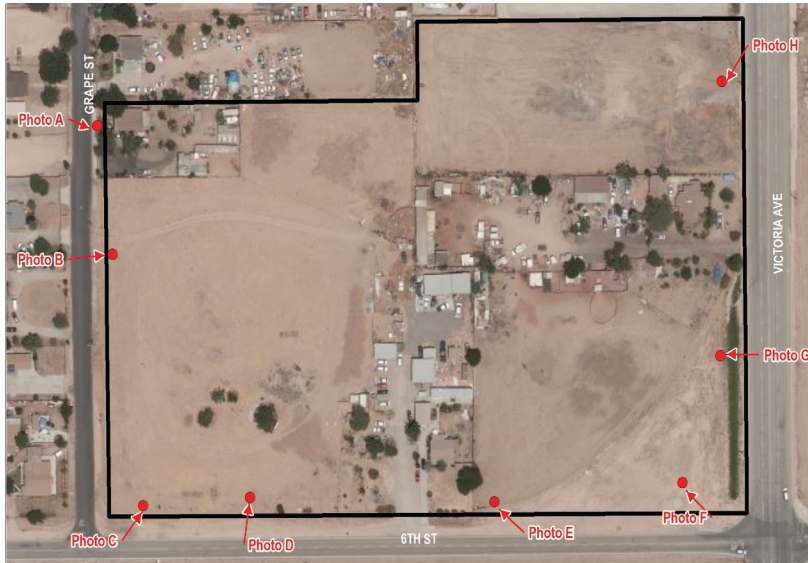


Photo Key



Photo G: Photo taken from Victoria Avenue facing west towards the center of the project site. A horse corral is visible in the middle-ground.



Photo H: Photo taken from Victoria Avenue facing south towards 7834 Victoria Avenue (APN 1192-281-10). Vacant land is visible in the foreground.

