

# CITY OF VERNON

## Vernon Westside Zone Change and General Plan Amendment Draft Program Environmental Impact Report

Prepared by:

**IMPACT  
SCIENCES**

811 W. 7th Street, Suite 200  
Los Angeles, CA 90017

Prepared for:

City of Vernon  
4305 S. Santa Fe Avenue  
Vernon, CA 90058

**March 2023**



**CITY OF VERNON  
WESTSIDE ZONE CHANGE AND  
GENERAL PLAN AMENDMENT  
Draft Program Environmental Impact Report**

**Prepared for:**

City of Vernon  
4305 S. Santa Fe Avenue  
Vernon, California 90058

**Prepared by:**

Impact Sciences, Inc.  
811 W. 7<sup>th</sup> Street, Suite 200  
Los Angeles, California 90017

**March 2023**



## TABLE OF CONTENTS

Section	Page
Executive Summary.....	ES-1
1.0 Introduction .....	1.0-1
2.0 Project Description .....	2.0-1
3.0 Environmental Impact Analysis.....	3.0-1
3.1 Aesthetics .....	3.1-1
3.2 Air Quality .....	3.2-1
3.3 Cultural Resources .....	3.3-1
3.4 Greenhouse Gas Emissions.....	3.4-1
3.5 Hazards and Hazardous Materials.....	3.5-1
3.6 Hydrology and Water Quality .....	3.6-1
3.7 Land Use and Planning .....	3.7-1
3.8 Noise and Vibration.....	3.8-1
3.9 Population and Housing.....	3.9-1
3.10 Public Services and Recreation .....	3.10-1
3.11 Transportation .....	3.11-1
3.12 Utilities and Service Systems.....	3.12-1
4.0 Alternatives .....	4.0-1
5.0 Effects Found Not to be Significant .....	5.0-1
6.0 Other CEQA Considerations .....	6.0-1
7.0 List of Preparers.....	7.0-1

### **Appendices**

1.1	CEQA Notices
3.2	CalEEMod Data
3.3	Tribal Consultation
3.8	Noise and Vibration Technical Data
3.11	Transportation Impact Analysis Report

## LIST OF FIGURES

Figure	Page
2.0-1 Regional Context .....	2.0-4
2.0-2 Project Area .....	2.0-5
2.0-3 General Plan Land Use Policy Map .....	2.0-6
2.0-4 Proposed General Plan Land Use Policy Map.....	2.0-10
2.0-5 Proposed Zoning Map .....	2.0-11
3.1-1 Intersection of Santa Fe Avenue and Vernon Avenue, Looking North.....	3.1-5
3.1-2 Alameda Street, Looking North .....	3.1-9
3.1-3 Santa Fe Avenue, Looking South .....	3.1-10
3.1-4 Pacific Boulevard, Looking Northwest .....	3.1-11
3.3-1 Local Geology Map .....	3.3-7
3.5-1 Envirostor Sites in the Project Area.....	3.5-6

## LIST OF FIGURES (continued)

Figure	Page
3.5-2 GeoTracker (SWQCB) Identified Cleanup Sites Within the Project Area.....	3.5-7
3.6-1 Surface Waters .....	3.6-3
3.6-2 Central Subbasin of the Los Angeles Groundwater Basin.....	3.6-6
3.7-1 Existing Zoning in the City of Vernon.....	3.7-3
3.8-1 Noise Measurement Locations .....	3.8-8
3.10-1 Fire Stations Serving the City of Vernon .....	3.10-3
3.10-2 Vernon Police Department.....	3.10-16
3.10-3 Public Schools Serving the Project Area.....	3.10-24
3.10-4 Public Libraries Serving the Project Area.....	3.10-33
3.10-5 Parks Surrounding the Project Area .....	3.10-39

## LIST OF TABLES

Table	Page
ES-1 Summary of Impacts and Mitigation Measures .....	ES-7
2.0-1 Key Development Features and Regulations .....	2.0-9
2.0-2 Permitted Uses – Mixed-Use City Center Zone .....	2.0-12
2.0-3 Proposed Development Standards - Mixed-Use City Center Zone.....	2.0-14
2.0-4 Permitted Uses – Mixed-Use Santa Fe North Zone .....	2.0-15
2.0-5 Proposed Development Standards – Mixed-Use Santa Fe North Zone.....	2.0-17
2.0-6 Permitted Uses – Mixed-Use Santa Fe South Zone.....	2.0-18
2.0-7 Proposed Development Standards – Mixed-Use Santa Fe South Zone .....	2.0-20
2.0-8 Permitted Uses – Mixed Use Pacific Hampton Zone .....	2.0-21
2.0-9 Proposed Development Standards – Mixed-Use Pacific Hampton Zone.....	2.0-22
2.0-10 Overall Project Development Summary .....	2.0-23
2.0-11 Vehicle Parking Standards by Use .....	2.0-25
2.0-12 Bicycle Parking Standards by Use.....	2.0-26
2.0-13 Population, Housing, and Jobs Projections Without the Project.....	2.0-28
2.0-14 Population and Housing Increase Associated with the Project .....	2.0-28
3.0-1 Cumulative Growth Projections for the City of Vernon .....	3.0-3
3.2-1 Ambient Air Quality Standards .....	3.2-3
3.2-2 Los Angeles (Main Street) Air Monitoring Station Ambient Pollutant Concentrations .....	3.2-6
3.2-3 Existing Project Area Operational Emissions .....	3.2-7
3.2-4 Land Uses That Emit TACs.....	3.2-8
3.2-5 National Ambient Air Quality Standards and Status South Coast Air Basin .....	3.2-10
3.2-6 California Ambient Air Quality Standards.....	3.2-12
3.2-7 SCAQMD Regional Significance Thresholds.....	3.2-19
3.2-8 SCAQMD LSTs for Construction Emissions in SRA 1 .....	3.2-20
3.2-9 Construction-Related Criteria Pollutant and Precursor Emissions – Maximum Pounds per Day .....	3.2-26
3.2-10 Estimated Operational Emissions .....	3.2-27
3.2-11 Localized Significance of Construction Emissions – Maximum Pounds per Day.....	3.2-32

## LIST OF TABLES (continued)

Table	Page
3.4-1	GHG Emissions in California .....3.4-5
3.4-2	Existing Project Area Annual GHG Emissions.....3.4-6
3.4-3	Project Greenhouse Gas Emissions Compared to Existing Conditions .....3.4-21
3.4-4	Project Greenhouse Gas Emissions Compared to Future Without the Project .....3.4-21
3.4-5	Consistency Analysis of the Project with the SCAG 2020 RTP/SCS .....3.4-25
3.4-6	Consistency Analysis of the Project with the City’s General Plan.....3.4-27
3.5-1	Schools within Project Area or ¼ mile Radius .....3.5-3
3.5-2	Department of Toxic Substances Control Cleanup Sites within the Project Area .....3.5-5
3.5-3	Geotracker (SWQCB) Identified Cleanup Sites within the Project Area .....3.5-8
3.7-1	Existing and Future Land Uses within the Project Area (Square Feet).....3.7-5
3.7-2	Project Consistency with SCAG’s Connect SoCal Land Use Policies.....3.7-19
3.7-3	Project Consistency with the City of Vernon General Plan .....3.7-21
3.8-1	A-Weighted Decibel Scale .....3.8-2
3.8-2	Building Noise Reduction Factors.....3.8-3
3.8-3	Existing Noise Levels in the Project Area .....3.8-7
3.8-4	Existing Roadway Noise Levels .....3.8-9
3.8-5	Construction Vibration Damage Criteria .....3.8-11
3.8-6	Groundborne Vibration and Groundborne Noise Impact Criteria for General Assessment.....3.8-12
3.8-7	Guideline Vibration Damage Potential Threshold Criteria.....3.8-13
3.8-8	Land Use Compatibility Standards.....3.8-15
3.8-9	Vernon Municipal Code Noise Standards .....3.8-16
3.8-10	Estimated Construction Noise Levels by Phase .....3.8-20
3.8-11	Project Traffic Noise .....3.8-23
3.8-12	Vibration Source Levels for Construction Equipment .....3.8-27
3.9-1	Population Growth Trends .....3.9-3
3.9-2	Housing for the City of Vernon and County of Los Angeles (2021) .....3.9-4
3.9-3	Population, Housing, and Jobs Projections Without the Project.....3.9-5
3.9-4	City of Vernon 2021-2029 Regional Housing Needs Assessment Allocation.....3.9-6
3.9-5	Population and Housing Increase Associated with the Project.....3.9-18
3.9-6	Estimated Onsite Employment Within the Project .....3.9-19
3.11-1	Baseline VMT Per Service Population .....3.11-14
3.11-2	Future Year 2040 No Project VMT Per Service Population.....3.11-15
3.11-3	Future Year 2040 with Project VMT Per Service Population.....3.11-15
3.11-4	Future Year 2040 Project Only VMT Per Service Population .....3.11-16
3.12-1	Vernon Water Department Water Demand and Supply .....3.12-3
3.12-2	Project Area Estimated Existing Annual Water Demand .....3.12-4
3.12-3	Project Area Existing Wastewater Generation .....3.12-5
3.12-4	Waste Transfer Stations and Capacity.....3.12-6
3.12-5	Project Area Existing Solid Waste Generation .....3.12-7
3.12-6	Estimated Annual Project Area Water Demand .....3.12-20
3.12-7	Project Wastewater Generation .....3.12-22
3.12-8	Project Projected Solid Waste Generation.....3.12-27
4.0-1	Alternative 1 Relationship to the Specific Plan Goals .....4.0-15
4.0-2	Alternative 2 Relationship to the Specific Plan Goals .....4.0-24

**LIST OF TABLES (continued)**

Table	Page
4.0-3 Comparison of Alternatives to the Project.....	4.0-26

# EXECUTIVE SUMMARY

---

## INTRODUCTION

The Vernon Westside Zone Change and General Plan Amendment (referred herein as the Project) Program Environmental Impact Report (PEIR) has been prepared to evaluate the potential environmental impacts associated with the Project. This Draft PEIR has been prepared in conformance with the California Environmental Quality Act (CEQA) Statute (California Public Resources Code Section 21000 et seq.), *State CEQA Guidelines* (Title 14, California Code of Regulations, Chapter 3, Section 15000 et seq.), and the rules, regulations, and procedures for implementation of CEQA as adopted by the City of Vernon. It is intended to serve as an informational document for public agency decision makers and the general public on the objectives and components of the Project, significant environmental impacts that may be associated with the implementation of the Project, and appropriate feasible mitigation measures and alternatives that may be adopted to reduce or eliminate these significant impacts. The City of Vernon is the lead agency under CEQA and is responsible for preparing the Vernon Westside Zone Change and General Plan Amendment PEIR (State Clearinghouse No. 2022040458). The City, as the lead agency, will review and consider the PEIR in its decision to approve, conditionally approve, revise, or deny the Project.

The City of Vernon, which has the principal responsibility for processing and making a decision on the Project, and other public agencies (i.e., responsible and trustee agencies) that may use the PEIR in their decision-making or permitting processes will consider the information in this Draft PEIR along with comments and responses that are generated during the CEQA process. Responsible and trustee agencies are identified in **Section 2.0, Project Description**. In addition, the PEIR is the primary reference document in the formulation and implementation of a Mitigation Monitoring and Reporting Program for the Project.

In accordance with CEQA, public agencies are required to make findings for each environmental impact of the project identified in the PEIR. If the lead agency and responsible and trustee agencies decide that the benefits of the proposed project outweigh any identified unmitigated significant environmental effects, they will be required to adopt a statement of overriding considerations supporting their actions.

The actions involved in the implementation of the Project are described in **Section 2.0, Project Description**. Other agencies that may have discretionary approval over the Project, or components thereof, are also described in **Section 2.0**.

## **ES.1 PROJECT LOCATION**

The City of Vernon (City) is an incorporated municipality in Los Angeles County, located five miles south of Downtown Los Angeles. Vernon is bordered by the City of Los Angeles to the north and west (including the communities of Boyle Heights, Central City North, and Southeast Los Angeles), and the cities of Huntington Park, Bell, and Maywood to the South, and Commerce to the East.

Vernon was first settled in the 1840s by farmers. The City was incorporated in 1905 as an industrial city, which it remains today. Vernon is well connected to industrial areas of adjacent communities and the region. The City is located in close proximity to several freeways: I-10, I-110, I-710, I-5, and I-105. Due to the industrial nature of the City, Vernon is home to an extensive rail network, most notably the Alameda Corridor, which connects the ports of Los Angeles and Long Beach to the rest of the region, and nation beyond. Vernon is also located 16 miles northeast of Los Angeles International Airport, another major hub for international cargo trade. The Los Angeles River (LA River) runs through the City of Vernon, east of the Project Area.

The Project Area encompasses 1.2 square miles, or approximately 780 acres of primarily industrial and commercial development, with transportation infrastructure and small pockets of residential. The Project Area roughly corresponds to a 1.75 by 0.75-mile area bound generally to the north by 27th Street; to the east by the Burlington Northern Santa Fe Railroad and Seville Avenue; to the south by Slauson Avenue; and to the west by the Alameda Corridor. The LA River is located approximately half a mile from the eastern portion of the Project Area.

The Project Area is zoned industrial and contains areas within the Commercial-1, Commercial-2, and Truck and Freight Terminal Overlay Zones. In addition, the Project Area is comprised primarily of industrial land uses, with properties used for warehousing, processing, distribution, and storage. However, there are also many properties being used for light and heavy manufacturing. Limited commercial retail and food service operations also exist which largely to serve the workers. Within the Project Area there are 13 residential units including 10 one-story single-family residences adjacent to Vernon City Hall on Furlong Place; one two-story single-family residence on Vernon Avenue; and a two-unit one-story multi-family residence on Vernon Avenue. The single-family residences along Furlong Place were built in the second half of the 20<sup>th</sup> century, while the two residences on Vernon Avenue were built before 1990.

The Vernon City Hall, Vernon Police Department, Los Angeles County Fire Station 52, and the Vernon City School are all clustered at the intersection of East Vernon Avenue and Santa Fe Avenue within the Project Area. This intersection is known as the Civic Center. The Civic Center also includes ten city-owned homes adjacent to Vernon City Hall, on Furlong Place. There is currently no designated open space in the Project



Area. At present the only publicly accessible open space in the Project Area is the landscaped lawn in front of Vernon City Hall that Santa Fe Avenue. This grassy area includes benches available for public use.

## **ES.2 PROJECT DESCRIPTION**

The City of Vernon proposes to implement a set of targeted zone changes combined with General Plan land use amendments to four specific areas within the general Project Area that would allow for additional residential and commercial uses in the form of mixed-use development. The purpose of these proposed zone changes is to implement regulatory standards that address the concerns raised during a community outreach of the Project Area. This includes a 17-member Stakeholders Advisory Committee and City leaders. The Project would reinvigorate the City's competitive advantage as a center of production; strengthen and provide long-term stability to the City's fiscal position; increase the residential population; diversify and reorient the land uses in the Project Area to take advantage of changes in the economic landscape of Southern California; increase amenities available to local residents and workers; and create a physical environment that is supportive of diverse land uses, welcoming to the larger region, and enhancing to the City's image and identity. The Project would thematically rezone the Project Area from the current Industrial and Commercial-2 Overlay Zone into the following zones: Mixed Use - City Center, Mixed Use -Santa Fe North, Mixed Use -Santa Fe South, and Mixed Use -Pacific Hampton.

## **ES.3 SCOPE OF THE PEIR**

This Draft PEIR addresses the potential environmental effects of the Project and alternatives to the project. The scope of the Draft PEIR includes issues identified by the City of Vernon and raised by agencies and the general public in response to the scoping process and Notice of Preparation (NOP), as described below.

### **ES.3.1 Scoping Process**

In compliance with the *State CEQA Guidelines*, the City of Vernon has taken steps to maximize opportunities to participate in the environmental process. An NOP was circulated on April 20, 2022, to solicit comments and inform the public of the Project. The Project was described, potential environmental effects associated with implementation were identified, and agencies and the public were invited to review and comment on the Notice of Preparation. The NOP review and comment period closed on May 20, 2022. At the time of preparation of this PEIR, the City received one written comments regarding the scope and content of the PEIR from the California Department of Transportation.

The following environmental issues were identified through the scoping process as having potential impacts associated with implementation of the Project and are addressed in this Draft PEIR:

- Aesthetics
- Air Quality
- Cultural and Tribal Cultural Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation and Circulation
- Utilities and Service Systems (including Energy)

Specific impact topics were identified for each of these environmental issues and are discussed in this Draft PEIR with respect to existing conditions, potential impacts, the significance of these potential impacts, and proposed mitigation for significant impacts.

Other sections required by CEQA include a discussion of growth inducement, cumulative impacts, significant irreversible environmental changes, and significant environmental effects that cannot be avoided. A discussion of alternatives to the Project is also presented in this Draft PEIR.

### **ES.3.2 Areas of Controversy Known to the Lead Agency**

This Draft PEIR addresses the areas of environmental controversy and environmental issues to be resolved which are known to the City of Vernon or were raised by agencies and the public during the scoping process. The City identified many of these during outreach of the NOP. It should be noted that not all of these issues are related to environmental effects of the project. The following summarizes the primary areas of controversy that have been identified and where they are addressed in this Draft PEIR:

Currently, warehousing uses make up the majority of the Project Area, and there is concern that current high land values for such uses could result in the area becoming overwhelmingly logistics oriented. Logistics uses have also contributed to another challenge, the area's heavy truck traffic, which negatively affects the overall livability of the area and deteriorates the City's roadway infrastructure. Heavy truck traffic also creates an unsafe and uncomfortable environment for pedestrians and cyclists. These transportation related issues are closely tied to air quality, greenhouse gas emissions, and noise environmental issues. See **Section 3.2, Air Quality**; **Section 3.4, Greenhouse Gas Emissions**; **Section 3.8, Noise**; and **Section 3.11, Transportation**, for further discussion on these issues.

### **ES.3.3 Issues to be Resolved**

The issues to be resolved by the City of Vernon include a decision on the alternatives, which include the Project, and whether or how to mitigate the environmental effects of the Project. The City will need to

determine if the type and intensity of development proposed by the Project are appropriate for the Project Area, and if it the existing infrastructures in the Project Area would accommodate the proposed development intensity.

## ES.4 SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION PROGRAM

### ES.4.1 Summary Table

**Table ES-1, Summary of Impacts and Mitigation Measures**, summarizes each potentially significant environmental effect of the Project, the recommended mitigation measures, or alternatives that would reduce or avoid the effect and the level of significance after mitigation. The reader is referred to the full text of this Draft PEIR for a detailed description of the environmental effects of the Project and feasible mitigation measures.

### ES.4.2 Potential Impacts Not Found To Be Significant

In accordance with *State CEQA Guidelines* Section 15128, this Draft PEIR identifies the possible significant effects that were determined not to be significant and are, therefore, not discussed in detail. Through the scoping process, the City of Vernon determined that an PEIR was required to evaluate the potentially significant environmental effects of the Project. The following environmental topics were determined not significant and are discussed in **Section 5.0, Effects Found Not to be Significant**:

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

## ES.5 MITIGATION MONITORING

State law and the City of Vernon CEQA procedures require the preparation of a mitigation monitoring and reporting program designed to ensure that mitigation measures adopted as conditions of approval to mitigate or avoid significant environmental effects are carried out. Mitigation measures identified within this Draft PEIR have been described in sufficient detail to provide the necessary information to identify the party (or parties) responsible for carrying out mitigation, when it is to be implemented, and how the

mitigation is to be monitored. A mitigation monitoring program will be considered by the City of Vernon with the Final PEIR.