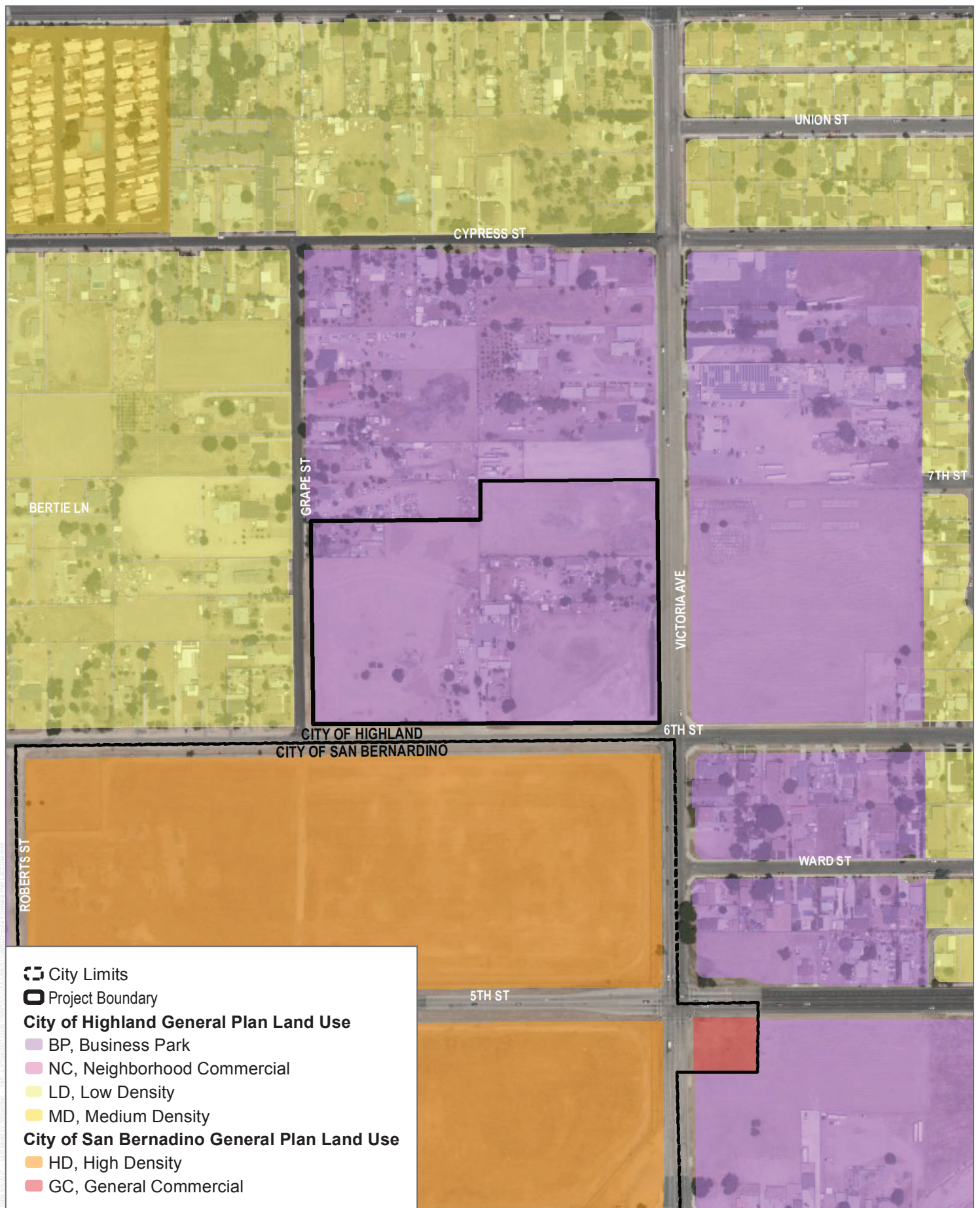
SOURCE: Dudek 2021

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FIGURE 3A-C
Existing Conditions

6th Street and Victoria Avenue Warehouse Project

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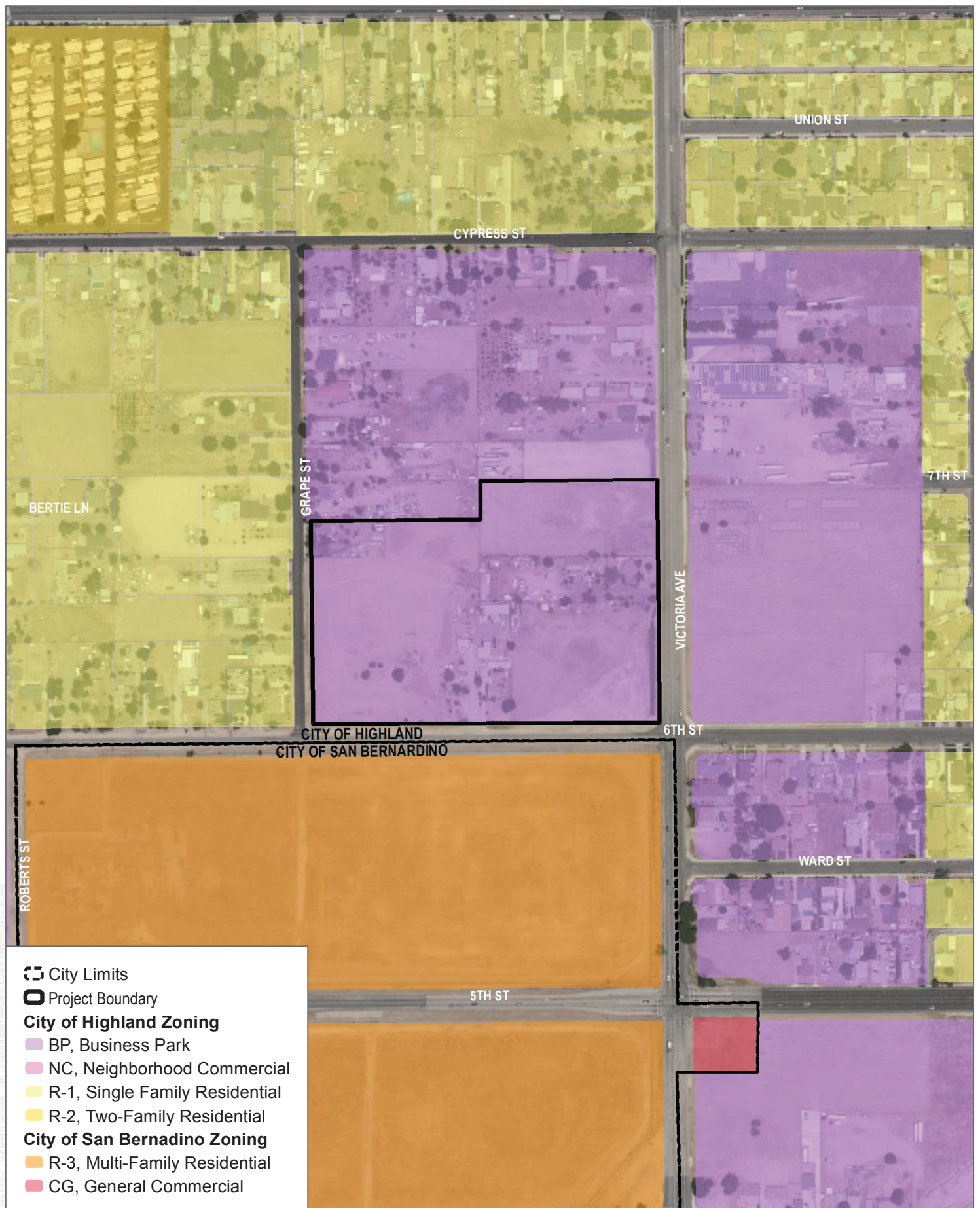
SOURCE: Bing Maps, City of Highland 2021, County of San Bernadino 2021