**Table ES-1  
Summary of Impacts and Mitigation Measures**

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Aesthetics</b>			
<b>AES-1:</b> Have a substantial adverse effect on a scenic vista.	No impact	No mitigation measures are required.	No impact
<b>AES-2:</b> Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	No impact	No mitigation measures are required.	No impact
<b>AES-3:</b> 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.	Less than significant	No mitigation measures are required.	Less than significant
<b>AES-4:</b> Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	Less than significant	No mitigation measures are required.	Less than significant
<b>Air Quality</b>			
<b>AQ-1:</b> Conflict with or obstruct implementation of the applicable air quality plan.	Less than significant	No mitigation measures are required.	Less than significant
<b>AQ-2:</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.	Potentially significant (construction); Less than significant (operation)	<b>AQ-1: Dust Control Compliance with SCAQMD Rule 403</b> <b>a. Applicability Threshold:</b> Any project whose construction activities involve the use of construction equipment and require a permit from City of Vernon Department of Public Works.	Significant and unavoidable

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><b>b. Standard:</b> Consistent with SCAQMD Rule 403, best available dust control measures shall be implemented during Ground Disturbance Activities and active construction operations capable of generating dust.</p> <p><b>AQ-2: Equipment Maintenance</b></p> <p><b>a. Applicability Threshold:</b> Any project whose construction activities involve the use of construction equipment and require a permit from City of Vernon Department of Public Works.</p> <p><b>b. Standard:</b> Maintain construction equipment in good, properly tuned operating condition, as specified by the manufacturer, to minimize exhaust emissions. Documentation demonstrating that the equipment has been maintained in accordance with the manufacturer’s specifications shall be maintained per the proof of compliance requirements for a minimum of five years after the Certificate of Occupancy is issued.</p> <p>All construction equipment shall achieve emissions reductions that are no less than what could be achieved by a Tier 3 diesel emission control strategy for a similarly sized engine as defined by CARB regulations.</p> <p><b>AQ-3: Vehicle Idling Limit and Notification Signs</b></p> <p><b>a. Applicability Threshold:</b> Any project whose construction activities involve the use of construction equipment and require a permit from City of Vernon Department of Public Works.</p> <p><b>b. Standard:</b> Vehicle idling during construction activities shall be limited to five minutes as set forth in the California Code of Regulations, Title 13, Section 2449. Signs shall be posted in areas where they will be seen by vehicle operators stating idling time limits.</p> <p><b>AQ-4: Non-Diesel Fueled Electrical Power</b></p> <p><b>a. Applicability Threshold:</b> Any project whose construction activities involve the use of construction equipment and require a permit from City of Vernon Department of Public Works.</p> <p><b>b. Standard:</b> Electricity from power poles rather than temporary gasoline or diesel-powered generators shall be used To the Extent Available and Feasible.</p>	



Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><b>AQ-5: Emissions Standards for Off-Road Construction Equipment Greater than 50 Horsepower</b></p> <p><b>a. Applicability Threshold:</b> Any project whose construction activities involve the use of construction equipment, require a permit from City of Vernon Department of Public Works, and involve at least 5,000 cubic yards of on-site cut/fill on any given day.</p> <p><b>b. Standard:</b> All off-road diesel-powered construction equipment equal to or greater than 50 horsepower shall meet the U.S. Environmental Protection Agency’s (U.S. EPA) Tier 4 emission standards during construction. Operators shall maintain records of all off-road equipment associated with Project construction to document that each piece of equipment used meets these emission standards per the proof of compliance requirement for a minimum of five years after the Certificate of Occupancy is issued.</p> <p>In lieu of compliance with the above requirement, an air quality study prepared in accordance with the SCAQMD’s Air Quality Handbook may be provided by the Applicant or Owner demonstrating that Project construction activities would not exceed the SCAQMD’s regional and localized construction thresholds.</p> <p><b>AQ-6: Use of Low Polluting Fuels</b></p> <p><b>a. Applicability Threshold:</b> Any project whose construction activities involve the use of construction equipment, require a permit from City of Vernon Department of Public Works, and involve at least 5,000 cubic yards of on-site cut/fill on any given day.</p> <p><b>b. Standard:</b> Construction equipment less than 50 horsepower shall use low polluting fuels (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline).</p> <p>In lieu of compliance with the above requirement, an air quality study prepared in accordance with the SCAQMD’s Air Quality Handbook may be provided by the Applicant or Owner demonstrating that Project construction activities would not exceed the SCAQMD’s regional and localized construction thresholds.</p> <p><b>AQ-7: Emission Standards for On-Road Haul Trucks</b></p> <p><b>a. Applicability Threshold:</b> Any project whose construction activities involve the use of construction equipment, require a permit from City</p>	

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>of Vernon Department of Public Works, and involve more than 90 round-trip haul truck trips on any given day for demolition debris and import/export of soil.</p> <p><b>b. Standard:</b> Construction haul truck operators for demolition debris and import/export of soil shall use trucks that meet the California Air Resources Board’s (CARB) 2010 engine emissions standards at 0.01 g/bhp-hr. of particulate matter (PM) and 0.20 g/bhp-hr. of nitrogen oxides (NOX) emissions. Operators shall maintain records of all trucks associated with Project construction to document that each truck used meets these emission standards per the proof of compliance requirements in Subsection I.D.6.</p> <p>In lieu of compliance with the above requirement, an air quality study prepared in accordance with the SCAQMD’s Air Quality Handbook may be provided by the Applicant or Owner demonstrating that Project construction activities would not exceed the SCAQMD’s regional and localized construction thresholds.</p> <p><b>AQ-8: Routes for On-Road Haul Trucks</b></p> <p><b>a. Applicability Threshold:</b> Any project whose construction activities involve the use of construction equipment and require a permit from City of Vernon Department of Public Works.</p> <p><b>b. Standard:</b> Construction contractors shall reroute construction trucks away from congested streets or Sensitive Uses, as feasible. The burden of proving that compliance is infeasible shall be upon the Applicant or Owner. Where avoiding Sensitive Uses and congested streets altogether is infeasible, routing away from Sensitive Uses shall be prioritized over routing away from congested streets.</p>	
<p><b>AQ-3:</b> Expose sensitive receptors to substantial pollutant concentrations.</p>	<p>Potentially significant (construction); Less Than Significant (operation)</p>	<p>See <b>Mitigation Measures AQ-1</b> through <b>AQ-8</b></p>	<p>Significant and unavoidable</p>
<p><b>AQ-4:</b> Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.</p>	<p>Less than Significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Cultural Resources</b>			
<p><b>CUL-1:</b> Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.</p>	<p>Potentially significant</p>	<p><b>CUL-1: Historical Built Environment Studies</b></p> <p>For projects where demolition or alteration of buildings or structures greater than 45 years is proposed, prior to the issuance of any demolition permits, the applicant shall prepare an inventory of buildings proposed for demolition located on the project site. The project applicant shall retain a historian or architectural historian who meets or exceeds the Secretary of Interior’s Professional Qualifications Standards to document and evaluate the historical significance of the affected buildings or structures in accordance with CEQA. If such documentation and evaluation indicate that the building or structure qualifies as a significant historical resource, the resource shall be avoided and preserved in place if feasible. If avoidance or preservation is not feasible, a Historical Resources Treatment Plan or similar proposed plan, shall be prepared and implemented. Further documentation may be required and may include but is not limited to archival quality photographs, measured drawings, oral histories, interpretive signage, and/or other measures including, potentially, alteration of the resource in accordance with Secretary of the Interior’s Standards or relocation of the resource.</p> <p>As defined in the California Code of Regulations (CCR) Title 4(3) Section 15126.4 (b)(2), in some circumstances, documentation of a historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to point where clearly no significant effect on the environment would occur. In these cases, the Historical Resources Treatment Plan, or comparable plan, shall also evaluate the feasibility of retaining significant buildings or structures in their original locations and rehabilitating them according to the Secretary of the Interior’s Standards and Guidelines for Rehabilitating Historic Buildings.</p>	<p>Less than significant with mitigation incorporated</p>
<p><b>CUL-2:</b> Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.</p>	<p>Potentially significant</p>	<p><b>CUL-2: Archaeological Resource Studies</b></p> <p>Prior to any approval by the City for projects that involve any demolition, grading, trenching, or other ground disturbance, a Phase 1 Cultural Resources Study conducted by a qualified archaeologist meeting the Secretary of the Interior standards in archaeology shall be required. A Phase 1 study shall include a pedestrian survey of the project site to</p>	<p>Less than significant with mitigation incorporated</p>

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>identify potential surficial archaeological resources and sufficient background archival research and field sampling to determine whether subsurface prehistoric or historic remains may be present. If the project site is completely paved and/or developed, a pedestrian survey may not be required. Archival research should include, at minimum, a records search conducted at the South Central Coast Information Center (SCCIC) and a Sacred Lands File (SLF) search conducted with the NAHC.</p> <p>Any cultural resources identified shall be avoided and preserved in place if feasible. Where preservation is not feasible, each resource shall be subject to a Phase 2 evaluation for significance and eligibility for listing in the CRHR. Phase 2 evaluation shall include any necessary archival research to identify significant historical associations as well as mapping of surface artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposit to characterize the nature of the sites, define the artifact and feature contents, determine horizontal boundaries and depth below surface, and retrieve representative samples of artifacts and other remains.</p> <p>Cultural materials collected from the sites shall be processed and analyzed in the laboratory according to standard archaeological procedures. The age of archaeological resources shall be determined using radiocarbon dating or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the sites shall be evaluated according to the criteria of the CRHR. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication "Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)". Upon completion of the work, all artifacts, other cultural remains, records, photographs, and other documentation shall be curated at an appropriate curation facility. All fieldwork, analysis, report production, and curation shall be fully funded by the applicant.</p> <p>If any of the resources meet CRHR significance standards, the City shall ensure that all feasible recommendations for mitigation of impacts are incorporated into the final design and any permits issued for development. Any necessary archaeological data recovery excavation</p>	

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>shall be carried out by a Registered Professional Archaeologist according to a research design reviewed and approved by the City prepared in advance of fieldwork and using appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof.</p> <p>As applicable, the final Phase 1 Inventory, Phase 2 Testing and Evaluation, Phase 3 Data Recovery reports shall be submitted to the City prior to final inspection of a construction permit.</p> <p>Recommendations contained therein shall be implemented throughout all ground disturbance activities including, at minimum, requirements to follow for unanticipated archaeological discoveries during construction.</p>	
<p><b>CUL-3:</b> Disturb any human remains, including those interred outside of dedicated cemeteries.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>
<p><b>CUL-4:</b> 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:</p> <ul style="list-style-type: none"> <li>i) Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code Section 5020.1(k), or</li> <li>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</li> </ul>	<p>Potentially significant</p>	<p><b>CUL-3: Unanticipated Discovery of Tribal Cultural Resources</b></p> <p>In the event that a cultural resource of Native American origin is identified in the Project Area during the implementation of <b>MM CUL-2</b> or during any project-related ground disturbance, the City of Vernon, as Lead Agency, shall consult with local Native American tribes who have requested notification of projects under AB 52. If the City, in consultation with the local Native American tribe(s), determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with representatives of the Native American tribe(s). The mitigation plan may include but would not be limited to avoidance, capping in place, excavation and removal of the resource, interpretive displays, sensitive area signage, or other mutually agreed upon measures.</p>	<p>Less than significant with mitigation incorporated</p>

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p>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.</p>			
<p><b>CUL-5:</b> Directly or indirectly a unique paleontological resource or site or unique geologic feature.</p>	<p>Potentially significant</p>	<p><b>CUL-4: Unanticipated Discovery of Paleontological Resources</b>                      In the event that paleontological resources are unearthed during ground-disturbing activities, the City of Vernon Public Works Division will be notified immediately, and all work will cease in the area of the find until a qualified paleontologist evaluates the find. Construction activity may continue unimpeded on other portions of the Project Site. The paleontologist shall determine the location, the time frame, and the extent to which any monitoring of earthmoving activities shall be required. The found deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in California PRC § 21083.2.</p>	<p>Less than significant with mitigation incorporated</p>
<p><b>Greenhouse Gas Emissions</b></p>			
<p><b>GHG-1:</b> Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>
<p><b>GHG-2:</b> Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gas emissions.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>
<p><b>Hazards and Hazardous Materials</b></p>			
<p><b>HAZ-1:</b> Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.</p>	<p>Potentially significant</p>	<p><b>HAZ-1: Phase I Investigation</b>                      Prior to construction activities onsite, a Phase I investigation shall be conducted to assess if there are any reasons to suspect that hazardous materials could be present. If current or past use of contaminants of potential concern are discovered through the Phase I investigation, or if the property has ever contained a gas station, dry cleaners or hazardous chemical storage tanks, a Phase II would be required. The Phase II investigation shall be conducted in accordance with guidelines developed by the Department of Toxic Substances Control (DTSC) and Environmental Protection Agency (EPA) for site assessments. The Phase II investigation shall estimate the potential threat to public health and the</p>	<p>Less than significant with mitigation incorporated</p>



Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
		environment if concentrations of pesticides are encountered using methods outlined in DTSC’s Preliminary Endangerment Assessment Guidance Manual and DTSC’s Screening Level Human Health Risk Assessment guidance for implementing screening level risk analysis. The Phase II investigation shall be submitted to the City of Vernon for review and approval by an independent third-party reviewer. If the Phase II testing reveals concentrations of contaminants above health-based screening levels for residential exposure, remediation of the site shall be required to address residual contamination above health-based level of concern. Remediation may include excavation and disposal of impacted soil or capping elevated areas beneath paved areas. The Construction Contractor shall implement the recommendations outlined in the Phase II.	
<b>HAZ-2:</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.	Less than significant	No mitigation measures are required.	Less than significant
<b>HAZ-3:</b> Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Less than significant	No mitigation measures are required.	Less than significant
<b>HAZ-4:</b> Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	Less than significant	No mitigation measures are required.	Less than significant
<b>HAZ-5:</b> For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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.	No Impact	No mitigation measures are required.	No Impact

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>HAZ-6:</b> Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than significant	No mitigation measures are required.	Less than significant
<b>HAZ-7:</b> Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.	No impact	No mitigation measures are required.	Less than significant
<b>Hydrology and Water Quality</b>			
<b>HYD-1:</b> Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Less than significant	No mitigation measures are required.	Less than significant
<b>HYD-2:</b> Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Less than significant	No mitigation measures are required.	Less than significant
<p><b>HYD-3:</b> 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:</p> <ul style="list-style-type: none"> <li>• result in substantial erosion or siltation on- or off-site;</li> <li>• substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;</li> <li>• 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</li> <li>• impede or redirect flood flows.</li> </ul>	Less than significant	No mitigation measures are required.	Less than significant

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>HYD-4:</b> In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.	No impact	No mitigation measures are required.	No impact
<b>Land Use and Planning</b>			
<b>LAN-1:</b> Physically divide an established community.	Beneficial impact	No mitigation measures are required.	Beneficial impact
<b>LAN-2:</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.	Less than significant	No mitigation measures are required.	Less than significant
<b>Noise</b>			
<b>NOI-1:</b> 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.	Potentially significant (construction); Less Than Significant (operation)	<p><b>NOI-1:</b> During case-by-case review of individual projects, the City shall consider the application of the following strategies to reduce construction noise levels to the maximum extent feasible:</p> <ul style="list-style-type: none"> <li>• <b>Mufflers.</b> Construction equipment shall be properly maintained and all internal combustion engine driven machinery with intake and exhaust mufflers and engine shrouds, as applicable, shall be in good condition and appropriate for the equipment. During construction, all equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers, consistent with manufacturers’ standards.</li> <li>• <b>Electrical Power.</b> Electrical power, rather than diesel equipment, shall be used to run compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities.</li> <li>• <b>Equipment Staging.</b> All stationary equipment shall be staged as far away from the adjacent sensitive receptors as feasible.</li> <li>• <b>Equipment Idling.</b> Construction vehicles and equipment shall not be left idling for longer than five minutes when not in use.</li> </ul>	Significant and unavoidable

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> <li>• Workers’ Radios. All noise from workers’ radios shall be controlled to a point that they are not audible at sensitive receptors near construction activity.</li> <li>• Smart Back-up Alarms. Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with human spotters to ensure safety when mobile construction equipment is moving in the reverse direction.</li> <li>• Disturbance Coordinator. Project applicants shall designate a disturbance coordinator who shall be responsible for responding to any local complaints about construction noise. The noise disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and identify remedies to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.</li> </ul> <p>NOI-2: During case-by-case review of individual projects, the City shall consider the application of the following strategy to reduce construction noise levels to the maximum extent feasible:</p> <ul style="list-style-type: none"> <li>• Temporary Sound Barriers. For construction activities located directly adjacent to sensitive receivers (e.g., residences, schools), temporary sound barriers shall be installed and maintained by the construction contractor between the construction site and adjacent receivers during the demolition, site preparation, grading phases, and building phases of construction. Temporary sound barriers shall consist of either sound blankets or other sound barriers/techniques such as acoustic padding or acoustic walls placed near adjacent residential buildings that have been field-tested to reduce noise. Barriers shall be placed such that the line-of-sight between noise-generating construction equipment and adjacent sensitive land uses is blocked and shall be placed as close to the source equipment as feasible. As an alternative, applicants may prepare a Noise Study that demonstrates construction noise would not exceed ambient noise levels at nearby sensitive resources. The Noise Study shall incorporate best management practices and other noise reduction measures to reduce noise levels.</li> </ul>	

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p><b>NOI-2:</b> Generation of excessive groundborne vibration or groundborne noise levels.</p>	<p>Potentially significant (construction – annoyance and building damage); Less Than Significant (operation)</p>	<p><b>NOI-3:</b> Prior to any grading or construction activity within 25 feet of an extremely fragile building (non-engineered timber and masonry) or potentially historical resource, applicants shall prepare a Vibration Control Plan. The Vibration Control Plan shall be prepared by a qualified structural engineer and shall include methods to minimize vibration, including but not limited to:</p> <ul style="list-style-type: none"> <li>• Use of drilled piles or the use of a sonic vibratory pile driver rather than impact pile driving.</li> <li>• Use of rubber-tired equipment rather than metal-tracked equipment.</li> <li>• Avoiding the use of vibrating equipment when allowed by best engineering practices.</li> </ul> <p>The Vibration Control Plan shall include a pre-construction survey letter establishing baseline conditions at potentially affected adjacent buildings. The survey letter shall provide a shoring design to protect the adjacent buildings from potential damage. The structural engineer may recommend alternative procedures that produce lower vibration levels, such as sonic pile driving or caisson drilling instead of impact pile driving. Development projects shall implement the structural engineer’s recommendations.</p> <p>A Statement of Compliance signed by the Applicant and Owner is required to be submitted to Building and Safety at plan check and prior to the issuance of any permit. The Vibration Control Plan, prepared as outlined above, shall be documented by a qualified structural engineer, and shall be provided to the City upon request.</p>	<p>Significant and unavoidable (construction annoyance); Less than significant with mitigation incorporated (building damage)</p>
<p><b>NOI-3:</b> 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.</p>	<p>No Impact</p>	<p>No mitigation measures are required.</p>	<p>No Impact</p>

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Population and Housing</b>			
<b>POP-1:</b> Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)	Less than significant	No mitigation measures are required.	Less than significant
<b>POP-2:</b> Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	Less than significant	No mitigation measures are required.	Less than significant
<b>Public Services and Recreation</b>			
<b>PS-1:</b> Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.	Less than significant	No mitigation measures are required.	Less than significant
<b>PS-2:</b> Result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.	Less than significant	No mitigation measures are required.	Less than significant
<b>PS-3:</b> Result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause	Less than significant	No mitigation measures are required.	Less than significant



Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives of the school district.			
<b>PS-4:</b> Result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, need for new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives	Less than significant	No mitigation measures are required.	Less than significant
<b>REC-1:</b> Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	Less than significant	No mitigation measures are required.	Less than significant
<b>REC-2:</b> Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	Less than significant	No mitigation measures are required.	Less than significant
<b>Transportation</b>			
<b>TRA-1:</b> Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less than significant	No mitigation measures are required.	Less than significant
<b>TRA-2:</b> Conflict or be inconsistent with <i>CEQA Guidelines</i> section 15064.3, subdivision (b).	Less than significant	No mitigation measures are required.	Less than significant
<b>TRA-3:</b> Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Beneficial impact	No mitigation measures are required.	Beneficial impact

Project Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p><b>TRA-4:</b> Result in inadequate emergency access.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>
<p><b>Utilities and Service Systems</b></p>			
<p><b>USS-1:</b> 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.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>
<p><b>USS-2:</b> Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>
<p><b>USS-3:</b> 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.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>
<p><b>USS-4:</b> 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.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>
<p><b>USS-5:</b> Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>
<p><b>EN-1:</b> Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.</p>	<p>Less than significant</p>	<p>No mitigation measures are required.</p>	<p>Less than significant</p>

<b>Project Impacts</b>	<b>Level of Significance Without Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance After Mitigation</b>
EN-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than significant	No mitigation measures are required.	Less than significant

## ES.6 ALTERNATIVES TO THE PROPOSED PROJECT

As required by Section 15126.6 of the *CEQA Guidelines*, a range of reasonable alternatives to the proposed project that would attain most of the basic project objectives but would avoid or substantially lessen any of its significant environmental effects must be examined. Project alternatives aim to identify and disclose ways to mitigate or avoid significant environmental effects that may result from the Project. Impacts found to be significant and unavoidable in **Section 3.0, Environmental Impact Analysis**, include cumulatively considerable net increase in emissions of criteria air pollutants during construction and potential exposure to sensitive receptors; temporary increases in ambient noise during construction that would expose sensitive receptors to increased noise levels; and construction activities that would intermittently generate vibrations that exceed the residential annoyance threshold. Impacts found to be potentially significant but are able to be reduced to a less than significant level with the imposition of proposed mitigation measures include impacts to historical resources, construction vibration (building damage), archaeological resources, tribal cultural resources, and paleontological resources.