FIGURE 4

General Plan Land Use

6th Street and Victoria Avenue Warehouse Project

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SOURCE: Bing Maps, City of Highland 2021, County of San Bernadino 2021

FIGURE 5

Zoning

6th Street and Victoria Avenue Warehouse Project

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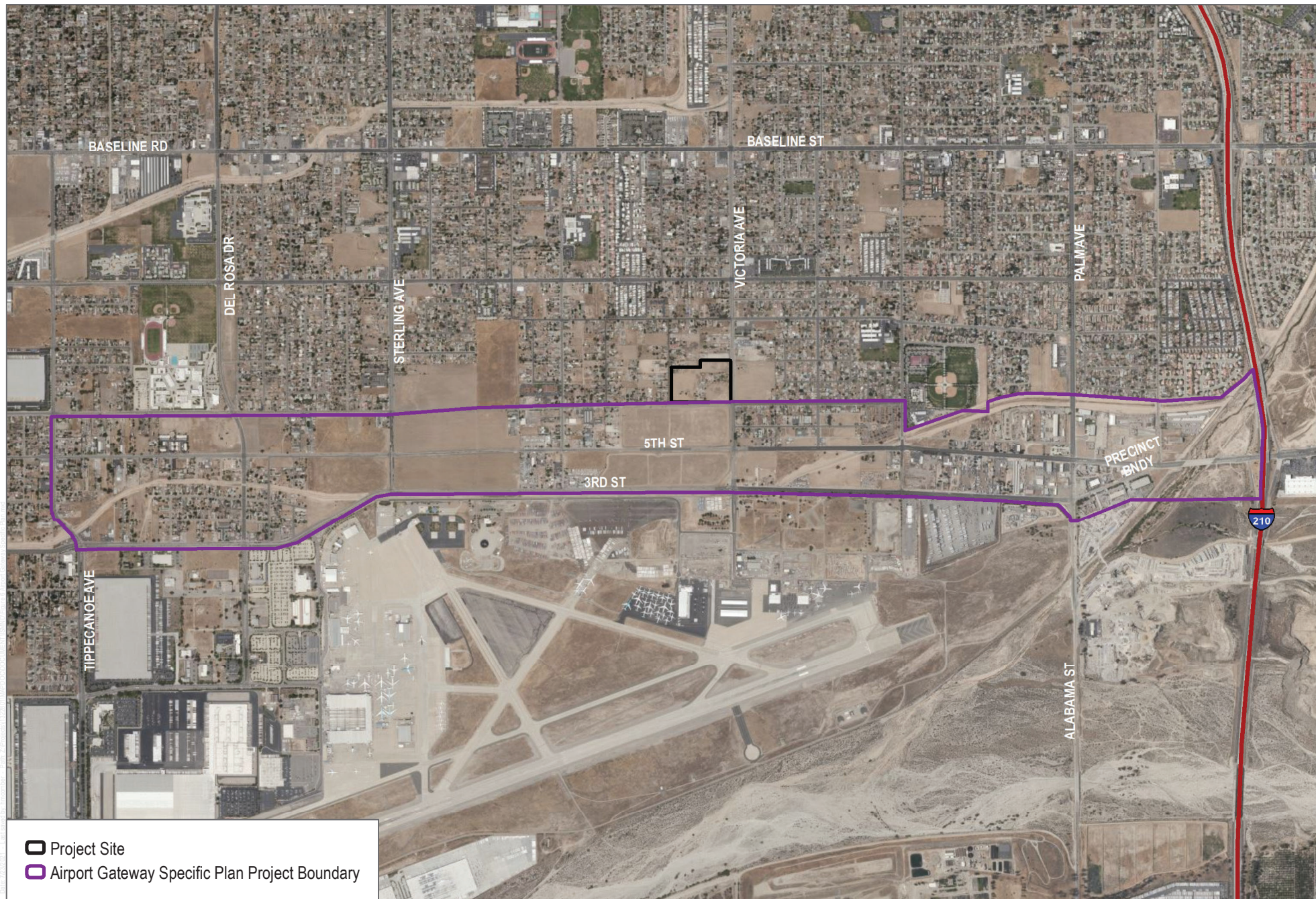