The alternatives considered are summarized below. Project alternatives are further discussed in **Section 4.0, Alternatives**.

### **Alternative 1 – No Project**

For purposes of this PEIR, the No Project Alternative (Alternative 1) assumes buildout within the Project Area would occur in accordance with the land uses included in the *City of Vernon 2007 General Plan (General Plan)* and implemented by the City's Zoning Code. The Zoning Code carries out the *General Plan* policies by regulating development and land uses within the City, consistent with the *General Plan*. Under this alternative the increased housing density opportunities and expanded mix of commercial, production, and research and development land uses proposed in the Project would not be achieved. Thus, the No Project Alternative assumes that without the Project in place to change the underlying land uses, the land uses reflected in the *General Plan* would be developed, resulting in primarily industrial development.

### **Alternative 2 – Vernon Westside Specific Plan Alternative**

The Vernon Westside Specific Plan Alternative (Alternative 2) proposes the preparation and adoption of a Vernon Westside Specific Plan (Specific Plan) for the Project Area. The Specific Plan would provide a regulatory document establishing the framework to maintain the City's roots as an industrial city, but also diversify its land uses and increase its population within the western portion of the City in the vicinity of Santa Fe Avenue. The Specific Plan would be developed based on the outcome of the same community outreach that is discussed in **Section 2.0, Project Description**. The Specific Plan would be thematically organized into a combination of districts and corridors including the Santa Fe Mixed Use Corridor, Mixed-

Use City Center District, Mixed-Use Santa Fe North District, Mixed-Use Santa Fe South District, and Mixed-Use Pacific Hampton District. Each district would be implemented over the same areas as the corresponding zones/land uses changes under the Project. The Santa Fe Mixed-Use Corridor would convert Santa Fe Avenue back into a “main street” by redirecting the existing heavy truck traffic that occurs on the roadway, and subsequently implementing additional transportation network improvements. Under the Specific Plan, each District would be zoned and include the same development standards as the corresponding zones/land uses changes identified in the Project.

## **ES.7 REVIEW OF THE DRAFT PEIR**

The Draft PEIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and other interested parties in accordance with *State CEQA Guidelines* Section 15086. The Notice of Completion for the Draft PEIR was also distributed as required by CEQA. During the 45-day public review period, the Draft PEIR, including the technical appendices, is available for review at the City of Vernon City Hall at 4305 S. Santa Fe Avenue in the City of Vernon and on the City’s Website at <https://www.cityofvernon.org/government/city-administration/westside-specific-plan>.

Written comments on the Draft PEIR should be addressed to:

Daniel Wall  
City of Vernon, Community Development Department, Planning Division  
4305 S. Santa Fe Avenue  
Vernon, California 90058

Upon completion of the 45-day public review period, written responses to all significant environmental issues raised will be prepared and made available for review at least 10 days prior to consideration of the Final PEIR before the Vernon City Council. These environmental comments and their responses will be included as part of the Final PEIR for consideration by decision makers for the Project.

# 1.0 INTRODUCTION

---

## 1.1 PURPOSE

This introduction is intended to provide the reader with general information regarding (1) the purpose of the Program Environmental Impact Report (EIR, PEIR, Draft EIR, or Draft PEIR), (2) standards for PEIR adequacy, (3) an introduction to the format and content of this PEIR for the Vernon Westside Mixed-Use Zoning and General Plan Amendment Project (Project) and (4) the PEIR processing requirements for the Project. Environmental documents can be confusing; this section is provided to educate the reader regarding the intent, format, and content of this PEIR so that it can be more easily understood.

## 1.2 PROJECT BACKGROUND AND PLANNING PROCESS

The City of Vernon (City) is an incorporated municipality in Los Angeles County, located five miles south of Downtown Los Angeles. Vernon is bordered by the City of Los Angeles to the north and west (including the communities of Boyle Heights, Central City North, and Southeast Los Angeles), Huntington Park, Bell, and Maywood to the South, and Commerce to the East. The Project Area is comprised of four specific areas within the western portion of the City located along Santa Fe Avenue and Hampton Street.

On April 20, 2022, the City published the Notice of Preparation (NOP) to the State Clearinghouse in the Office of Planning and Research, notifying the general public, responsible and trustee agencies, as well as interested parties that an EIR would be prepared for the Project. The NOP specified that the Project included the development of the Vernon Westside Specific Plan which included land use, zoning, and street improvements. Since the issuance of the NOP, additional public outreach was conducted, and the Project Description was revised to remove the street improvement elements and focus only on the land use and zoning designation changes. The land use and zoning modifications that were included in the Specific Plan will now be presented as Zone Changes and General Plan Amendments. The removal of the street improvement elements does not constitute as significant new information nor were there any changes to the existing conditions at the time of the NOP publication. Therefore, recirculation of the NOP was not necessary. The Project, as further described in **Section 2.0, Project Description**, includes targeted zone changes combined with General Plan land use amendments to four specific areas within the general Project Area.

### 1.2.1 Project Summary

The City is proposing to implement a Zone Change and General Plan Amendment to four specific areas within the western portion of the City to provide flexibility, attract people, and stimulate investment in the

western portion of the City. The Project was developed based on community outreach, including a 17-member Stakeholders Advisory Committee, and City leaders. The intent of the Project is to provide development standards and regulations to maintain the City's roots as an industrial city, but also diversify its land uses and increase its population within the western portion of the City in the vicinity of Santa Fe Avenue. The Project would reinvigorate the City's competitive advantage as a center of production; strengthen and provide long-term stability to the City's fiscal position; increase the residential population; diversify and reorient the land uses in the Project Area to take advantage of changes in the economic landscape of Southern California; increase amenities available to local residents and workers; and create a physical environment that is supportive of diverse land uses, welcoming to the larger region, and enhancing to the City's image and identity.

### 1.3 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The purpose of this EIR is to assess the environmental effects of implementing the Project, as described above. All projects within the State of California are required to undergo an environmental review to determine the environmental impacts associated with implementation of the project in accordance with the California Environmental Quality Act (CEQA). CEQA was enacted in 1970 by the California legislature to disclose to decision makers and the public, the significant environmental effects of proposed activities, as well as ways to avoid or reduce the environmental effects by requiring implementation of feasible alternatives or mitigation measures. CEQA applies to all California governmental agencies at all levels, including local agencies, regional agencies, state agencies, boards, commissions, and special districts.

The EIR is ultimately intended as an informational document and by itself does not determine whether the Project, or any of its components, will be approved. The EIR aids in the decision-making process by disclosing the potential significant and adverse impacts. In conformance with CEQA, California Public Resources Code, Section 21000, this EIR provides objective information addressing the environmental consequences of the Project and identifies the means of reducing or avoiding its significant impacts where feasible.

The *CEQA Guidelines* help define the role and expectations of this EIR as follows:

- **Information Document.** An EIR is an informational document that will inform decision-makers as well as members of the public of the significant environmental effects of a project, identify feasible ways to minimize or avoid these effects, and describe a set of reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information contained in the administrative record (Section 15121(a)).

- **Degree of Specificity.** An EIR on an individual development project will be more detailed in the specific effects of the project than will an EIR on the adoption of a general plan or zoning ordinance because the effects of the individual development can be predicted with greater accuracy. An EIR on a project such as the adoption of the Project should focus on the secondary effects that can be expected to follow from the adoption but need not be as detailed as the analysis on the specific construction project that might follow (Section 15146).
- **Standards of Adequacy.** An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information that enables them to make a decision that intelligently takes account of environmental consequences. An evaluation of the environmental effects of a project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure (Section 15151).

The *CEQA Guidelines*, Section 15382, defines a significant effect on the environment as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.”

This EIR is to serve as an informational document for the public, and decision makers of the City. The EIR process will culminate with City Council hearings to consider certification of a Final EIR and consideration of the project.

## 1.4 LEAD AGENCY, AUTHORIZATION, AND FOCUS

The lead agency for the Project is the City of Vernon. The Public Works Department, Planning Division is responsible for preparing the EIR for the review and consideration of the City Council, as the final decision-maker for the Project. The address for the Public Works Development Department – Planning Division is the following:

City of Vernon  
Public Works Department  
Planning Division  
4305 S. Santa Fe Ave.  
Vernon, California 90058



The *State CEQA Guidelines* define “lead,” “responsible,” and “trustee” agencies. The determination that the City of Vernon is the “lead agency” is made in accordance with *CEQA Guidelines* sections 15051 and 15367, which define the lead agency as the public agency that has the principal responsibility for carrying out or approving a project. This Draft EIR reflects the independent judgment of the City regarding the potential environmental impacts and the level of significance of the impacts both before and after the mitigation measures proposed to reduce the impacts.

The City determined that an EIR is needed to evaluate potentially significant effects that could result from the implementation of the Project. An Initial Study was not prepared for the Project since it was determined from the outset that a EIR would be required (*CEQA Guidelines* Section 15060(d)).

The City is required to consider the information in the Draft EIR, along with any other relevant information, in making its decision on the Project. Although the Draft EIR does not determine the ultimate decision that will be made regarding implementation of the Project, CEQA requires the City to consider the information in the Draft EIR and make findings regarding each significant effect in the Draft EIR. Once certified, the Final EIR will serve as the environmental document for the Project and will be used as a basis for decisions related to future development in the Project Area. Other agencies may also use the certified Final EIR in their review and approval process.

A “responsible agency” refers to a public agency other than the lead agency that has discretionary approval over the project. A “trustee agency” refers to a state agency having jurisdiction by law over natural resources affected by the project. There are no responsible or trustee agencies associated with the Project.

## 1.5 TYPE OF ENVIRONMENTAL REVIEW

The Project will guide development for the Project Area through 2040. This EIR considers broad Project level issues and evaluates the effects of the Project. This EIR addresses environmental impacts from the Project to the level that can be assessed without undue speculation, considering the scope of the Project components.

Consistent with the requirements of CEQA, the EIR compares expected development from the Project against the existing environment and not to the existing plans and regulations. The No Project Alternative considers the effects of the existing general plan and zoning relative to the impacts of the Project.

### **Future Use of the EIR and Subsequent Projects**

Approval of the Project does not constitute a commitment to any specific development project. It is contemplated that future site-specific approvals in the Project Area may be evaluated with consideration

of the EIR under CEQA rules for subsequent approvals, where applicable, including but not limited to the following:

- **Addenda** (*CEQA Guidelines* Sections 15164). Addenda may be used when a subsequent approval contains some changes or additions to the Project, a change in circumstances, or new information, as a result of a new significant impact or an identified significant impact being more severe but no major revisions to the EIR are required based on the changes.
- **Tiering** (Public Resources Code Section 21094 and *CEQA Guidelines* Section 15152). Tiering refers to using the analysis of general matters contained in a broader EIR with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussion from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project.
- **Program EIR / Subsequent Approvals** (*CEQA Guidelines* Section 15168). Projects within the scope of a Program EIR are eligible for streamlined or limited CEQA review through tiering of future CEQA documents and/or preparation of an addenda to the program EIR.
- **Streamlining for Infill Projects** (SB 226; Public Resources Code [PRC] Section 21094.5; *CEQA Guidelines* Section 15183.3). Eligible infill projects may qualify for streamlined environmental review at the project level where the effects of infill development have been addressed in a planning level decision or by uniformly applicable development policies.
- **Transit Priority Projects** (SB 375; PRC Section 21155-21155.2). Transit Priority Projects consistent with the SCAG Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) near transit that have imposed all or all applicable mitigation measures from a prior EIR may be exempt from CEQA or be subject to streamlined review.

## 1.6 ENVIRONMENTAL REVIEW PROCESS

The environmental review process, as required under CEQA, is summarized below. The steps are presented in sequential order.

1. **Notice of Preparation (NOP) Distributed.** Immediately after deciding that an EIR is required, the lead agency files an NOP soliciting input on the EIR scope to “responsible,” “trustee,” and involved federal agencies; to the State Clearinghouse, if one or more state agencies is a responsible or trustee agency; and to parties previously requesting notice in writing. A scoping meeting to solicit public input on the issues to be assessed in the EIR, while not always required, may be conducted by the lead agency.

2. **Draft Environmental Impact Report (Draft EIR) Prepared.** The Draft EIR must contain a (1) table of contents or index, (2) summary, (3) project description, (4) environmental setting, (5) environmental impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts), (6) alternatives, (7) mitigation measures, (8) irreversible changes, and (9) organizations and persons consulted.
3. **Public Notice and Review.** The lead agency must prepare a Notice of Availability (NOA) of an EIR. The Notice must be posted in the County Clerk's office for 30 days (Public Resources Code Section 21092.3) and sent to anyone requesting it. Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: (1) publication in a newspaper of general circulation, (2) posting on and off the project site, and (3) direct mailing to owners and occupants of contiguous properties (as the Project covers approximately 780 acres of the City and encompasses numerous properties it is not plausible to post the NOA around the Project Area or mail a copy of the NOA to owners and occupants of contiguous properties. Thus, the NOA will be published in the local newspaper). The lead agency must consult with and request comments on the Draft EIR from responsible and trustee agencies, and adjacent cities and counties. The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days, unless a shorter period is approved by the State Clearinghouse (Public Resources Code 21091). Distribution of the Draft EIR may be required through the State Clearinghouse.
4. **Notice of Completion.** The lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a Draft EIR.
5. **Final EIR.** A Final EIR must include (1) the Draft EIR or a revision thereof, (2) copies of comments received during public review, (3) list of persons and entities commenting, and (4) responses to comments.
6. **Certification of Final EIR.** Prior to approving a project, the lead agency shall certify that (1) the Final EIR has been completed in compliance with CEQA, (2) the Final EIR was presented to the decision-making body of the lead agency, and (3) the decision-making body reviewed and considered the information in the Final EIR. A Notice of Determination must be filed with the County Clerk within five days of the certification of the Final EIR.
7. **Lead Agency Project Decision.** The lead agency may (1) disapprove a project because of its significant environmental effects; (2) require changes to a project to reduce or avoid significant environmental effects; or (3) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted.

8. **Findings / Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either (1) the project has been changed to avoid or substantially reduce the magnitude of the impact; (2) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or (3) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible. If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
9. **Mitigation Monitoring and Reporting Program (MMRP).** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
10. **Notice of Determination.** An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared. A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA challenges.

## Notice of Preparation

In compliance with CEQA, the City completed a multi-step process to determine the appropriate scope of issues to be examined in this Draft EIR. Pursuant to *CEQA Guidelines* Section 15082, an NOP was prepared by the City and distributed on April 20, 2022 to the State Clearinghouse in the Office of Planning and Research, notifying the general public, responsible and trustee agencies, as well as interested parties that an EIR will be prepared for the Project. The NOP was circulated for a 30-day review period that began on April 20, 2022, and ended on May 20, 2022. Refer to **Appendix 1.0-1, CEQA Notices and Response Letter**, to this EIR for a copy of the NOP. At the time of preparation of this EIR, the City received one written comment regarding the scope and content of the EIR from the California Department of Transportation.

## Public Participation

One of the primary objectives of CEQA is to enhance public participation in the planning process. Community members are encouraged to participate in the environmental review process, request to be notified of meetings and release of documents, monitor newspapers for formal announcements, and submit substantive comments at every possible opportunity afforded by the lead agency. The environmental review process provides various opportunities for the public to participate through scoping, public review of CEQA documents, and public hearings.

The public is invited to provide comments and concerns regarding the accuracy of this Draft EIR and the CEQA process. The comment period is indicated on the cover of this EIR. The Draft EIR will be circulated for review and comment by the public and other interested parties, agencies, and organizations for 45 calendar days. The Draft EIR is available on the City of Vernon website at:

**Project Website:** <https://www.reimaginevernon.com/>

Hard copies of the Draft EIR will also be available at:

Vernon City Hall  
4305 S. Santa Fe Ave.  
Vernon, California 90058

Written comments may be submitted via:

1. **Mail:** Daniel Wall  
City of Vernon, Public Works Department  
4305 S. Santa Fe Avenue  
Vernon, California 90058
2. **E-mail:** Daniel Wall, [dwall@cityofvernon.org](mailto:dwall@cityofvernon.org)

Pursuant to *CEQA Guidelines* Section 15088, the City will prepare written responses to any comments that raise significant environmental issues received during the noticed comment period and include those responses in the Final EIR. The public will also be provided opportunities to present oral and written comments at future hearings and meetings on the Project to the City Council. The City may but is not required to provide written responses to comments submitted after the circulation period for the Draft EIR.

## 1.7 AREAS OF CONTROVERSY / ISSUES TO BE RESOLVED

Potential areas of controversy and issues to be resolved by the City's decision-makers may include those environmental issue areas where the potential for an unavoidable and significant impact has been identified. Issues known to be of concern in the community and therefore, potential areas of controversy, include increased population, truck and automobile traffic, air quality and hazards and hazardous materials.

## 1.8 FINAL EIR AND EIR CERTIFICATION

Following the close of the public review period on the Draft EIR, the City will prepare and publish a Final EIR, which will contain a summary of all written and recorded oral comments on this EIR received during the public review period for the Draft EIR and written responses to those comments that raise

environmental concerns, along with copies of the letters received, and any necessary revisions to the EIR. The Draft EIR, comments on the EIR and a list of persons, organizations, and public agencies that commented on the Draft EIR, response to comments, and any revisions to the Draft EIR will constitute the Final EIR. The Final EIR will be available for public review prior to consideration of certification of the document by the decision-makers. The City Council, in an advertised public meeting(s), will consider the documents and then, if found adequate, certify the Final EIR as completed in compliance with CEQA and the *CEQA Guidelines*.

## 1.9 ORGANIZATION OF THE EIR

The EIR is organized into the following chapters so the reader can easily obtain information about the Project and any potential issues:

- **Executive Summary:** This section provides a summary of the Project and potential environmental impacts that would result from implementation of the Project, proposed mitigation measures where applicable, and the level of significance of the impact before and after mitigation.
- **Chapter 1.0, Introduction:** This chapter contains an overview of the purpose and focus of the Draft EIR, a discussion of the intended use of this Draft EIR, a description of the organization of the Draft EIR, and a discussion of the public review process and potential areas of controversy.
- **Chapter 2.0, Project Description:** This chapter describes the Project, including project location, project background, project objectives and components, and a description of the proposed changes to existing plans and zoning under the project.
- **Chapter 3.0, Environmental Impact Analysis:** This chapter is the primary focus of this Draft EIR. Each environmental issue is considered in a separate section, which contains a discussion of the environmental settings, the regulatory setting, the methodology and the thresholds of significance. Each section also includes the analyses of environmental impacts of the Project, mitigation measures, conclusions regarding the level of significance after mitigation, and cumulative impacts for each of the following environmental topics and environmental issues:
  - **Section 3.1, Aesthetics:** Changes to views, scenic resources, and visual quality
  - **Section 3.2, Air Quality:** Changes in pollutants affecting air quality
  - **Section 3.3, Cultural Resources and Tribal Cultural Resources:** Changes to historic resources and impacts to archaeological or paleontological resource and human remains and impacts to cultural resources potentially related to one of more Native American tribes

- **Section 3.4, Greenhouse Gas Emissions:** Changes to greenhouse gas emissions and conformance to applicable greenhouse has plans, policy, and regulations
- **Section 3.5, Hazards and Hazardous Materials:** Changes in the risk of exposure to hazardous materials, or proximity to wildland fire hazards
- **Section 3.6, Hydrology and Water Quality:** Changes in water quality, drainage patterns and the amount of stormwater runoff
- **Section 3.7, Land Use and Planning:** Changes to land use and zoning
- **Section 3.8, Noise and Vibration:** Changes in noise and vibration levels due to construction, traffic, and proposed uses
- **Section 3.9, Population and Housing:** Changes in population, jobs/housing balance, and the displacement of a substantial number of housing units or persons
- **Section 3.10, Public Services and Recreation:** Impacts related to the construction of new or expanded public facilities (i.e., fire protection and schools)
- **Section 3.11, Transportation and Traffic:** Changes in transportation conditions and vehicles miles traveled, review of emergency access, potential hazardous design features, and potential conflict with alternative transportation (e.g., bicycles and public transportation)
- **Section 3.12, Utilities and Service Systems (including Energy):** Impacts related to the increased need for utilities and infrastructure improvements and the construction of new or expanded facilities; and wasteful or inefficient use of energy resources
- **Chapter 4.0, Alternatives:** This chapter provides analysis of a range of reasonable alternatives to the Project in accordance with *CEQA Guidelines* Section 15126(f). The range of alternatives considered is based on their ability to feasibly attain most of the project objectives and avoid or substantially lessen any of the significant effects of the Project:
  - **Alternative 1:** No Project
  - **Alternative 2:** Vernon Westside Specific Plan
- **Chapter 5.0, Effects Not Found to be Significant:** This chapter summarizes those impact categories that were determined to be less than significant and did not need further analysis in the EIR.

- **Chapter 6.0, Other CEQA Considerations:** This chapter provides a summary of significant and unavoidable impacts of the Project and a discussion of potential growth inducing effects.
- **Chapter 7.0, List of Preparers:** This chapter lists the individuals involved in preparing the EIR and organizations and persons consulted.

## 1.10 CEQA FINDINGS FOR PROJECT APPROVAL

Where a certified EIR identifies significant environmental effects, *CEQA Guidelines* Sections 15091 and 15092 require the adoption of findings prior to approval of a project. Prior to approval of a project, one of three findings must be made, as required by PRC Section 21081 and *CEQA Guidelines* Section 15091:

- Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the Final EIR.

If the City approves the Project, despite significant impacts identified in the Final EIR that cannot be feasibly mitigated, the City must state in writing the reasons for its actions, under *CEQA Guidelines* Section 15093. Those findings, called a Statement of Overriding Considerations, must be prepared to substantiate the City's decision to accept the unavoidable significant environmental effects of the Project when balanced against the benefits afforded by the Project, and must be supported by substantial evidence in the record.

## 1.11 MITIGATION MONITORING AND REPORTING PROGRAM

At the time of project approval, CEQA and the *CEQA Guidelines* require lead agencies to adopt a Mitigation Monitoring and Reporting Program for monitoring the revisions it has required in the project and the measures it has imposed to mitigate or avoid significant effects on the environment (*CEQA Guidelines* Section 21081.6; *CEQA Guidelines* Section 15097). This Draft EIR contains mitigation measures that if found feasible will be included in the Mitigation Monitoring and Reporting Program for the Project.



## 2.0 PROJECT DESCRIPTION

---

### INTRODUCTION

*The Project Description is the starting point for all environmental analysis required by the State CEQA Guidelines. The purpose of the Project Description is to describe the project in a way that will be meaningful to the public, reviewing agencies, and decision makers. For this Program Environmental Impact Report (PEIR), the project description will focus on program-level information pertaining to the Vernon Westside Mixed-Use Zoning and General Plan Amendment (Project). As described in §15124 of the State California Environmental Quality Act (CEQA) Guidelines, the Project Description in an EIR is required to contain the following information: (1) the location of the project; (2) a statement of project objectives; (3) a general description of the project's technical, economic, and environmental characteristics; and (4) a statement briefly describing the intended uses of the EIR.*

*Section 15146 of the State CEQA Guidelines states that the degree of specificity required in a EIR will correspond to the degree of specificity involved in the underlying activity, which is described in the EIR. The following Project Description serves as the basis for the environmental analysis contained in this PEIR.*

### 2.1 PROJECT LOCATION

#### 2.1.1 Project Location

The City of Vernon (City) is an incorporated municipality in Los Angeles County, located five miles south of Downtown Los Angeles. Vernon is bordered by the City of Los Angeles to the north and west (including the communities of Boyle Heights, Central City North, and Southeast Los Angeles), Huntington Park, Bell, and Maywood to the South, and Commerce to the East.

Vernon was first settled in the 1840s by farmers. The City was incorporated in 1905 as an industrial city, which it remains today. Vernon is well connected to industrial areas of adjacent communities and the region. The city is located in close proximity to several freeways: Interstate 10 (I-10), I-110, I-710, I-5, and I-105. Due to the industrial nature of the City, Vernon is home to an extensive rail network, most notably the Alameda Corridor, which connects the ports of Los Angeles and Long Beach to the rest of the region, and nation beyond. Vernon is also located 16 miles northeast of Los Angeles International Airport, another major hub for international cargo trade. The Los Angeles River (LA River) runs through the City of Vernon.

The Project is comprised of zone changes and *General Plan* amendments to four specific areas within the western portion of the City. As shown in **Figure 2.0-1, Regional Context**, and **Figure 2.0-2, Project Area**, the Project Area is generally bound on the north by 25<sup>th</sup> Street; to the east by the Atchison, Topeka and Santa Fe (ATSF) Railroad and the eastern frontage of Pacific Boulevard; to the south by Slauson Avenue;

and to the west by the Alameda Corridor. The Project Area encompasses approximately 1.2 square miles, or 780 acres of primarily industrial and commercial development, with transportation infrastructure and small pockets of residential. The LA River is located approximately half a mile from the eastern portion of the Project Area.

### 2.1.2 Existing Project Area Characteristics

#### *City of Vernon*

In 1905, the City of Vernon was incorporated to capitalize on job growth spurred by the existing railroads in the area. As the first exclusively industrial city in the Southwestern United States, the City's industrial zoning was intended to maintain the City's status as regional manufacturing and industrial center. The entire City is currently zoned for industrial uses. In addition, there are seven Overlay Zones: Commercial-1, Commercial-2, Emergency Shelter, Housing, Rendering, Slaughtering, and Truck and Freight Terminal. The northern and eastern sections of the Project Area include Commercial-1, Commercial-2, and Truck and Freight Terminal Overlay Zone areas along Santa Fe Avenue and Pacific Boulevard. Similarly, the City's General Plan Land Use Designation for the entire City is Industrial. There are overlay districts for Housing, Emergency Shelter, Commercial, Rendering and Slaughtering. The Housing Overlay Zone permits residential uses with discretionary review. The Vernon Village Apartments, built in 2015, is located within the Housing Overlay Zone in the southeast corner of the City. There are currently 222 residents living within the City of Vernon and 78 housing units.<sup>1</sup>

#### *Project Area*

The Project Area is surrounded by industrial and commercial uses, both within the City of Vernon and the surrounding cities, such as the cities of Los Angeles (including the community Project Areas of Southeast Los Angeles, Central City North, and Boyle Heights), Huntington Park. Currently, the Project Area is zoned industrial and contains areas within the Commercial-1, Commercial-2, and Truck and Freight Terminal Overlay Zones. In addition, the Project Area is comprised primarily of industrial land uses, with properties used for warehousing, distribution, and storage. Many properties are in use as light and heavy manufacturing. The limited commercial retail and food service operations largely exist to serve the workers. Thirteen residential units are located within the Project Area, including 10 one-story single-family residences adjacent to Vernon City Hall on Furlong Place; one two-story single-family residence on Vernon Avenue; and a two-unit one-story multi-family residence on Vernon Avenue. The single-family residences

---

<sup>1</sup> State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2022*. Available online at: <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/>, accessed October 31, 2022.

along Furlong Place were built in the second half of the 20<sup>th</sup> century, while the two residences on Vernon Avenue were built before 1990. All of the homes are in good condition.

The Vernon City Hall, Vernon Police Department, Los Angeles County Fire Station 52, and the Vernon City School are all clustered at the intersection of East Vernon Avenue and Santa Fe Avenue within the Project Area. This intersection is known as the Civic Center. As mentioned above, ten city-owned homes are located adjacent to Vernon City Hall, on Furlong Place. Currently, no designated open space exists are located within the Project Area. At present the only publicly accessible open space in the Project Area is the landscaped lawn in front of Vernon City Hall that Santa Fe Avenue. This grassy area includes benches available for public use.

Industrial buildings in the Project Area are primarily one-story and generally between 25,000 and 300,000 square feet, with the majority of the buildings having been built between 1930 and 1980. Most of the buildings take up the majority of the lot with parking located towards the front of the building. Smaller, older industrial and commercial buildings (less than 25,000 square feet) are concentrated within clusters along Santa Fe Avenue, 37th Street, 38th Street, and Hampton Street. Residential buildings along Vernon Avenue are single-family homes. There are no buffers between the residential and industrial uses (see **Figure 2.0-3, Existing General Plan Land Use Policy Map**).

There are several active and inactive rail lines that are adjacent to the Project Area. The Malabar Yard, operated by Burlington Northern Santa Fe Railway, is in the eastern perimeter of the Project Area, between Santa Fe Avenue and Hampton Street. The City of Vernon is also served by the Los Angeles Metropolitan Transportation Authority bus network.

North/south travel within the Project Area primarily relies on Santa Fe Avenue, as Pacific Boulevard converts into Vernon Avenue, and Alameda East primarily provides access to properties on the western edge of Vernon. Santa Fe Avenue is a critical connector between Vernon and Los Angeles's industrial land uses and the Arts District, to the north, and connects Huntington Park and other communities south of Vernon.

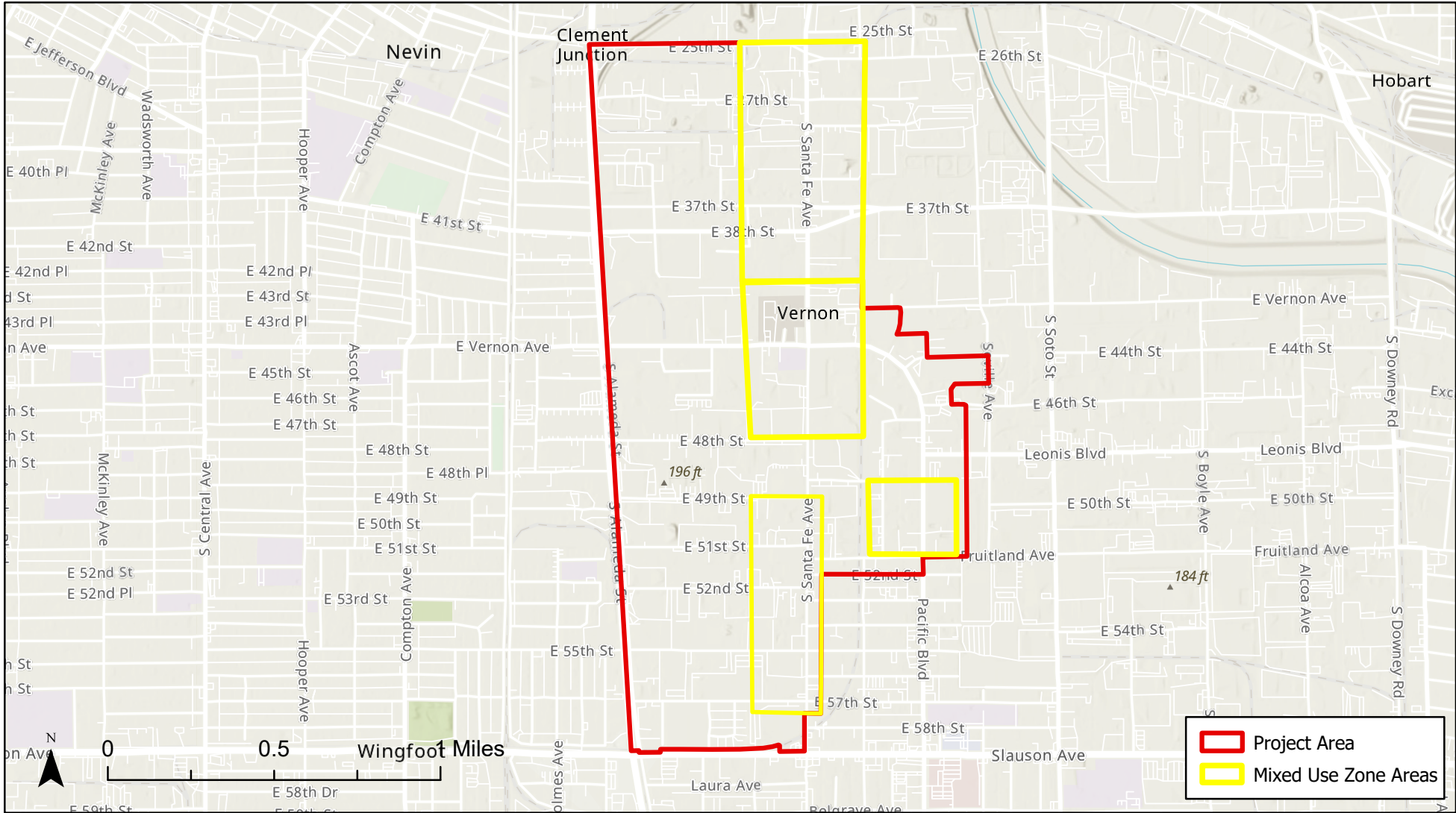
The City of Vernon currently does not define specific streets as truck routes. However, the City of Los Angeles identifies Alameda Street and 26<sup>th</sup> Street as truck routes. Given the concentration of industrial land uses, all streets are open to trucks to serve local businesses as needed. Santa Fe Avenue is also used as a key truck corridor. Truck traffic to and from the Project Area is distributed throughout the roadways with Alameda Street, Santa Fe Avenue, and Bandini Boulevard as the most common routes. The City of Vernon is primarily served by the Los Angeles Metropolitan Transportation Authority (Metro) bus network.



SOURCE: Google Earth, 2020

FIGURE 2.0-1

Regional Context

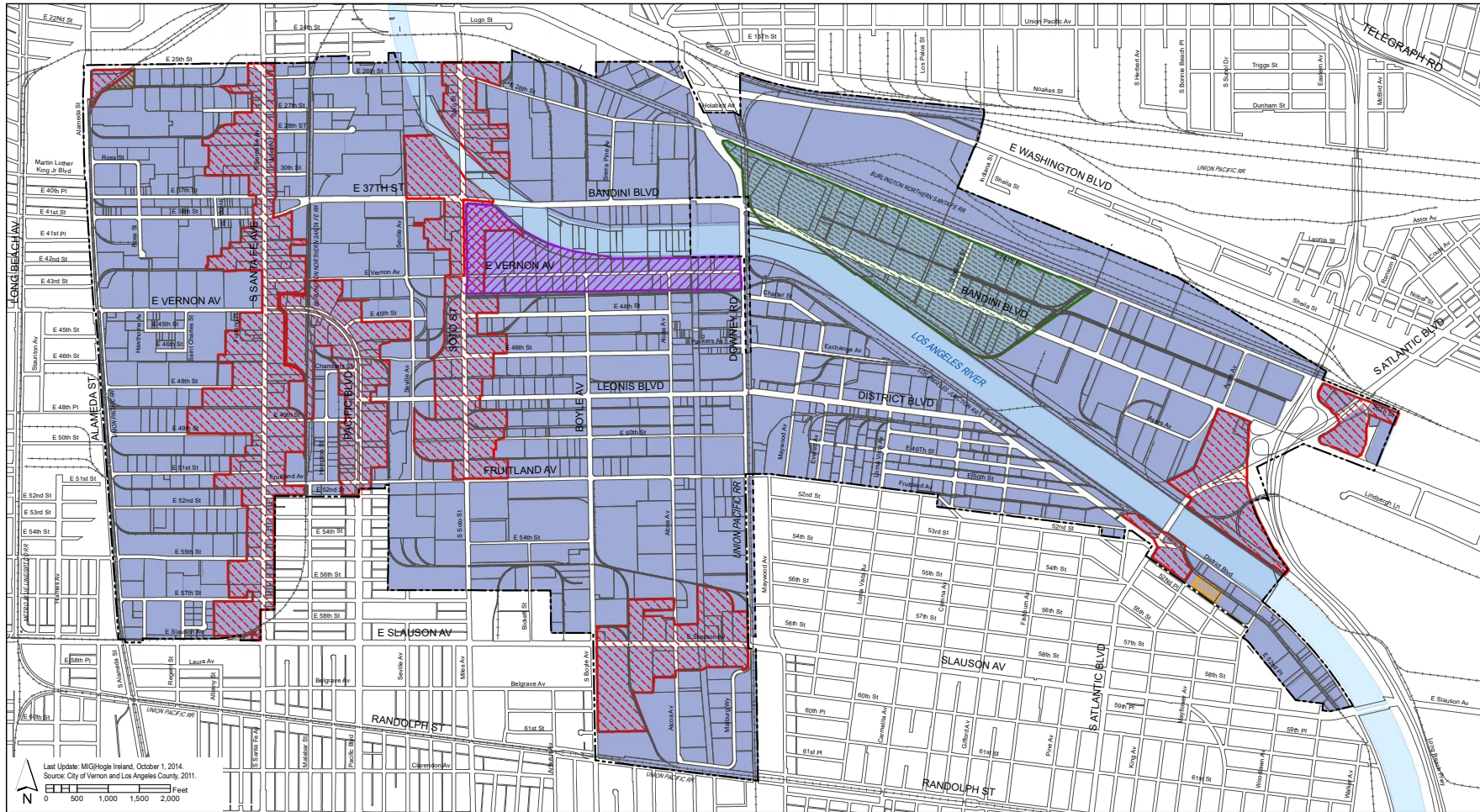


SOURCE: Google Earth, 2020

FIGURE 2.0-2

Project Area





Last Update: MIG/Hogbe Ireland, October 1, 2014.  
 Source: City of Vernon and Los Angeles County, 2011.

- |                             |                          |                            |
|-----------------------------|--------------------------|----------------------------|
| <b>Land Use Designation</b> | <b>Overlay Districts</b> | <b>Base Map</b>            |
| Industrial                  | Housing                  | Vernon City Boundary       |
| Emergency Shelter           | Commercial               | Vernon Sphere of Influence |
| Rendering                   | Slaughtering             | Freeway                    |
|                             |                          | Railroad                   |
|                             |                          | Los Angeles River          |

SOURCE: City of Vernon, 2015

FIGURE 2.0-3

Five local lines and three Metro Rapid lines serve or are within a half mile of the Project Area, forming a grid comprised of north-south transit travel corridors along Pacific Boulevard, Santa Fe Avenue, and Soto Street, and east-west transit travel corridors along Vernon Avenue, Leonis Boulevard, and Slauson Avenue. The 705 Rapid travels along Vernon Avenue and connects the City of Vernon to Culver City, Beverly Hills, and West Hollywood. The Rapid 751 Route primarily runs on Soto Street and provides connections to Cypress Park, Lincoln Heights, Downtown LA, Huntington Park, and South Gate, as well as connections to the Metro C (Green) and L (Gold) Lines. The Rapid 760 Route provides connections to Downtown LA, Huntington Park, Southgate, Watts, and Lynwood and runs primarily on Pacific Boulevard in the City of Vernon. The Local 108, which operates along Slauson Avenue, provides connections to Pico Rivera, the City of Commerce, Culver City, Venice, and Marina Del Rey. The Local 611 or Huntington Park Shuttle is a local circulator route that connects Vernon to neighboring cities including Huntington Park, Maywood, Bell, and South Gate. The route primarily runs on Vernon Avenue, Leonis Boulevard, and District Boulevard within city limits.

The Metro A (Blue) Line train also runs along Long Beach one mile west of the City boundary, with stations located on Washington Avenue, Vernon Avenue, and Slauson Avenue. The A Line stations nearest the northern and southern edges of the Project Area are beyond walking distance to most Vernon locations with no clear routes or direct connections. The Vernon Station located on Vernon Avenue and Long Beach Boulevard is the most accessible station. The station is approximately 0.70 miles west of the Project Area and 0.75 miles from the Vernon Avenue and Santa Fe Avenue intersection.

## 2.2 DESCRIPTION OF THE PROJECT

The City of Vernon proposes to implement a set of targeted zone changes combined with *General Plan* land use amendments to four specific areas within the general Project Area that would allow for additional residential and commercial uses in the form of mixed-use development. The purpose of these proposed zone changes is to implement regulatory standards that address the concerns raised during community outreach. This includes a 17-member Stakeholders Advisory Committee and City leaders. The Project would reinvigorate the City's competitive advantage as a center of production; strengthen and provide long-term stability to the City's fiscal position; increase the residential population; diversify and reorient the land uses in the Project Area to take advantage of changes in the economic landscape of Southern California; increase amenities available to local residents and workers; and create a physical environment that is supportive of diverse land uses, welcoming to the larger region, and enhancing to the City's image and identity. The Project would rezone the Project Area from the current Industrial and Commercial-2 Overlay Zone into the following zones:

- Mixed Use – City Center (MU-CC);

- Mixed Use – Santa Fe North (MU-N);
- Mixed Use – Santa Fe South (MU-S); and
- Mixed Use – Pacific Hampton (MU-PH)

The *Vernon General Plan* is the primary policy document that guides future development in the City. The *General Plan* will be updated to be consistent with the proposed zone changes. Parcels currently located within the Commercial-2 Overlay Zone would be redesignated to their associated mixed-use zone.