FIGURE 6

Airport Gateway Specific Plan

6th Street and Victoria Avenue Warehouse Project

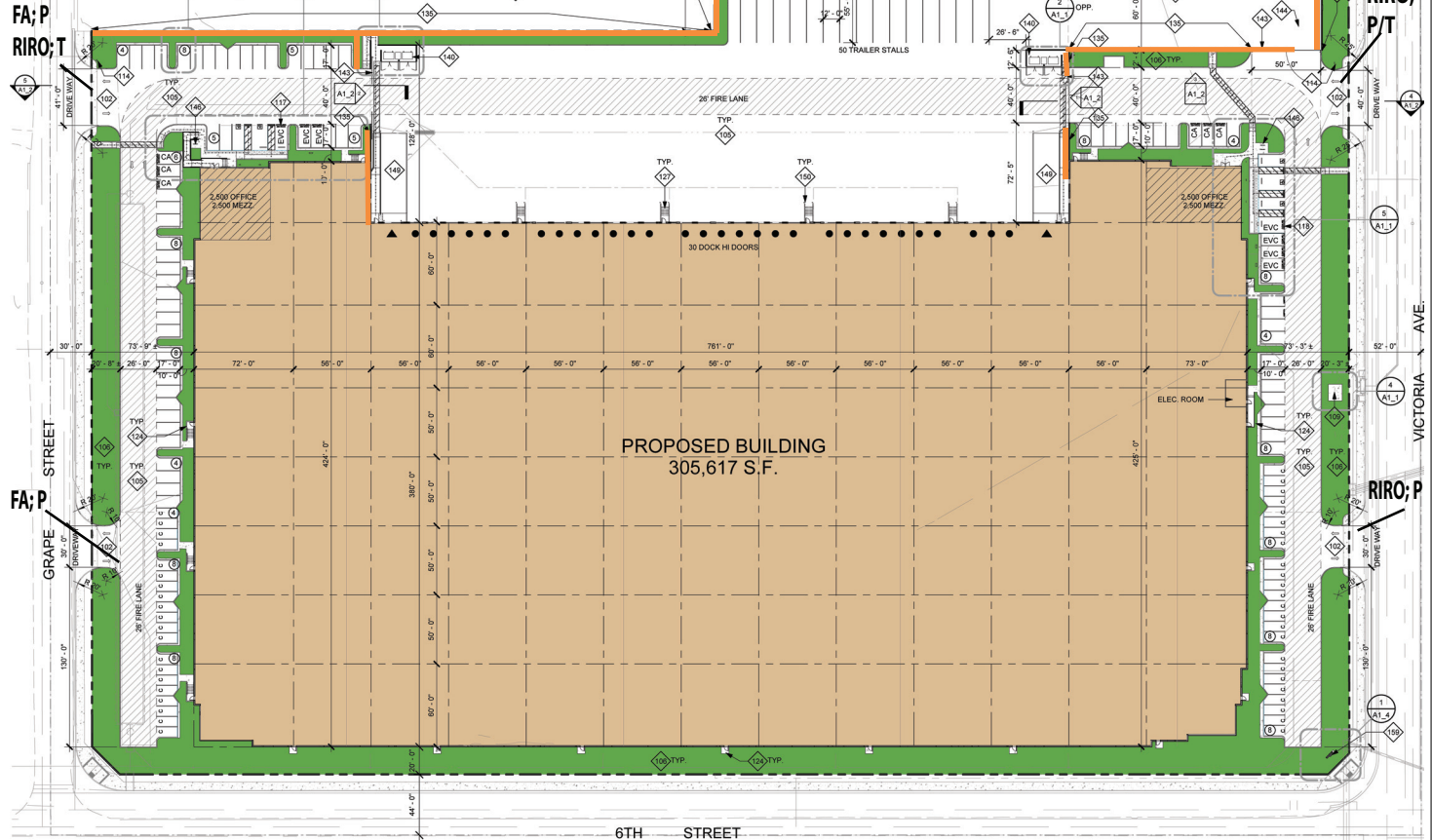
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Site Legend

- Landscape Area
- Concrete Paving
- Building Area
- Dock Thru Door
- Dock High Door
- 8' High Painted Concrete Wall

FA = Full Access
P = Passenger Vehicles
RIRO = Right In/Right Out
T = Trucks

| PROJECT INFORMATION | | |
|---|---|------------------------|
| GROSS SITE AREA | 12.29 AC | 535,549 SF |
| NET FAR | | 57.1% |
| MAX FAR | | 60.0% |
| ZONE: (BP) - BUSINESS PARK | | |
| SETBACKS(BLDG): | | |
| STREET FRONT BLDG. SETBACK (VICTORIA AVE) | 20' | |
| STREET SIDE BLDG. SETBACK (GRAPE & 6TH ST) | 20' | |
| INTERIOR/REAR | 20' | |
| SETBACKS ALONG STREETS MUST BE FULLY LANDSCAPED | | |
| MAX BLDG. HEIGHT | 35' | |
| PROPOSED BLDG HEIGHT | 45' | |
| CLEAR HEIGHT | 36' CLEAR @ 6" INSIDE FIRST COLUMN LINE | |
| LANDSCAPE REQUIRED | 10% OF THE PARKING AREA PER 16-52.03.F | 9,759 SF |
| PROVIDED | 68% OF PARKING AREA | 66,328 SF |
| TOTAL BUILDING AREA | | |
| FOOTPRINT | WAREHOUSE | 300,617 SF |
| | OFFICE | 295,617 SF |
| | MEZZANINE | 5,000 SF |
| | OFFICE | 5,000 SF |
| | TOTAL OFFICE | 10,000 SF |
| | TOTAL WAREHOUSE | 295,617 SF |
| PARKING REQUIRED (9' x 19') | | |
| | WAREHOUSE @ 1/1,000 | 296 |
| | OFFICE @ 1/250 | 40 |
| NO TRAILER REQUIRED (12' x 55') | | |
| | | NONE |
| PARKING PROVIDED | | |
| | STANDARD (9' x 19') | 129 |
| | VANPOOL PARKING (9' x 19') | 65 |
| | COMPACT (7.5' X 15') | 2 (1/100 STALLS) |
| | VAN ADA | 44 (35% MAX.) |
| | ADA | 2 |
| | EV VAN ADA | 3 |
| | EV ADA | 1 |
| | EV | 5 |
| | CLEAN AIR | 6 |
| | MOTORCYCLE (56 SF @ 1/100 STALLS) | 2 AREA |
| | BIKE RACK | 6 BIKE PARKING (RACKS) |
| | TRAILER PROVIDED (12' X 55') | 50 |