In addition to the proposed Mixed-Use zones, the Project includes the addition of the existing Commercial-1 Overlay Zone to the southern portion of the Project Area to provide greater flexibility, including the potential to bring large regional-serving retail uses to the area. The overlay zone would be applied to the area bound by Alameda Street to the west, East 57<sup>th</sup> Street to the north, South Santa Fe Avenue to the east, and East Slauson Avenue to the south. While the Project would include the addition of the Commercial-1 Overlay Zone to this specific area, there are currently no development assumptions and therefore this particular zone change is not evaluated within this EIR. Therefore, any future projects within the new Commercial-1 Overlay Zone would be subject to additional environmental review.

### **Proposed Zone Changes**

The parcels located within the existing Commercial-2 Overlay Zone would be rezoned to Mixed-Use City Center, Mixed-Use Santa Fe South, Mixed-Use Santa Fe North, or Mixed-Use Pacific Hampton. The majority of these parcels would be located along Santa Fe Avenue (see **Figure 2.0-4, Proposed General Plan Land Use Map**, and **Figure 2.0-5, Proposed Zoning Map**). Each of the Mixed-Use zones has a central theme for development and are described below.

### ***Key Development Features***

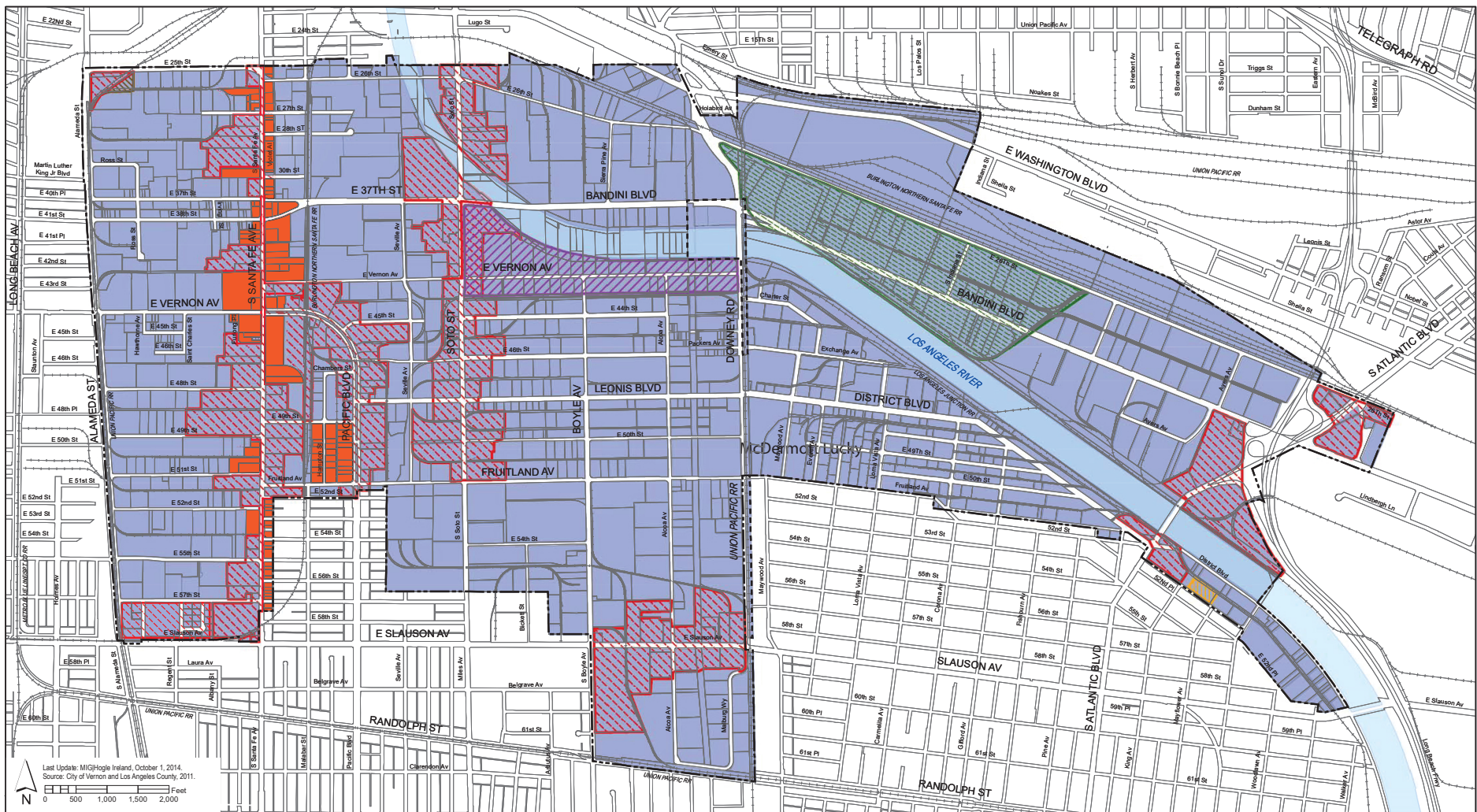
The Project would implement key development features and requirements for future development within areas that are zoned as a mixed-use. These features are intended to minimize potential conflicts between residential or live/work uses and on-site or neighboring uses. **Table 2.0-1, Key Development Features and Regulations**, summarizes the development standards for future development within each proposed zone.



**Table 2.0-1  
Key Development Features and Regulations**

Development Feature	Regulations
Setbacks and Projections:	<ul style="list-style-type: none"> <li>Upper floor uses, including residential and office uses, should incorporate setbacks and/or appropriate window orientation to ensure access to light and privacy. At a minimum, upper floors of buildings shall comply with the fire separation requirements of California Building Code Table R.302.1.1 (un-sprinklered buildings) or R.302.1 (sprinklered buildings).</li> <li>Balconies shall not project into the public right-of-way.</li> </ul>
Buffering and Orientation	<ul style="list-style-type: none"> <li>Residential uses shall be separated from any adjacent heavy industrial uses located outside a mixed-use zone with acoustic and visual buffers. Unless the applicant can demonstrate that a different strategy will be similarly effective, the buffer shall consist of a minimum six-foot high wall constructed of solid masonry and partially or fully covered with hedges, ivy, bamboo or other similar softening material, and a minimum five-foot wide screen landscaping strip consisting of evergreen trees or an evergreen trellis structure of at least six feet in height.</li> <li>Habitable residential spaces and windows should be oriented away from adjacent industrial uses to the greatest extent possible.</li> <li>Open spaces should be oriented away from adjacent industrial uses. Should they be constructed in an area which is open to adjacent industrial properties, screening should be used to lessen the impacts of industrial activities on the residential properties.</li> </ul>
Exterior Lighting	<ul style="list-style-type: none"> <li>Every project should have adequate lighting to provide for security and visibility, particularly along walkways and driveways, entrances to parking areas, and open space areas.</li> <li>Site, parking lot and building security lighting should not impact surrounding or neighboring properties. The type and location of such lighting shall preclude direct glare onto adjoining property, streets, or skyward, and should not adversely impact residential units within a development.</li> </ul>
Outdoor Service, Storage and Loading	<ul style="list-style-type: none"> <li>Outdoor storage areas, loading docks, mechanical equipment and trash enclosures shall not be visible from Santa Fe Avenue, Pacific Boulevard, Vernon Avenue or Hampton Street and shall be concealed or screened with a combination of building features, decorative walls and landscaping consistent with the architectural style of the building. Operational equipment for on-site businesses shall also be screened.</li> <li>Any loading dock designed for use of trucks/trailers with four or more axles shall be screened from Santa Fe Avenue, Pacific Boulevard, Vernon Avenue or Hampton Street by a building. Docks should be located toward the rear of such properties.</li> </ul>
Building and Performance Requirements	<ul style="list-style-type: none"> <li>All interior spaces shall be sufficiently acoustically separated from other on- and off-site uses, as required by the California Building Code (CBC) and other regulations.</li> <li>All regularly occupied areas of mechanically ventilated buildings shall be equipped with air filtration media for outside and return air that provides a Minimum Efficiency Reporting Value (MERV) of 13.</li> </ul>
Unit Design	<ul style="list-style-type: none"> <li>Every live/work unit shall have a defined area of no less than 200 square feet which is built and designed for productive work.</li> <li>Productive work areas shall have a height of at least 10 feet floor to ceiling, shall be open and unimpeded by walls, and should be constructed of resilient materials that can support for productive uses. For example, appropriate flooring materials include concrete and hardwoods, and inappropriate flooring materials include linoleum.</li> <li>The maximum size of a live/work unit shall be 3,000 square feet.</li> <li>Work areas in adjacent units should be located next to each other. If a living space must be located near a work area of an adjacent unit, additional sound separation should be provided. If a residential project is located along streets which do not have restrictions on trucking at the time of entitlement, the upper-floor street frontage should be occupied with work areas of live/work units</li> </ul>
Ground Floor Live/Work	<ul style="list-style-type: none"> <li>Ground-floor live/workspaces should be designed in a special manner, which emphasizes the “work” component of live/work and engages the public in the pedestrian realm. Ground-floor live/work units will exist adjacent to commercial or light industrial uses and should be designed for small businesses with employees and walk-in clientele.</li> <li>In new construction buildings, ground-floor live/work units shall have separate spaces and entrances for the living and working spaces. Living spaces may be located on upper floors of the building.</li> <li>A minimum of 350 square feet of work area shall be provided, and it shall be located on the ground floor. This work area shall have a height of at least 14 feet floor to ceiling and comply with all other requirements of (7).</li> <li>An active business license with the City of Vernon shall be required to occupy a ground-floor live/work unit.</li> <li>Living and working spaces may be detached from each other.</li> </ul>

Source: *The Arroyo Group, 2023*



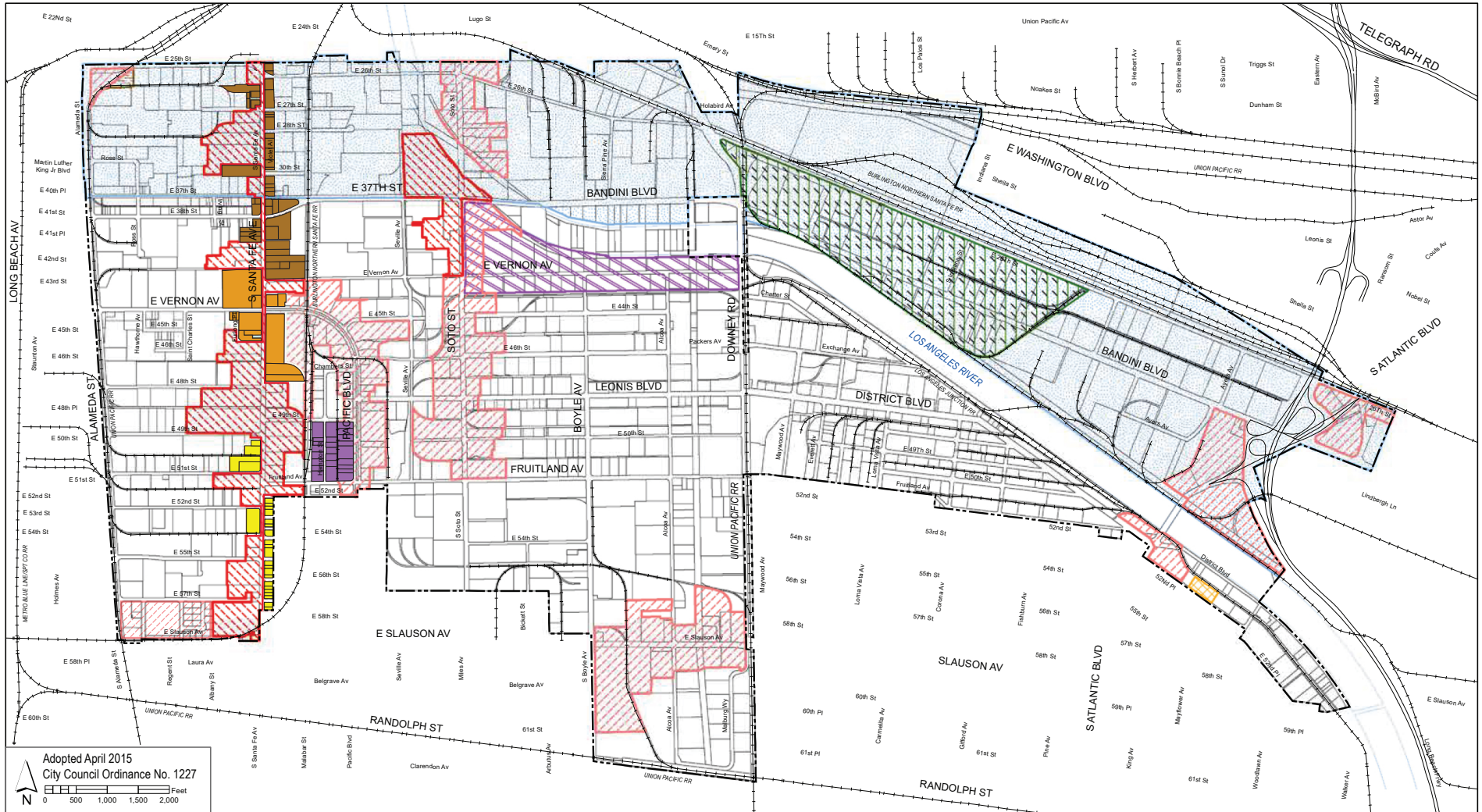
- |                             |                          |                            |
|-----------------------------|--------------------------|----------------------------|
| <b>Land Use Designation</b> | <b>Overlay Districts</b> | <b>Base Map</b>            |
| Industrial                  | Housing                  | Vernon City Boundary       |
| Mixed-Use                   | Emergency Shelter        | Vernon Sphere of Influence |
|                             | Commercial               | Freeway                    |
|                             | Rendering                | Railroad                   |
|                             | Slaughtering             | Los Angeles River          |

Last Update: MGI/Hogie Ireland, October 1, 2014.  
 Source: City of Vernon and Los Angeles County, 2011.

SOURCE: City of Vernon, 2014.

FIGURE 2.0-4





SOURCE: City of Vernon, 2015.

FIGURE 2.0-5

### *Mixed-Use City Center Zone (MU-CC)*

Mixed-Use City Center Zone functions as the “downtown” of Vernon, with a concentration of density, activity and amenity for residents and employees of the City. It builds upon the existing government, educational, religious, and residential uses and is intended to form a hub for retail, food, business and personal services and public spaces which would serve the entire Vernon community. **Table 2.0-2, Permitted Uses – Mixed Use City Center Zone**, details the permitted uses for parcels located in the Mixed-Use City Center Zone. As shown in **Table 2.0-2**, new residential uses would also be designated in this area to bring new life to the streetscape and to support the new service uses. Hospitality and temporary residential uses, production retail, restaurant, market, art gallery, and artisan industrial uses would also be permitted within this zone. At the center of the City Center Zone is a revitalized City Center Hall Plaza. A hierarchy of public existing and designated open spaces would provide a link between the various active commercial uses and the dense residential development, which is located as far away from existing heavy industrial uses as practical. Approximately 400 new residential units could be accommodated.

### **Development Standards**

Future implementation of the zone change would be subject to the proposed development standards for the Mixed-Use City Center Zone. **Table 2.0-3, Proposed Development Standards**, provides a summary of the proposed development standards for the Zone.

**Table 2.0-2**  
**Permitted Uses – Mixed-Use City Center Zone**

Land Use		Use Control	General Regulations & Notes
Primarily Residential Uses			
R1	Single-Family Dwelling	Permitted of Right	Additional development standards include the following: Minimum front setback: 5 ft Maximum height: 3 stories / 35 feet
R2	Multi-Family Dwelling	Permitted of Right	All multi-family residential buildings greater than 20 units shall include 25% live/work units. All multi-family or live/work buildings greater than 100 units shall be conditional.
R3	Hospitality and Temporary Residential	Encouraged	
R4	Live/Work	Permitted of Right	Must contain at least 200 square feet per unit of designated workspace.
R5	Caretaker Residential	Accessory	
R6	Residential Care Facilities	Permitted of Right	
R7	Trailer Park	Prohibited	
R8	Emergency Shelter	Prohibited	

Land Use		Use Control	General Regulations & Notes
O-Primarily Office Uses			
O1	Office Manufacturing	Permitted of Right	
O2	Media Production Studio	Permitted of Right	
O3	Professional Offices	Permitted of Right	
C-Primarily Retail Uses			
C1	Goods Sales	Permitted of Right	
C2	Production Retail Restaurant	Encouraged	
C3	Restaurant	Encouraged	
C4	Market	Encouraged	
C5	Art Galleries	Encouraged	
C6	Nightlife and Entertainment	Conditional	
C7	Local Services	Permitted of Right	
C8	Big Box Retail	Conditional	
C9	Drive-Through Retail	Conditional	Subject to Standards in VMC Chapter 17.112
C10	Adult or Sexually Oriented Business	Prohibited	
C11	Fitness and Recreation	Permitted of Right	
Primarily Production/Industrial Uses			
I1	Artisan Industrial	Encouraged	Allowed activity within R4, O1 and C2. Subject to Standards in VMC Chapter 17.54.
I2	Light Industrial	Permitted or Right	Allowed activity within R4, O1 and C2. Permits Required. Subject to Standards in VMC Chapter 17.54.
G- Primarily Civic/ Institutional Uses			
G1	Public Facilities	Permitted of Right	
G2	Education	Permitted of Right	
G3	Religious	Permitted of Right	

Notes: VMC= Vernon Municipal Code.  
Source: The Arroyo Group, 2023

**Table 2.0-3  
Proposed Development Standards - Mixed-Use City Center Zone**

<b>Use Limitation</b>	
<b>Use Limitations</b>	
Minimum Non-Residential Building Square Footage per Residential Unit	100 square feet
Santa Fe Avenue Ground Floor Frontage Active Uses, minimum <sup>1</sup>	50 percent
<b>Percentage of Total Residential Units that must be Live/Work</b>	
Less than 20 units	None
Over 20 units	25 percent
<b>Height<sup>2</sup></b>	
Maximum, first 50 feet of frontage	Four stories/ 55 feet
Maximum, other	Unlimited
<b>Setbacks</b>	
Santa Fe Ave, minimum	None
Santa Fe Ave, maximum	15 feet
Vernon Ave/Pacific Ave, minimum	5 feet
Vernon Ave/Pacific Ave, maximum	20 feet
Local Street, minimum	None <sup>3</sup>
Local Street, maximum	10 feet
Interior Property Line, minimum	None
<b>Street wall and Frontage</b>	
Building Street wall at Setback <sup>4</sup> , Santa Fe Ave, minimum	80 percent
Building Street wall at Setback <sup>4</sup> , Vernon Ave/Pacific Ave, minimum	60 percent
Transparency <sup>5</sup> , Santa Fe Ave, minimum	50 percent
Transparency <sup>5</sup> , Vernon Ave/Pacific Ave, minimum	25 percent
Transparency <sup>5</sup> , Local Street, minimum	25 percent
<b>Open Space</b>	
Open Space <sup>6</sup> per unit, minimum	150 square feet
Common Open Space <sup>7</sup> per unit, minimum	75 square feet
Ground/Podium Level Open Space, percent of lot, minimum	5 percent

*Notes:*

- The following use classifications are considered “active uses”: C (Retail), O (Office), R3 (Hospitality), G (Institutional). Active uses shall cover at least 50% of the ground floor, excluding parking and loading areas. They shall also cover at least 50% of the building frontage along Santa Fe Avenue. This regulation shall not apply to use classifications, I3, I4, and I5.
- Mechanical equipment, elevator shafts, and architectural features are permitted to exceed the maximum height limit by up to 12 feet with a maximum horizontal dimension of 30 feet.
- Dedication shall be required to establish a 12-foot minimum sidewalk.
- Publicly-accessible open spaces, such as paseos or plazas, shall be exempt from the calculation.
- “Transparency” means of a minimum percentage of that portion of a street-facing exterior wall, which is between 2 feet to 12 feet above the sidewalk grade, which is visually open to the building interior, including un-tinted, unfrosted, and non-reflective windows, doorways and other openings. Walkways, driveways, paseos and plazas are omitted from the calculation.
- “Open Space” means any open-air space which is designed for specific recreational purposes, including active and passive activities. Open space includes yards (except the required front yard setback), courtyards, balconies, decks, porches, roof decks and patios. Open space does not include driveways, aisles, parking spaces or side or rear yards less than eight feet (8') in width or front setback areas.

---

**Use Limitation**

7. "Common Open Space" means usable open space designed and intended for the common use or enjoyment by residents or guests, with a minimum dimension of fifteen feet.
8. Use types I3, I4, and I5, shall meet this requirement through a publicly accessible open space connected to the street and subject to Design Review. A widened sidewalk, enhanced with landscaping, furniture, lighting and/or art, shall be an acceptable form of publicly accessible open space for these uses, even if setbacks are not allowed.

Source: *The Arroyo Group, 2022*

---

### ***Mixed-Use Santa Fe North Zone (MU-N)***

The proposed Mixed-Use Santa Fe North Zone would stretch along Santa Fe Avenue from the City Center to the City limit at 25th Street. **Table 2.0-4, Permitted Uses – Mixed-Use Santa Fe North Zone**, details the permitted uses for parcels located in the Zone. As shown in **Table 2.0-4**, land uses would focus on production retail, as well as stand-alone manufacturing and retail uses, with supportive live/work. The Mixed-Use Santa Fe North Zone will provide linkages to the Downtown Los Angeles Arts and Warehouse District. Office manufacturing, production retail, restaurant, art gallery, and artisan industrial uses are encouraged.

### **Development Standards**

Future implementation of the zone change would be subject to the proposed development standards for the Mixed-Use Santa Fe North Zone. **Table 2.0-5 Proposed Development Standards – Mixed-Use Santa Fe North Zone** provides a summary of the proposed development standards for the Zone.

---

**Table 2.0-4  
Permitted Uses – Mixed-Use Santa Fe North Zone**

Land Use		Use Control	General Regulations & Notes
Primarily Residential Uses			
R1	Single-Family Dwelling	Prohibited	
R2	Multi-Family Dwelling	Permitted of Right	All multi-family residential buildings greater than 20 units shall include 50% live/work units. All multi-family or live/work buildings greater than 100 units shall be conditional
R3	Hospitality and Temporary Residential	Prohibited	
R4	Live/Work	Permitted	Must contain at least 200 square feet per unit of designated workspace.
R5	Caretaker Residential	Accessory	
R6	Residential Care Facilities	Permitted of Right	
R7	Trailer Park	Prohibited	
R8	Emergency Shelter	Permitted of Right	Subject to a maximum of 40 beds

Land Use		Use Control	General Regulations & Notes
<b>O-Primarily Office Uses</b>			
O1	Office Manufacturing	Encouraged	
O2	Media Production Studio	Permitted of Right	
O3	Professional Offices	Permitted of Right	
O4	Medical Offices	Permitted of Right	
<b>C-Primarily Retail Uses</b>			
C1	Goods Sales	Permitted of Right	
C2	Production Retail Restaurant	Encouraged	
C3	Restaurant	Encouraged	
C4	Market	Permitted of Right	
C5	Art Galleries	Encouraged	
C6	Nightlife and Entertainment	Conditional	
C7	Local Services	Permitted of Right	
C8	Big Box Retail	Conditional	
C9	Drive-Through Retail	Conditional	Subject to Standards in VMC Chapter 17.112
C10	Adult or Sexually Oriented Business	Prohibited	
C11	Fitness and Recreation	Permitted of Right	
<b>Primarily Production/Industrial Uses</b>			
I1	Artisan Industrial	Encouraged	Allow activity within R4, O1 and C2. See Section 3.9 for detailed live/work regulations. Subject to Standards in VMC Chapter 17.54.
I2	Light Industrial	Permitted of Right	Allowed activity within R4, O1 and C2. Limited Air Pollution Permits Required. Subject to Standards in VMC Chapter 17.54. Primarily regulating through rules for applicable equipment
<b>G- Primarily Civic/ Institutional Uses</b>			
G1	Community Facilities	Permitted of Right	
G2	Education	Permitted of Right	
G3	Religious	Permitted of Right	

Notes: VMC= Vernon Municipal Code.  
Source: The Arroyo Group, 2023



**Table 2.0-5  
Proposed Development Standards – Mixed-Use Santa Fe North Zone**

<b>Use Limitation</b>	
<b>Use Limitations</b>	
Minimum Non-Residential Building Square Footage per Residential Unit	100 square feet
Santa Fe Avenue Ground Floor Frontage Active Uses, minimum <sup>1</sup>	30 percent
<b>Percentage of Total Residential Units that must be Live/Work</b>	
Less than 20 units	None
Over 20 units	50 percent
<b>Height<sup>2</sup></b>	
Maximum, first 50 feet of frontage	3 stories/ 45 feet
Maximum, other	5 stories/ 65 feet
<b>Setbacks</b>	
Santa Fe Ave, minimum	0 feet <sup>3</sup>
Santa Fe Ave, maximum	10 feet <sup>3</sup>
Vernon Ave/Pacific Ave, minimum	5 feet
Vernon Ave/Pacific Ave, maximum	20 feet
Local Street, minimum	None <sup>4</sup>
Local Street, maximum	15 feet
Interior Property Line, minimum	None
<b>Street wall and Frontage</b>	
Building Street wall at Setback <sup>5</sup> , Santa Fe Ave, minimum	60 percent
Building Street wall at Setback <sup>5</sup> , Vernon Ave/Pacific Ave, minimum	50 percent
Transparency <sup>6</sup> , Santa Fe Ave, minimum	50 percent
Transparency <sup>6</sup> , Vernon Ave/Pacific Ave, minimum	None
Transparency <sup>6</sup> , Local Street, minimum	None
<b>Open Space</b>	
Open Space <sup>7</sup> per unit, minimum	200 square feet
Common Open Space <sup>8</sup> per unit, minimum	100 square feet
Ground/Podium Level Open Space, percent of lot, minimum <sup>9</sup>	10 percent

*Notes:*

- The following use classifications are considered “active uses”: C (Retail), O (Office), R3 (Hospitality), G (Institutional). Active uses shall cover at least 50% of the ground floor, excluding parking and loading areas. They shall also cover at least 50% of the building frontage along Santa Fe Avenue. This regulation shall not apply to use classifications, I3, I4, and I5.
- Mechanical equipment, elevator shafts, and architectural features are permitted to exceed the maximum height limit by up to 12 feet with a maximum horizontal dimension of 30 feet.
- Within the block between 38th Street and Vernon Avenue, on the east side of Santa Fe Avenue, the Santa Fe Avenue setback shall match the setback of adjacent legacy structures, plus or minus three feet.
- Dedication shall be required to establish a 12-foot minimum sidewalk.
- Publicly accessible open spaces, such as paseos or plazas, shall be exempt from the calculation.
- “Transparency” means of a minimum percentage of that portion of a street-facing exterior wall, which is between 2 feet to 12 feet above the sidewalk grade, which is visually open to the building interior, including un-tinted, unfrosted, and non-reflective windows, doorways and other openings. Walkways, driveways, paseos and plazas are omitted from the calculation.
- “Open Space” means any open-air space which is designed for specific recreational purposes, including active and passive activities. Open space includes yards (except the required front yard setback), courtyards, balconies, decks, porches, roof

---

**Use Limitation**

decks and patios. Open space does not include driveways, aisles, parking spaces or side or rear yards less than eight feet (8') in width or front setback areas.

8. "Common Open Space" means usable open space designed and intended for the common use or enjoyment by residents or guests, with a minimum dimension of fifteen feet.
9. Use types I3, I4, and I5, shall meet this requirement through a publicly accessible open space connected to the street and subject to Design Review. A widened sidewalk, enhanced with landscaping, furniture, lighting and/or art, shall be an acceptable form of publicly accessible open space for these uses, even if setbacks are not allowed.

Source: *The Arroyo Group, 2022*

---

### **Mixed-Use Santa Fe South Zone (MU-S)**

Located close to existing residential neighborhoods in Huntington Park, the Mixed-Use Santa Fe South Zone will include residential and live/workspaces at human scale, supported with local services. To maintain the low scale feeling of the area, building height would be limited to three stories for the first 50 feet of parcel depth, with five stories permitted with a minimum 50-foot setback. Uses such as hospitality and temporary residential, office manufacturing, production retail, restaurant, market, art galleries, and artisan industrial are uses that are encouraged.

#### **Development Standards**

Future implementation of the zone change would be subject to the proposed development standards for the Zone. **Table 2.0-7, Proposed Development Standards – Mixed-Use Santa Fe South Zone**, provides a summary of the proposed development standards for the Zone.

---

**Table 2.0-6  
Permitted Uses – Mixed-Use Santa Fe South Zone**

<b>Land Use</b>	<b>Use Control</b>	<b>General Regulations &amp; Notes</b>
Primarily Residential Uses		
R1	Single-Family Dwelling	Prohibited
R2	Multi-Family Dwelling	Permitted of Right All multi-family residential buildings greater than 20 units shall include 50% live/work units. All multi-family or live/work buildings greater than 100 units shall be conditional
R3	Hospitality and Temporary Residential	Encouraged
R4	Live/Work	Permitted of Right Must contain at least 200 square feet per unit of designated workspace.
R5	Caretaker Residential	Accessory
R6	Residential Care Facilities	Permitted of Right
R7	Trailer Park	Prohibited
R8	Emergency Shelter	Prohibited

Land Use		Use Control	General Regulations & Notes
O-Primarily Office Uses			
O1	Office Manufacturing	Encouraged	
O2	Media Production Studio	Permitted of Right	
O3	Professional Offices	Permitted of Right	
C-Primarily Retail Uses of Right			
C1	Goods Sales	Permitted of Right	
C2	Production Retail Restaurant	Encouraged	
C3	Restaurant	Encouraged	
C4	Market	Encouraged	
C5	Art Galleries	Encouraged	
C6	Nightlife and Entertainment	Conditional	
C7	Local Services	Permitted of Right	
C8	Big Box Retail	Conditional	
C9	Drive-Through Retail	Conditional	Standards in VMC Chapter 17.112
C10	Adult or Sexually Oriented Business	Permitted of Right	
Primarily Production/Industrial Uses			
I1	Artisan Industrial	Encouraged	Allowed activity within R4, O1 and C2.
I2	Light Industrial	Permitted of Right	Allowed activity within R4, O1 and C2. Limited Air Pollution Permits Required. Primarily regulating through rules for applicable equipment.
G- Primarily Civic/ Institutional Uses			
G1	Public Facilities	Permitted of Right	
G2	Education	Permitted of Right	
G3	Religious	Permitted of Right	

Notes: VMC= Vernon Municipal Code.

Source: The Arroyo Group, 2023

**Table 2.0-7  
Proposed Development Standards – Mixed-Use Santa Fe South Zone**

<b>Use Limitation</b>	
<b>Use Limitations</b>	
Minimum Non-Residential Building Square Footage per Residential Unit	100 square feet
Santa Fe Avenue Ground Floor Frontage Active Uses, minimum <sup>1</sup>	50 percent
<b>Percentage of Total Residential Units that must be Live/Work</b>	
Less than 20 units	None
Over 20 units	30 percent
<b>Height<sup>2</sup></b>	
Maximum, first 50 feet of frontage	3 stories/ 45 feet
Maximum, other	5 stories/ 65 feet
<b>Setbacks</b>	
Santa Fe Ave, minimum/ maximum	0 feet <sup>3</sup>
Local Street, minimum	None <sup>4</sup>
Local Street, maximum	15 feet
Interior Property Line, minimum	None
<b>Street wall and Frontage</b>	
Building Street wall at Setback <sup>5</sup> , Santa Fe Ave, minimum	80 percent
Transparency <sup>6</sup> , Santa Fe Ave, minimum	50 percent
Transparency <sup>6</sup> , Local Street, minimum	25 percent
<b>Open Space</b>	
Open Space <sup>7</sup> per unit, minimum	150 square feet
Common Open Space <sup>7</sup> per unit, minimum	75 square feet
Ground/Podium Level Open Space, percent of lot, minimum <sup>9</sup>	5 percent

1. The following use classifications are considered “active uses”: C (Retail), O (Office), R3 (Hospitality), G (Institutional). Active uses shall cover at least 50% of the ground floor, excluding parking and loading areas. They shall also cover at least 50% of the building frontage along Santa Fe Avenue. This regulation shall not apply to use classifications, I3, I4, and I5.
2. Mechanical equipment, elevator shafts, and architectural features are permitted to exceed the maximum height limit by up to 12 feet with a maximum horizontal dimension of 30 feet.
3. Setback on Santa Fe Avenue is prohibited, except on a parcel adjacent to a legacy structure (see definition in Section 5.8). Within 100 feet of a legacy structure, the Santa Fe Avenue setback shall match the legacy structure setback, plus or minus three feet.
4. Dedication shall be required to establish a 12-foot minimum sidewalk.
5. Publicly accessible open spaces, such as paseos or plazas, shall be exempt from the calculation.
6. “Transparency” means of a minimum percentage of that portion of a street-facing exterior wall, which is between 2 feet to 12 feet above the sidewalk grade, which is visually open to the building interior, including un-tinted, unfrosted, and non-reflective windows, doorways and other openings. Walkways, driveways, paseos and plazas are omitted from the calculation.
7. “Open Space” means any open-air space which is designed for specific recreational purposes, including active and passive activities. Open space includes yards (except the required front yard setback), courtyards, balconies, decks, porches, roof decks and patios. Open space does not include driveways, aisles, parking spaces or side or rear yards less than eight feet (8') in width or front setback areas.
8. “Common Open Space” means usable open space designed and intended for the common use or enjoyment by residents or guests, with a minimum dimension of fifteen feet.
9. Use types I3, I4, and I5, shall meet this requirement through a publicly accessible open space connected to the street and subject to Design Review. A widened sidewalk, enhanced with landscaping, furniture, lighting and/or art, shall be an acceptable form of publicly accessible open space for these uses, even if setbacks are not allowed.

Source: *The Arroyo Group, 2022*

### *Mixed-Use Pacific Hampton Zone (MU-PH)*

The Mixed-Use Pacific Hampton Zone, the only mixed-use zone located off Santa Fe Avenue, is comprised of smaller-scale, 1940s single-story industrial buildings which are slowly being transformed into production studios, creative offices, commercial kitchens and other office and industrial type uses.

As shown in **Table 2.0-8, Permitted Uses – Mixed-Use Pacific Hampton Zone**, permitted uses include emergency shelters, manufacturing, media production studios, professional offices, production retail, restaurants, art galleries, local services, artisan industrial, light industrial, public facilities, education and religious uses. Office manufacturing, media production studio, and gallery uses are encouraged.

### **Design Standards**

Future implementation of the zone change would be subject to the proposed development standards for the Zone. **Table 2.0-9, Proposed Development Standards – Mixed-Use Pacific Hampton Zone**, provides a summary of the proposed development standards for the Zone.

**Table 2.0-8  
Permitted Uses – Mixed Use Pacific Hampton Zone**

<b>Land Use</b>	<b>Use Control</b>	<b>General Regulations &amp; Notes</b>
<b>Primarily Residential Uses</b>		
R1	Single-Family Dwelling	Prohibited
R2	Multi-Family Dwelling	Prohibited
R3	Hospitality and Temporary Residential	Prohibited
R4	Live/Work	Prohibited
R5	Caretaker Residential	Accessory
R6	Residential Care Facilities	Prohibited
R7	Trailer Park	Prohibited
R8	Emergency Shelter	Permitted of Right      Maximum of 40 beds
<b>O-Primarily Office Uses</b>		
O1	Office Manufacturing	Encouraged
O2	Media Production Studio	Encouraged
O3	Professional Offices	Permitted of Right
<b>C-Primarily Retail Uses</b>		
C1	Goods Sales	Accessory or Conditional
C2	Production Retail Restaurant	Permitted of Right
C3	Restaurant	Permitted of Right
C4	Market	Prohibited
C5	Art Galleries	Encouraged

Land Use	Use Control	General Regulations & Notes	
C6	Nightlife	Not Permitted	
C7	Personal Services	Prohibited	
C8	Big Box Retail	Conditional	
C9	Drive-Through Retail	Conditional	Standards in VMC Chapter 17.112
C10	Adult or Sexually Oriented Business	Prohibited	
C11	Fitness and Recreation	Permitted of Right	
Primarily Production/Industrial Uses			
I1	Artisan Industrial	Permitted of Right	
I2	Light Industrial	Permitted of Right	Limited Air Pollution Permits Required. Primarily regulating through rules for applicable equipment.
G- Primarily Civic/ Institutional Uses			
G1	Community Facilities	Permitted of Right	
G2	Trade School	Permitted of Right	
G3	Religious Use	Permitted of Right	

Notes: VMC= Vernon Municipal Code.  
Source: The Arroyo Group, 2023

**Table 2.0-9**  
**Proposed Development Standards – Mixed-Use Pacific Hampton Zone**

Use Limitation	
Use Limitations	
Ground Floor Frontage Active Uses, minimum <sup>1</sup>	None
Height <sup>2</sup>	
Maximum, first 50 feet of frontage	2 stories/ 40 feet
Maximum, other	3 stories/ 50 feet
Setbacks	
Hampton Street, minimum/maximum	0 feet <sup>3</sup>
Santa Fe Ave, minimum/ maximum	Prevailing <sup>3</sup>
Fruit Avenue, minimum	5 feet
Fruit Avenue, maximum	20 feet
Local Street, minimum	None <sup>4</sup>
Local Street, maximum	15 feet
Interior Property Line, minimum	None
Street wall and Frontage	
Building Street wall at Setback <sup>5</sup> , Hampton St/Pacific Avenue, minimum	60 percent
Building Street wall at Setback <sup>5</sup> , Fruit Avenue, minimum	50 percent
Transparency <sup>6</sup> , minimum	None
Open Space	
Ground/Podium Level Open Space <sup>7</sup> , percent of lot, minimum	5 percent

---

**Use Limitation**


---

## Notes:

1. The following use classifications are considered “active uses”: C (Retail), O (Office), R3 (Hospitality), G (Institutional). Active uses shall cover at least 50% of the ground floor, excluding parking and loading areas. They shall also cover at least 50% of the building frontage along Santa Fe Avenue. This regulation shall not apply to use classifications, I3, I4, and I5.
2. Mechanical equipment, elevator shafts, and architectural features are permitted to exceed the maximum height limit by up to 12 feet with a maximum horizontal dimension of 30 feet.
3. The Pacific Boulevard setback shall match the setback of adjacent legacy structures, plus or minus three feet.
4. Dedication shall be required to establish a 12-foot minimum sidewalk.
5. Publicly accessible open spaces, such as paseos or plazas, shall be exempt from the calculation.
6. “Transparency” means of a minimum percentage of that portion of a street-facing exterior wall, which is between 2 feet to 12 feet above the sidewalk grade, which is visually open to the building interior, including un-tinted, unfrosted, and non-reflective windows, doorways and other openings. Walkways, driveways, paseos and plazas are omitted from the calculation.
7. “Open Space” means any open-air space which is designed for specific recreational purposes, including active and passive activities. Open space includes yards (except the required front yard setback), courtyards, balconies, decks, porches, roof decks and patios. Open space does not include driveways, aisles, parking spaces or side or rear yards less than eight feet (8’) in width or front setback areas.

---

Source: The Arroyo Group, 2022

---

## Land Use Demand and Distribution

The overall development potential allowed under the Project is summarized below in **Table 2.0-10, Overall Project Development Summary**. For the purpose of analysis in this EIR, the total development potential resulting from implementation of the zone changes are analyzed.

**Table 2.0-10  
Overall Project Development Summary**

Land Use Category	Existing Conditions	Proposed New Development	Future With Project
Residential (units)	13	874	887
Residential (square footage)	5,046	805,644	810,690
Commercial	6,930	120,059	126,989
Production Retail	-	253,021	253,021
Research and Development	-	360,429	360,429
Industrial	14,942,363	(575,549)	14,366,814
<b>Total</b>	<b>14,954,339</b>	<b>963,604</b>	<b>15,917,943</b>

---

Source: The Arroyo Group, 2023

---

As shown in **Table 2.0-11**, the net development by 2040 is anticipated to be:

- 874 residential units;
- 360,429 square feet of office/research and development;

- 253,021 square feet of production retail;
- A net increase in commercial space of 120,059 square feet; and
- A decrease of 575,549 square feet of industrial space.

The Project would support mixed use developments while minimizing potential conflicts with existing industrial uses through the following additional regulations:

- New residential uses shall be separated from any adjacent heavy industrial uses located outside a mixed-use zone with acoustic and visual buffers. Unless the future development applicants can demonstrate that a different strategy will be similarly effective, the buffer shall consist of a minimum six-foot high wall constructed of solid masonry and partially or fully covered with hedges, ivy, bamboo or other similar softening material, and a minimum five-foot wide screen landscaping strip consisting of evergreen trees or an evergreen trellis structure of at least six feet in height.
- Habitable residential spaces and windows should be oriented away from adjacent industrial uses to the greatest extent possible.
- Open spaces should be oriented away from adjacent industrial uses. Should they be constructed in an area which is open to adjacent industrial properties, screening should be used to lessen the impacts of industrial activities on the residential properties.