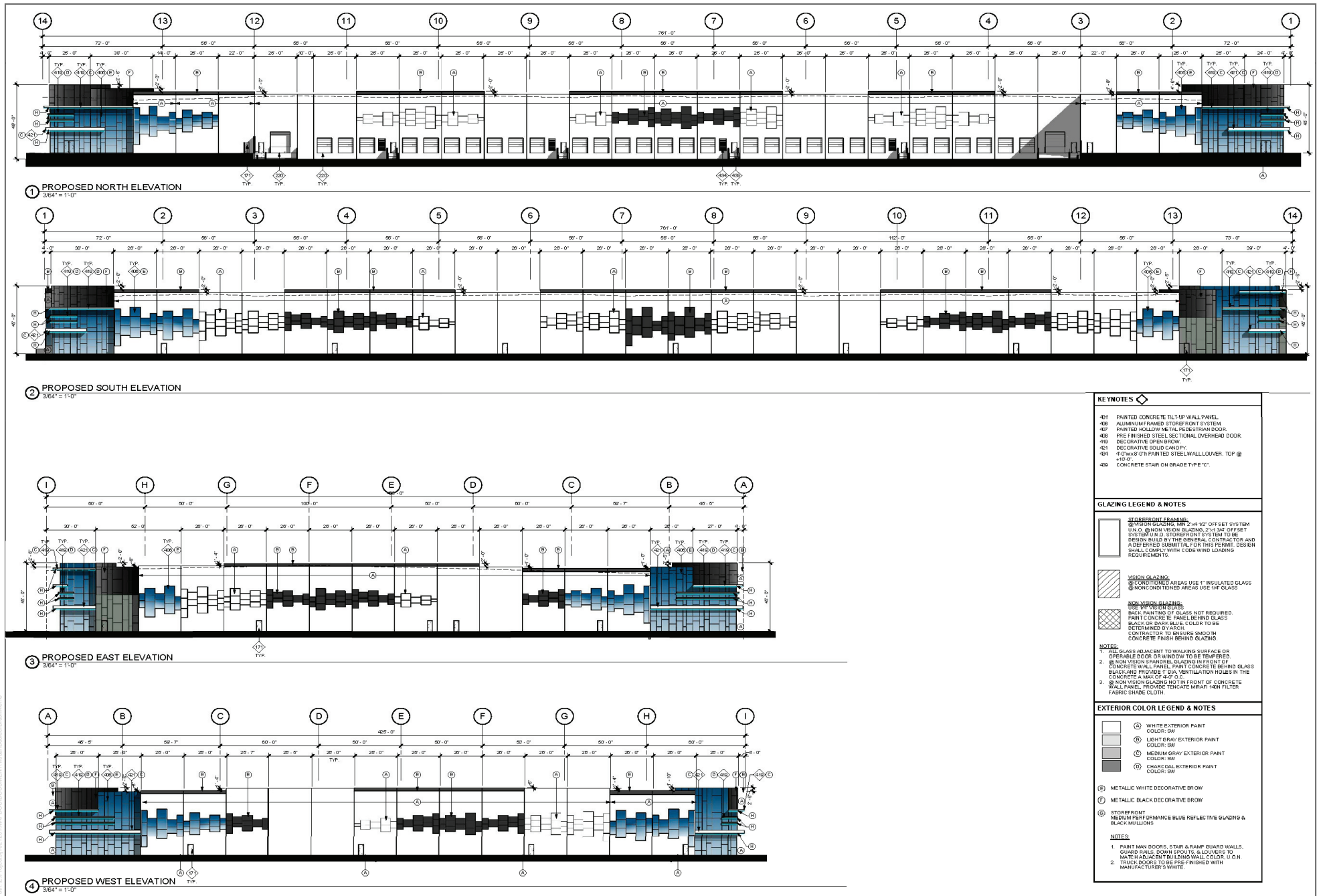


Site Notes

- 102 PROPOSED DRIVEWAY.
- 105 CONCRETE PAVING.
- 106 PROPOSED LANDSCAPED AREA.
- 114 ACCESSIBLE SITE ENTRANCE SIGN.
- 124 EXTERIOR CONCRETE LANDING.
- 127 CONCRETE STAIR.
- 135 PAINTED CONCRETE TILT-UP SCREEN WALL OR TRASH ENCLOSURE WALL.
- 140 TRASH ENCLOSURE w/ ROOF COVERING.
- 143 PAINTED STEEL ROLLING GATE(S) WITH KNOX BOX AS REQUIRED BY FIRE AUTHORITY.
- 144 PAINTED STEEL SWINGING GATE(S) WITH KNOX BOX AS REQUIRED BY FIRE AUTHORITY.
- 149 CONCRETE TRUCK RAMP w/ 42" HIGH CONCRETE TILT-UP GUARD ON OPEN SIDE(S).
- 150 STEEL PIPE BOLLARD PROTECTION POST.
- 159 MONUMENT SIGN.
- 168 PROVIDE MOTORCYCLE PARKING SPACE.

Source: Herdman Architecture & Design 2021

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Source: Herdman Architecture & Design 2021

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FIGURE 8

Conceptual Elevations

6th Street and Victoria Avenue Warehouse Project

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SOUTH EAST CORNER

Source: Herdman Architecture & Design 2021

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FIGURE 9A

Conceptual Rendering

6th Street and Victoria Avenue Warehouse Project

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NORTH WEST CORNER

Source: Herdman Architecture & Design 2021

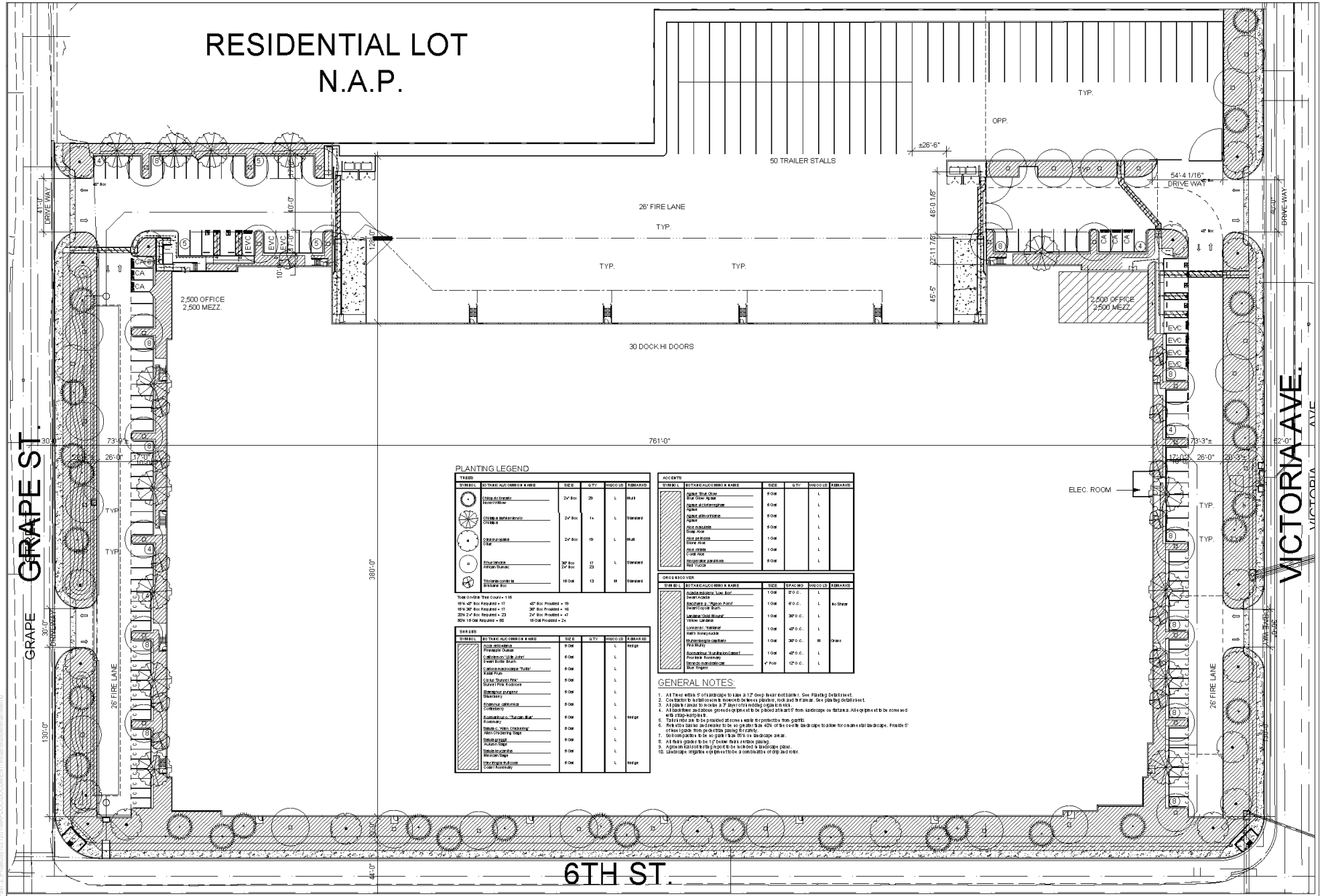
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FIGURE 9B