### ***Parking Standards***

The Project would implement parking standards associated with the specified land uses within the Project Area. These parking standards would maximize the efficiency of parking and reduce barriers to future development while accommodating future needs in the Project Area. **Table 2.0-11, Vehicle Parking Standards by Use**, details the required number of parking spaces within the area by land use. **Table 2.0-12, Bicycle Parking Standards by Use**, details the required number of parking spaces by land use.



**Table 2.0-11  
Vehicle Parking Standards by Use**

Land Use		Vehicle Spaces Required
Primarily Residential Uses		
R1	Single-Family Dwelling	N/A
R2	Multi-Family Dwelling	General: 1 Space/DU Covenanted Affordable: 0.5 spaces/DU Supported Housing None
R3	Hospitality and Temporary Residential	0.7 per unit/key
R4	Live/Work	1 Space/DU
R5	Caretaker Residential	None
R6	Residential Care Facilities	0.25 per bed
R7	Trailer Park	N/A
R8	Emergency Shelter	None
O-Primarily Office Uses		
O1	Office Manufacturing	1 Space/KSF
O2	Media Production Studio	1 Space/KSF
O3	Professional Offices	1.6 Spaces/KSF
O4	Medical Offices	2.9 Spaces/KSF
C-Primarily Retail Uses		
C1	Goods Sales	1.7 Spaces/KSF
C2	Production Retail Restaurant	0.7 Spaces/KSF
C3	Restaurant	5.0 Spaces/KSF
C4	Market	1.9 Spaces/KSF
C5	Art Galleries	0.7 Spaces/KSF
C6	Nightlife and Entertainment	5.0 Spaces/KSF
C7	Local Services	3.0 Spaces/KSF
C8	Big Box Retail	Parking study required
C9	Drive-Through Retail	Requirement of underlying use
C10	Adult or Sexually Oriented Business	5.0 Spaces/KSF
Primarily Production/Industrial Uses		
I1	Artisan Industrial	0.7 Spaces/KSF
I2	Light Industrial	0.6 Spaces/KSF
I3	Medium Industrial	1.0 Spaces/KSF
I4	Heavy Industrial	Subject to all parking, loading, maneuvering and other standards of VMC
I5	Warehousing	17.56
G- Primarily Civic/ Institutional Uses		
G1	Public Facilities	1.0 Spaces/KSF
G2	Education	0.3 per anticipated student
G3	Religious	0.2 per seat or 5.0 Spaces/KSF

Land Use	Vehicle Spaces Required
<i>Notes:</i>	
1. DU=Dwelling Unit	
2. Covenanted to lower-income households as defined in Health and Safety Code 50079.5	
3. Requirement includes parking requirement for any commercial or industrial activities located within the unit	
4. KSF= 1,00 square feet of gross floor area	
<i>Source: The Arroyo Group, 2023</i>	

**Table 2.0-12  
Bicycle Parking Standards by Use**

Land Use	Bicycle Spaces Required
R Residential Uses	0.5/unit
O Office	1 per KSF
C1, C2, C4, C5, C7, C8 Retail	1 per KSF
C3, C6 Restaurant and Entertainment	3 per KSF
I Industrial	1 per KSF
G Civic or Institutional	1 per KSF

*Notes:*

1. KSF= 1,00 square feet of gross floor area

*Source: The Arroyo Group, 2023*

## 2.3 PROJECT OBJECTIVES

CEQA requires that an environmental impact report include a statement of the objectives sought by a proposed project (Section 15124(b) of the *State CEQA Guidelines*). The Project includes the following project objectives:

- Objective 1: Reinvigorate the City's competitive advantage as a center of production.
- Objective 2: Strengthen and provide long-term stability to the City's fiscal position.
- Objective 3: Increase the residential population in order to increase access to proportionally allocated Federal and State funding, to strengthen the City's governance, and help meet regional housing needs.
- Objective 4: Diversify and reorient the Westside's land uses to take advantage of changes in the economic landscape of Southern California.
- Objective 5: Increase amenities available to local residents and workers.

## 2.4 PROJECT SUMMARY

### 2.4.1 Programmatic EIR

The Project is an amendment to the *City of Vernon General Plan* (December 2007) and Zone Changes to the City of Vernon Zoning Ordinance (Project). The Project would provide regulatory guidance and standards for future development in the Project Area in the vicinity of Santa Fe Avenue. Project implementation could result in the future conversion of its existing industrial buildings to live/work and production retail, and also construct new retail and residential uses in the City of Vernon.

#### *Approach to CEQA Analysis*

This program EIR approaches the environmental analysis based on the overall development pattern and character described above. As a program EIR, it describes the potential impacts that could result from the implementation of the Project over a 20-year horizon through 2040. Subsequent projects that are within the development envelope considered in this Program EIR may not be subject to additional environmental review or to a more limited environmental review. See **Section 1.0, Introduction**, for a discussion of the CEQA process.

Section 15126.2 of the *State CEQA Guidelines* requires EIRs to focus on the significant “direct and indirect” and “short-term and long-term” effects of a project. Although the exact nature of Project Area development through 2040 is not known, development forecasts have been developed based on reasonably expected development to provide a basis for analysis of the Project’s environmental impacts. The actual rate and amount of development will depend upon market conditions and regulatory processes.

As shown in **Table 2.0-13, Population, Housing, and Jobs Projections Without the Project**, the City of Vernon’s population and number of households are expected remain the same in 2040 without implementation of the Project. The Southern California Association of Governments (SCAG) does project a slight increase in the number of employees. The number of employees is projected to increase from 43,565 in 2022 to 44,361 in 2040, a 1.8 percent increase.

**Table 2.0-13  
Population, Housing, and Jobs Projections Without the Project**

	2022		2040		2021-2040 Growth	
	City of Vernon	LA County	City of Vernon	LA County	City of Vernon	LA County
Population <sup>1</sup>	222	10,380,000	222	11,404,000	0%	10% (1,024,000)
Households <sup>1</sup>	74	3,457,000	74	3,981,000	0%	15% (524,000)
Employment <sup>2</sup>	43,565	4,853,000	44,361	5,272,000	1.8% (795)	9% (419,000)

Source:

<sup>1</sup> U.S. Census

<sup>2</sup> Southern California Association of Governments. 2020. Connect SoCal: Demographics and Growth Forecast.

[https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial\\_demographics-and-growth-forecast.pdf?1606001579](https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579) \*

\* SCAG population projection has been projected linearly to determine 2021 and 2040 conditions

Implementation of the Project could add approximately 2,486 residents to the Project Area, the City of Vernon, and County of Los Angeles. **Table 2.0-14, Population and Housing Increase Associated with the Project**, shows details on how the Project could increase housing and population in the City and County.

**Table 2.0-14  
Population and Housing Increase Associated with the Project**

	Project Area <sup>1</sup>	City of Vernon <sup>2</sup>	Los Angeles County <sup>3</sup>
<b>Population</b>			
Existing (2022)	37	222	10,014,009
Proposed (2040)	2,486	2,486	2,486
New Total	2,523	2,708	10,016,495
<b>Housing</b>			
Existing (2021)	13	76	3,641,809
Proposed (2040)	874	874	874
New Total	886	950	3,642,683

Source:

<sup>1</sup> The Arroyo Group

<sup>2</sup> City of Vernon 2021-2029 Housing Element, proposed population was calculated based on the City's average household size of 2.92 and occupancy rate of 97.4%

<sup>3</sup> US Census

## 2.5 INTENDED USES OF THE PEIR

This PEIR will serve as the primary source of environmental information for the actions and approvals associated with the City of Vernon, the *City of Vernon General Plan*, and the City of Vernon Zoning Code. In accordance with Section 21002.1 of CEQA, the purpose of this PEIR is to provide the City, serving as the lead agency, information on: the potentially significant environmental impacts that would result from implementation of the Project; alternatives to the Project; and mitigation measures, which may reduce or avoid any significant effects. This PEIR will also be used as an information document by other public agencies, in connection with any approvals or permits necessary for construction and operation of the Project.

The EIR is intended to serve as a Program EIR, as defined in Section 15168 of the *State CEQA Guidelines*, for use by the City as lead agency and by responsible agencies as needed. The PEIR will evaluate the broad-scale impacts of the Project regulations and may evaluate project-level impacts where more detail is available at this time. PEIRs are typically prepared for public policy programs such as a general plan or new zones; for a series of related actions that can be characterized as one large project; or for large-scale, multi-phase development projects such as specific plans. In a PEIR, CEQA allows the general analysis of broad environmental effects of the program, with the acknowledgement that subsequent, project-specific environmental review may be required for aspects or portions of the program at the time of project implementation, in accordance with Section 15162 of the *State CEQA Guidelines*. The PEIR would serve as the first-tier environmental analysis. The PEIR can be incorporated by reference into subsequently prepared environmental documentation to address issues such as cumulative impacts and growth-inducing impacts, allowing the subsequent documents to focus on new or site-specific impacts pursuant to Section 15168(d) of the *CEQA Guidelines*. To assess the potential broad-scale environmental impacts that may result from implementation of the Project, development assumptions have been made at this time and are described in the above sections.

Development projects resulting from implementation of the Project would require subsequent approvals and permits, including, in some cases, additional CEQA review.

## 2.6 REVIEWS AND APPROVALS

To be approved and implemented, the Project requires approval of the following actions by the City:

- Change of Zone for the Project Area, and
- Amendments to the Vernon General Plan.

This PEIR may be used by various governmental decision-makers for discretionary permits and actions that are necessary or may be requested in connection with implementation of future development projects pursuant to the proposed Project. The state or local agencies that may rely upon the information contained in this PEIR when considering approval of permits may include, but are not limited to, the following:

- South Coast Air Quality Management District (point source emissions permits);
- California Regional Water Quality Control Board (National Pollutant Discharge Elimination System [NPDES] permit);
- State Water Resources Control Board (General Construction Activity Stormwater Permit); and
- California Department of Toxic Substance Control (provide clearance for school expansions/developments).

## 2.7 REFERENCES

City of Vernon. *City of Vernon General Plan*. 2015. Available online at:

<https://www.cityofvernon.org/home/showpublisheddocument/1306/637635880850570000>, accessed October 31, 2022.

State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2022*. Available online at: <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/>, accessed October 31, 2022.

## 3.0 ENVIRONMENTAL IMPACT ANALYSIS

---

*This section of the Program Environmental Impact Report (PEIR) evaluates the potential of the Project to result in significant impacts to the environment. This section provides a full scope of environmental analysis in conformance with the California Environmental Quality Act Guidelines (CEQA Guidelines).*

### SCOPE OF THE ENVIRONMENTAL IMPACT ANALYSIS

In accordance with Section 15126 of the *State CEQA Guidelines*, **Chapter 3.0, Environmental Impact Analysis**, of this Program EIR provides an analysis of the direct, indirect, project and cumulative, environmental effects of future development that complies with the Project with respect to existing conditions at the time the Notice of Preparation (NOP) was published (**Appendix 1.0-1**). The determination of whether an impact is significant has been made based on the physical conditions established at the time the NOP was published (*State CEQA Guidelines*, Section 15125(a)). The Project is evaluated in the PEIR at a programmatic level, in accordance with *State CEQA Guidelines*, Section 15168. As previously stated in **Chapter 1.0, Introduction**, the PEIR analysis is not intended to focus on the site-specific construction and operation details of each future development within the Project Area. Rather, this PEIR serves as a first-tier environmental document that focuses on the effects of implementing the overall Project to provide a comprehensive document that addresses environmental concerns of the overall effects of buildout of the Project.

The following environmental resources are assessed in this chapter in accordance with Appendix G of the *State CEQA Guidelines*:

- Aesthetics
- Air Quality
- Cultural Resources and Tribal Cultural Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise and Vibration
- Population and Housing
- Public Services and Recreation
- Transportation and Traffic
- Utilities and Services Systems (including Energy)

### Approach to Environmental Analysis

**Section 3.1** through **Section 3.12** of this PEIR contain discussions of the environmental setting, regulatory framework, and potential impacts related to construction and operation of future development that is in accordance with the Project. The environmental evaluation includes a project analysis (i.e., Project) and a cumulative analysis. If potential significant impacts are identified, feasible mitigation measures are

recommended. The analysis also includes a level of impact after the implementation of mitigation measures.

The project analysis evaluates the construction of up to 874 residential dwelling units and 157,960 square feet of new non-residential uses. The analysis also takes into account the various development standards and regulations that are included within the Project. A detailed discussion of the development standards is included in **Chapter 2.0, Project Description**.

The cumulative analysis was prepared in accordance with Section 15130 of the *State CEQA Guidelines* that requires an EIR to discuss cumulative impacts of a project when the incremental effects of a project are cumulatively considerable. Cumulative impacts are defined as an impact that is created as a result of the combination of the project evaluated in this PEIR together with other projects causing related impacts. Cumulatively considerable means that the incremental effects of an individual 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. According to Section 15130(b) of the *State CEQA Guidelines*, elements considered necessary to provide an adequate discussion of cumulative impacts of a project include either:

- (1) list of past, present, and probable future projects producing related or cumulative impacts; or
- (2) a summary of projection contained in an adopted General Plan or related planning document which is designed to evaluate regional or area-wide conditions.

The cumulative analysis discussed in this PEIR is provided within each technical section in **Chapter 3.0**. The geographic context for the cumulative analysis is specified for each environmental issue addressed in each section. Unless otherwise identified in the environmental issue addressed in this Chapter, a summary of projections contained in the Southern California Association of Governments *Regional Transportation Plan / Sustainable Communities Strategy (SCAG RTP/SCS)* was used to assess potential environmental effects. These forecasts provide the anticipated planned population, housing, and employment growth in the region. **Table 3.0-1, Cumulative Growth Projections for the City of Vernon**, includes the forecast for Vernon.



**Table 3.0-1**  
**Cumulative Growth Projections for the City of Vernon**

Jurisdiction	Population (Persons)	Households	Employment (jobs)
Vernon	200	100	44,600

*Source: SCAG Final Connect SoCal Demographics and Growth Forecast Technical Report, September 3, 2020*

*[https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial\\_demographics-and-growth-forecast.pdf?1606001579](https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579)*

*Note: Forecast numbers are for 2045 while the horizon year of the Project is 2040, these forecasts are used to define the cumulative context of the project and do not represent any one project in particular.*

The cumulative analysis included an evaluation of the combined effect of the Project along with future growth in accordance with the projections provided in **Table 3.0-1**. In addition, if the combined cumulative effect is significant then a discussion of the project's contribution to the significant cumulative effect is provided. If the project's contribution is determined to be less than cumulatively considerable then the project would have a less than significant cumulative impact. Although not required, the cumulative analysis also evaluated the project's contribution to a less than significant cumulative effect. This determination consistently found that the project's contribution to a less than significant cumulative effect would be less than cumulatively considerable.

The analysis in this Chapter also includes the recommendation of mitigation measures to be implemented by the Project if potential environmental effects were identified as significant under the project-specific analysis or if the Project's contribution to significant cumulative effects were determined to be cumulatively considerable under the cumulative analysis.

A discussion of the level of impact after the implementation of mitigation measures is provided in the Significance Determination. If a project-specific impact or a project's contribution to a cumulative impact did not require mitigation measures, then a statement of the level of impact (i.e., No impact or Less than significant impact) is provided.

### **Organization of Environmental Issue Area**

Implementation of the Project will result in demolition, construction and operational activities. The potential environmental issues associated with each environmental analysis that is addressed in **Chapter 3.0** contain the following components.

### ***Environmental Setting***

This section identifies and describes the existing physical environmental conditions of the Project Area and vicinity associated with each of the impact sections. According to Section 15125(a) of the *State CEQA Guidelines*, an EIR must include a description of the existing physical environmental conditions in the vicinity of the proposed project to provide the “baseline condition” against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the NOP is published. The NOP for the Project was published in April 2022, which is considered the baseline for the analysis contained in this PEIR.

### ***Regulatory Framework***

The regulatory framework provides an understanding of the regulatory environment that exists prior to the implementation of the project. The regulatory framework that was used in this PEIR included federal, state, regional, and local regulations and policies applicable to the Project Area.

### ***Impacts and Mitigation Measures***

This section describes environmental changes to the existing physical conditions that may occur if the proposed project is implemented and evaluates these changes with respect to the significance criteria. This section also includes a project impact analysis and a cumulative impact analysis. Mitigation measures are identified, if determined feasible, for significant project impacts and cumulative impacts where the project’s contribution was determined to be cumulatively considerable. The mitigation measures are those measures that could avoid, minimize, or reduce an environmental impact. This section also includes a significance determination after mitigation that describes the level of impact significance remaining after mitigation measures are implemented.

### **Significance Criteria**

Significance criteria have been developed for each environmental resource in accordance with Appendix G of the *State CEQA Guidelines*. The criteria are defined at the beginning of each impact analysis section. Impacts are categorized as follows:

- **Significant:** mitigation measures, if feasible, shall be recommended to reduce potential impacts;
- **Less than Significant with Mitigation:** mitigation measures are identified that will reduce impacts below the threshold of significance;

- **Less than Significant:** mitigation measures are not required under CEQA but may be recommended;  
or
- **No Impact:** mitigation measures are not required.

### *References*

Sources relied upon for each environmental topic analyzed in this document are provided at the end of each section.

### INTRODUCTION

*This section describes the existing visual resources within the City, identifies the regulatory framework with respect to regulations that address visual resources, and evaluates the significance of the potential changes to visual resources that could result from implementation of the Project. In addition, to reduce impacts, mitigation measures are included when applicable.*

#### 3.1.1 ENVIRONMENTAL SETTING

##### 3.1.1.1 Definition of Terms

To provide context for the analysis presented below, a discussion of general definitions is necessary. Terms to be discussed include “viewsheds” and “visual quality,” both key factors in addressing impacts to aesthetics and views. The environmental setting also generally describes those resources that are regionally significant and lists the designated scenic highways, byways, and vista points.

The aesthetic value of an area is a measure of its visual character and quality, combined with the viewer response to the area. The scenic quality component can best be described as the overall impression that an individual viewer retains after driving through, walking through, or flying over an area. Viewer response is a combination of viewer exposure and viewer sensitivity. Viewer exposure is a function of the number of viewers, the number of views seen, the distance of the viewers, and the viewing duration. Viewer sensitivity relates to the extent of the public’s concern for particular viewsheds. These terms and criteria are described in detail below.

**Viewshed:** A viewshed is a geographic area composed of land, water, biotic, and/or cultural elements that may be seen from one or more viewpoints and has inherent scenic qualities and/or aesthetic value as determined by those who view it. The extent of a viewshed can be limited by a number of intervening elements, including trees and other vegetation, built structures, or topography such as hills and mountains.

**Visual Quality:** Visual quality refers to the character of the landscape, which generally gives visual value to a setting. It is useful to think of scenic resources in terms of “typical views” seen throughout an area, because scenic resources are rarely encountered in isolation. A typical view may include several types of scenic resources, including both natural and man-made elements. It is also important to distinguish between public and private views. Private views are views seen from privately owned land and are typically viewed by individual viewers, including views from private residences.

Public views are experienced by the collective public. These include views of significant landscape features, as seen from public viewing spaces, not privately-owned properties. CEQA (Public Resources Code § 21000 et seq.) case law has established that, in general, protection of public views is emphasized. For example, in *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal. App. 4th 720, 734, the court determined the following:

*“we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in Topanga Beach Renters Assn. v. Department of General Services (1976) 58 Cal.App.3d 188 [129 Cal.Rptr. 739]: “[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] would adversely affect particular persons but whether [the project] would adversely affect the environment of persons in general.”*

Therefore, for this analysis, only public views are considered in analyzing the visual impacts of the Project.

### 3.1.1.2 Regional and Local Setting

The City of Vernon is an incorporated municipality in Los Angeles County, located five miles south of Downtown Los Angeles. Vernon is bordered by the City of Los Angeles to the north and west, Huntington Park, Belle, Maywood, to the South, Commerce to the East, and East Los Angeles to the northeast.