Conceptual Rendering

6th Street and Victoria Avenue Warehouse Project

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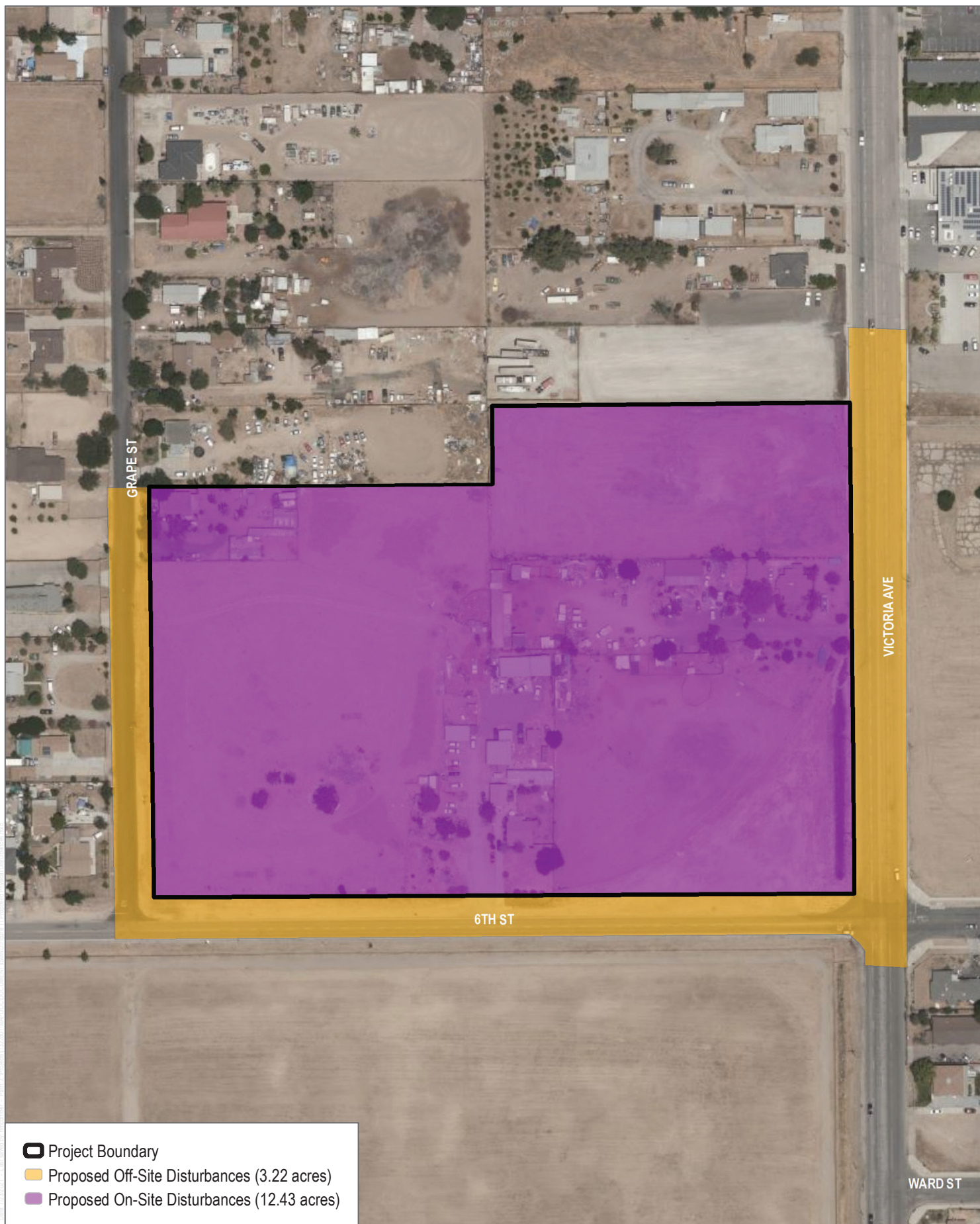
Source: Hunter Landscape 2021

FIGURE 10

Conceptual Landscape Plan

6th Street and Victoria Avenue Warehouse Project

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SOURCE: Bing Maps

FIGURE 11

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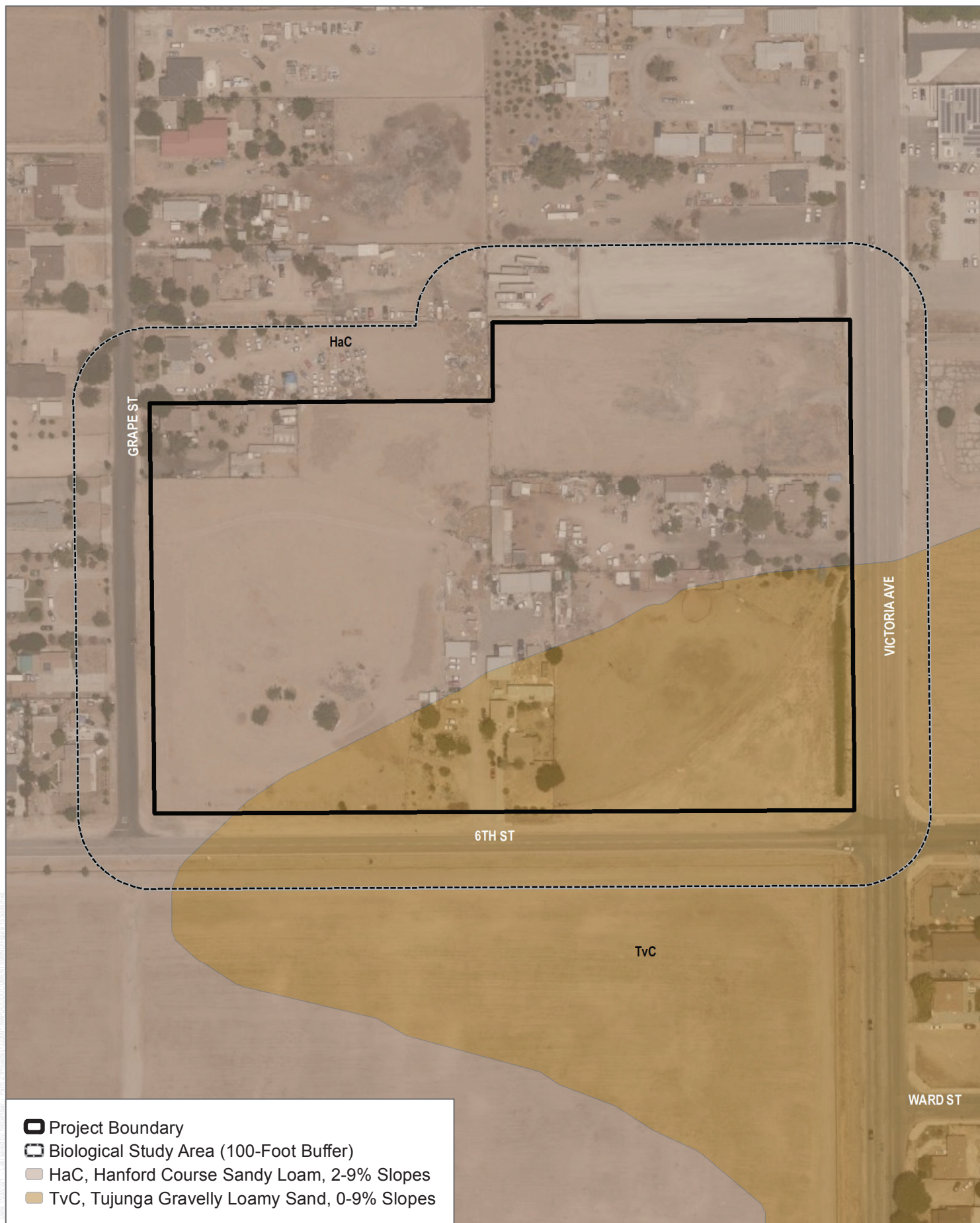
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SOURCE: Bing Maps

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SOURCE: Bing Maps, USDA 2021

FIGURE 15

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SOURCE: Bing Maps

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