Originally an agricultural and residential community, Vernon was incorporated in 1905 as an industrial city, which it remains today. It was the first exclusively industrial city in the Southwestern United States and is well connected to industrial areas of adjacent communities and the region as a whole. It is bounded by several nearby freeways, such as: Interstate 10 (I-10), I-110, I-710, I-5, and I-105. Vernon is home to an extensive rail network, most notably the Alameda Corridor, which connects the ports of Los Angeles and Long Beach to the rest of the region and nation beyond. Vernon is also located 16 miles northeast of Los Angeles International Airport, another major hub for international cargo trade.

The Project is proposed in the western portion of the City. The Project Area encompasses 1.2 square miles, or approximately 780 acres of primarily industrial and commercial development, transportation infrastructure, small pockets of residential. The Project Area roughly corresponds to a 1.75 by 0.75-mile area bound generally to the north by 27<sup>th</sup> Street; to the east by the Burlington Northern Santa Fe Railroad and Seville Avenue; to the south by Slauson Avenue; and to the west by the Alameda Corridor.

The City of Vernon is almost completely built out and is currently entirely designated as one land use category: Industrial. There are five Overlay Districts that permit specialized uses within the Industrial category: Commercial, Rendering, Slaughtering, Housing, and Emergency Shelter. The Industrial designation allows a broad range of activities to maintain the City's status as a regional manufacturing and industrial center. The majority of industrial uses within the City are light manufacturing, warehousing, distribution, and storage. Heavy manufacturing is scattered throughout the City. The majority of buildings within the City are large, one-story buildings that range from 50,000 to 300,000 square feet. The prevalence of industrial uses creates long continuous blocks of buildings with minimal landscaping or articulation that are generally unwelcoming to pedestrians. Most of the buildings are oriented towards the street due to the industrial uses. Both the age and the quality of the existing buildings varies greatly throughout the Project Area with some older buildings being well maintained

Vernon's development as an industrial city centered in the 1920's, and the oldest buildings in the City dates to this time. However, there is a significant range in the age of buildings within the City, including significant development within the latter half of the 20<sup>th</sup> century and early part of the 21<sup>st</sup> century. Most of the buildings within the City were built in the span between 1933 and 1983.

Commercial Overlay Districts are established along Santa Fe Avenue, Pacific Boulevard, Atlantic Boulevard, and Slauson Avenue, and along portions of Soto Street. These districts currently accommodate retail, commercial, service, and restaurant uses in the Project Area. Small pockets of residential uses are located along Vernon Avenue and are composed of one and two-story single-family homes and small two-story multifamily buildings. The Vernon Village Park Apartments, the most recently constructed housing in Vernon in the eastern part of the City, was completed in 2015, and is comprised of a cluster of 12 two-story buildings. There is currently no buffer between the residential and industrial uses.

The Malabar Yard, operated by BNSF Railway, is located in the eastern part of the Project Area, between Santa Fe Avenue and Hampton Street.

The Los Angeles River runs through the City of Vernon. The river is located approximately half a mile from the eastern portion of the Project Area. The open spaces that exist in Vernon are limited to privately owned landscaping around buildings, utility easements, rail yards, and the Los Angeles River. No public open space exists within the Project Area.

### ***Views and Scenic Resources***

The City, including the Project Area, is relatively flat. Elevation ranges from approximately 175-210 feet above mean sea level. The Project Area is located approximately 13 miles east of the Pacific Ocean and

thus views of the ocean are obstructed by existing structures and do not constitute scenic vistas. Additionally, the Project Area is approximately 11 miles southeast of the nearest mountain range, the Verdugo Mountains, and 17 miles southwest of the San Gabriel Mountains. The view of the Verdugo Mountains and San Gabriel Mountains is a distant, background view from the Project Area, particularly on the north-south oriented streets (see **Figure 3.1-1, Intersection of Santa Fe Avenue and Vernon Avenue, looking north**). The nearest national forest is the Angeles National Forest, located approximately 15 miles northeast of the Project Area. Additionally, the skyline of Downtown Los Angeles is approximately 2.5 miles from the Project Area and does not constitute a scenic vista and is a distant, background view. There are no designated scenic views in the Project Area, according to the City's *General Plan*.<sup>1</sup>

---

<sup>1</sup> City of Vernon. *City of Vernon General Plan*. 2007. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/1306/637635880850570000>, accessed August 1, 2022.



SOURCE: Google Earth, 2022

FIGURE 3.1-1



### *Scenic Highways*

The California State Scenic Highway System is a list of scenic highways (mainly state highways) or scenic parkways which have been designated or proposed by the state of California. The scenic highway designation serves to protect California's scenic beauty as well as its scenic resources. There are no state-designated scenic highways (or proposed state scenic highways or parkways) within the Project Area.<sup>2</sup> The Arroyo Seco Parkway (I-110) is a National Civil Engineering Landmark, a National Scenic Byway, and one of two California Historic Parkways, and is located 5.5 miles north of the Project Area.

Therefore, there are no scenic resources within the vicinity of a scenic highway. Additionally, there are no scenic resources identified in the City of Vernon *General Plan*.

### *Visual Character*

The concept of visual character is not explicitly defined in the *CEQA Guidelines*. In this aesthetics discussion, potential visual character impacts are assessed based on industry-accepted definitions of visual character. Visual character can be defined in terms of the overall impression formed by the relationship between perceived visual elements of the existing built, urban environment. Visual character comprises the existing features or elements that contribute to the valued image of a neighborhood, community, or localized area. Features that contribute to visual character may include, but are not limited to:

- Height and mass of proposed buildings compared to existing development;
- Structures of architectural or historical significance, or visual prominence;
- Public plazas, art, or gardens;
- Landscaping and street trees; or
- Other features of recognized value to the aesthetic or visual character of an area.

The Project Area is comprised primarily of industrial uses, with pockets of commercial, residential and governmental uses. Similar to the rest of the City, the majority of industrial uses are light manufacturing, warehousing, distribution, and storage, and are located within large, one-story buildings that range from

---

<sup>2</sup> Caltrans, California State Scenic Highways. Available online at: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>, accessed August 1, 2022.

50,000-to-300,000 square feet. Buildings of smaller sizes are concentrated within clusters along Santa Fe Avenue, 37<sup>th</sup> Street, 38<sup>th</sup> Street, and Hampton Street.

Similar to the City as a whole, there is a significant range of building areas. Most of the buildings within the Project Area were built in the span between 1933 and 1983. There is a cluster of buildings that date from the 1910s and 1920s around Vernon Avenue, Pacific Avenue, and along Santa Fe Avenue. The majority of the older buildings within the Project Area are made out of brick. Buildings built after 1984 tend to be clustered in the southern half of the study area. Since 2000, only a few larger warehouse buildings have been built in the study area.

The commercial uses are generally concentrated along Santa Fe Avenue. The small number of residential buildings are mainly concentrated around Vernon City Hall.

### *Transportation Corridors*

Several rail lines cross Vernon, the most important of which is the Alameda Corridor. The Alameda Corridor, opened in 2002, serves as the primary connection between the ports of Los Angeles and Long Beach and the rail yards of Vernon, Commerce, and downtown Los Angeles. The Alameda Corridor runs within the 30-ft deep Mid-Corridor Trench that stretches down the center of Alameda Street on the western boundary of the Project Area (see **Figure 3.1-2, Alameda Street Looking North**). Specifically, there are many at-grade rail crossings that exist within the general Project Area. The Malabar Yard, operated by BNSF Railway, is located in the eastern part of the Project Area, between Santa Fe Avenue and Hampton Street.

The Project Area is made up of arterial streets, collectors, and local streets. Arterial streets are currently designed to have the highest traffic carrying capacity. Critical arterials in the Project Area include Alameda Street, Santa Fe Avenue and Vernon Avenue/Pacific Boulevard. These arterials range in size from 80-120 feet, including sidewalks. Santa Fe Avenue is a north-south arterial street with two travel lanes in each direction and a central turn lane. Alameda Street is a north-south arterial street that forms the western boundary of the Project Area. It is bifurcated by the Alameda Freight Corridor. To the east of the rail corridor, located within the City of Vernon, Alameda East is a two-way street with one lane in each direction. Vernon Avenue is an east-west arterial street with two travel lanes in each direction. It turns into Pacific Boulevard to the east of Santa Fe Avenue.

Collector streets serve as intermediate routes between arterial streets and local streets and are designed to provide access and move traffic. Collectors within the Project Area include 25<sup>th</sup>/26<sup>th</sup> Streets, 37<sup>th</sup>/38<sup>th</sup> Streets, 51<sup>st</sup> Street, Fruitland Avenue, and Vernon Avenue (East of Santa Fe Avenue). The collectors have a total right-of-way of 80 feet, with up to 16 feet allocated for sidewalks or other uses beyond the curbs.

The remainder of the streets within the Project Area are local and do not facilitate through-traffic. Local streets have a total right-of-way ranging from 60-65 feet, with up to 18 feet allocated for sidewalks or other uses beyond the curbs.

Access to the regional highway system for Vernon businesses and visitors is provided by I-10 and I-170. The I-10 Freeway passes just north of the Project Area and is accessible from Santa Fe Avenue and Alameda Street. The I-710 freeway passes through the eastern portion of Vernon at the interchange between I-710, Atlantic Boulevard, and Bandini Boulevard.



SOURCE: Google Earth, 2022

FIGURE 3.1-2

Alameda Street Looking North





SOURCE: Google Earth, 2022

FIGURE 3.1-3





SOURCE: Google Earth, 2022

FIGURE 3.1-4

Pacific Boulevard, looking northwest

### *Civic Center Area*

The Vernon City Hall, City Yard, Los Angeles County Fire Station 52, and the Vernon City School are all clustered at the intersection of East Vernon Avenue and Santa Fe Avenue. This intersection is known as the Civic Center.

Fire Station 52 is located at the northeastern corner of the Civic Center. The fire station is located in a two-story stucco building with an entrance on Santa Fe Avenue. In the rear of the Fire Station to the west, is a two-story parking structure, which shares the same driveway to Santa Fe Avenue. The parking structure can also be accessed through a driveway off Vernon Avenue. The parking structure connects to the south to Vernon City Hall and the Vernon Police Department. The concrete building was built in 1963 and reflects a post-war modern style. The building rises to three stories at the northern portion of the building and drops down to two stories at the southern end, which fronts Santa Fe Avenue. The entrance to the building is set back from Santa Fe Avenue which contains a grassy open yard with paths leading to the building. The open space is one of the only publicly available open spaces in the area. This space contains a monument to the Battle of La Mesa, which was erected in 1926 by Native Sons of the Golden West, Historical Society of Southern California, Union Pacific Railroad and Los Angeles Union Stock Yards. On the southwestern corner of the Civic Center, adjacent to Vernon City Hall, is a cluster of ten single-family homes on Furlong Place.

Across Vernon Avenue to the south, at the corner of Santa Fe Avenue, is the Vernon City School. The school is located within a one-story Spanish-style building built in 1947. The entrance to the school is located off Vernon Avenue. The majority of the street frontage is fenced with hedges.

On the eastern side of Santa Fe Avenue are one- and two-story industrial buildings. Diagonally opposite City Hall, on the southeast corner of Santa Fe Avenue and Pacific Boulevard, is a large legacy brick building. Buildings within this Zone are predominantly brick and stucco. Many of the buildings have blank facades that come up to the lot line. Others include a small strip of landscaped area between the building and the lot line. Parking is typically located in the rear of buildings, although south of Vernon Avenue, there are several buildings that are set back with parking located at the street frontage. Building ages are varied within this cluster. There is a high concentration of buildings built prior to 1950, but they are interspersed amongst buildings from the second half of the 20<sup>st</sup> century and beginning of the 21<sup>st</sup> century. Sidewalks are located along every street, and although they are in good condition, they are narrow and there are long stretches without crosswalks.

Given the predominance of one- and two-story buildings within this area, the Civic Center Area is not highly visible from other areas in the City. On clear days, the view of the Verdugo Mountains and San Gabriel Mountains is visible in the distant background looking north on Santa Fe Avenue.

### *Commercial/Industrial Districts*

The industrial buildings within the study area are primarily large one-story buildings (see **Figure 3.1-3, Santa Fe Avenue, looking south**). The vast majority of buildings are between 25,000 and 300,000 square feet, with large, fenced parking lots that front the street (see **Figure 3.1-4, Pacific Boulevard, looking northwest**). Industrial buildings smaller than 25,000 square feet are concentrated within clusters along Santa Fe Avenue, 37<sup>th</sup> Street, 38<sup>th</sup> Street, and Hampton Street. Pacific Boulevard and Hampton Street are comprised of smaller-scale, 1940s single-story industrial buildings, which are currently transitioning into production studios, creative offices, commercial kitchens and other office and industrial type uses.

Within the I Zone, special categories of uses have been established for the purpose of allowing special uses. Within the Project Area, there are two Commercial Overlay Zones (C-1 and C-2). Commercial Overlays are located along Santa Fe Avenue and Pacific Boulevard. Commercial land uses are interspersed amongst industrial uses. The commercial uses included in the Project Area are primarily restaurants and wholesale stores. The City is in the process of approving General Plan Amendments to allow for mixed-use zones.

### *Visual Character of the Project Area*

As discussed above, the Project Area is generally defined by its large one-story warehouses and light manufacturing buildings built between 1933 and 1983. Buildings with smaller sizes are concentrated within clusters along Santa Fe Avenue, 37<sup>th</sup> Street, 38<sup>th</sup> Street and Hampton Street. Buildings are predominantly brick, stucco, and concrete. There are pockets of commercial and residential uses within the Project Area, particularly along Vernon Avenue and Santa Fe Avenue. The Vernon Civic Center, which contains a range of architectural styles, provides the only open space within the Project Area.

### **Light and Glare**

For purpose of this analysis, “light” refers to light emission, or the degree of brightness, generated by a given source. Artificial lighting may be generated from point sources (i.e., focused points of origin representing unshielded light sources) or from indirectly illuminated sources of reflected light. Light may be directed downward to illuminate an area or surface, cast upward into the sky and refracted by atmospheric conditions (skyglow), or cast sideways and outwards onto off-site properties (overspill). Skyglow and overspill are considered forms of light pollution.



The effects of nighttime lighting are contextual and depend upon the light source’s intensity, its proximity to light-sensitive land uses (i.e., sensitive receptors such as residential units and schools), and the existing lighting environment in the vicinity of a project site. The primary sources of nighttime illumination include street lighting, security and other types of outdoor lighting on commercial and residential properties, surface-parking illumination, and illuminated commercial signage. Nighttime lighting can impact views, alter the nature of community, or neighborhood character, or illuminates a sensitive land use. Nighttime illumination of sensitive receptors also may adversely affect certain land use functions—such as those of a residential or institutional nature—since such uses are typically occupied during evening hours and can be disturbed by bright lights.

“Glare” or “unwanted source luminance” is defined as focused, intense light directly emanated by source or indirectly reflected by a surface from a source. Daytime glare typically is caused by the reflection of sunlight from highly reflective surfaces at or above eye level. Reflective surfaces generally are associated with buildings clad with broad expanses of highly polished surfaces or with broad, light-colored areas of paving. Daytime glare generally is most pronounced during early morning and late afternoon hours when the sun is at a low angle and potential exists for intense reflected light to interfere with vision and driving conditions. Daytime glare also may hinder outdoor activities conducted in surrounding land uses, such as sports.

The Project Area is a built-out urban environment with industrial and commercial uses and high levels of existing light and glare. Primary sources of light are associated with vehicles traveling along roadways in the Project Area, street and parking area lighting, and existing industrial and commercial buildings, including building-mounted lighting. The City is also bordered by several freeways: I-10 to the north, I-5 to the northeast, I-710 to the east, and I-110 to the west. Glare is generally a result of reflections off of pavement, vehicle windows and chrome, and building materials that include reflective glass and other shiny materials. The majority of the Project Area is composed of older buildings made out of brick and stucco, which are not highly reflective. However, the majority of the Project Area is paved and contains high levels of car and truck traffic resulting in existing high levels of light and glare.

### **3.1.2 REGULATORY FRAMEWORK**

#### **3.1.2.1 State**

##### ***California Scenic Highways and Historic Parkways Program***

The California Scenic Highways and Historic Parkways Program was created in 1963 to preserve and protect highway corridors located in areas of outstanding natural beauty from changes that would diminish the aesthetic value of the adjacent lands. The State of California Department of Transportation

(Caltrans) maintains its State Scenic Highways and Historic Parkways Program, through which segments of the State highway system are designated as being of particular scenic value or interest. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Interstates, state highways, byways, and parkways are eligible for designation or for recognition as eligible for designation. The program is governed by the regulations found in the California Streets and Highways Code, Section 260 et seq.

California Streets and Highway Code Section 261 requires local government agencies to take the following actions to protect the scenic appearance of the scenic corridor:

- Regulate land use and density of development;
- Provide detailed land and site planning;
- Prohibit off-site outdoor advertising and control of on-site outdoor advertising;
- Pay careful attention to and control of earthmoving and landscaping; and
- Scrutinize the design and appearance of structures and equipment.

California Streets and Highway Code Section 263 allows the California State Legislature the authority to identify highways as eligible for designation as a scenic highway. The government with jurisdiction over land abutting a highway considered to be scenic is required to adopt a "scenic corridor protection program" that restricts development, outdoor advertising, and earthmoving activities along the affected segment or corridor (Corridor Protection Program). Caltrans must also indicate that the highway segment meets established criteria in order for the roadway or segment to be designated as scenic.

### ***California Code of Regulations Title 24 Part 6***

The California Energy Code (Cal. Code Regs., tit. 24 § 6) creates standards in an effort to reduce energy consumption. The type of luminaries and the allowable wattage of certain outdoor lighting applications are regulated.

### ***Senate Bill 743***

In September 2013, the Governor signed into law Senate Bill (SB) 743, which instituted changes to CEQA when evaluating environmental impacts to projects located in areas served by transit. While the thrust of SB 743 addressed a major overhaul on how transportation impacts are evaluated under CEQA, it also

limited the extent to which aesthetics and parking are defined as impacts under CEQA. Specifically, Section 21099 (d)(1) of the Public Resources Code (PRC) states that a project's aesthetic and parking impacts shall not be considered a significant impact on the environment if:

1. The project is a residential, mixed-use residential, or employment center project, and
2. The project is located on an infill site within a transit priority area.

“Transit priority area” means an area within one-half mile of a major transit stop that is existing or planned. Section 21064.3 of the PRC defines a “major transit stop” as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

### **3.1.2.2 Local**

#### ***Vernon Municipal Code***

Chapter 17 of the *Vernon Municipal Code*, also known as the *Comprehensive Zoning Ordinance of the City of Vernon (Zoning Ordinance)*, implements the land use policies of the *General Plan*. The *Zoning Ordinance* designates, regulates, and restricts the use, location, and size of buildings, ancillary structures, and land for industrial uses and other permitted purposes and that establishes performance and development standards in order to protect the public health, safety, and welfare.

### **3.1.3 IMPACTS AND MITIGATION MEASURES**

#### **3.1.3.1 Methodology**

This impact discussion evaluates impacts from inside and outside the four specific zone change areas within the Project Area where the visual resources identified in the existing setting may be affected by the Project. This impact section analyzes impacts from potential development of the Project.

The visual impacts of a project include both the objective visual resource change created by the Project and the subjective viewer response to that change. Distance from the project, frequency of view, length of view, viewer activity, viewer perception, and viewing conditions contribute to the assessment of a visual impact. The physical limits and changes of the views and the quantity of viewers are objective. Viewer perception is subjective.

The perception of different viewer groups to the visual environment and its elements varies based on viewer activity and awareness. Activities such as commuting in heavy traffic can distract an observer from many aspects of the visual environment. Conversely, pleasure driving or relaxing in a scenic environment can encourage an observer to look at the view more closely and at greater length, thus increasing the observer's attention to detail. Sensitivity is also determined by how much the viewer has at stake in the viewshed. Typically, people who own property in an area are more sensitive to change than those just passing through.

The assessment of aesthetic impacts is subjective by nature. Aesthetics generally refer to the identification of visual resources and the quality of what can be seen, as well as an overall visual perception of the environment. The significance determination for the aesthetics analysis is based on consideration of whether any resources exist within or near the Project Area; and if a resource exists, (1) whether it can be viewed from public areas within or near the Project Area and (2) the potential for implementation of the Project to either hinder views of the resource or result in its visual degradation. Should resources not currently exist, implementation of the Project would not result in impacts.

### 3.1.3.2 Thresholds of Significance

The following thresholds for determining the significance of impacts related to visual resources are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant adverse impacts to visual resources, if any of the following could occur:

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

### 3.1.4 ENVIRONMENTAL IMPACTS

**Impact AES-1                    Have a substantial adverse effect on a scenic vista.**

Scenic vistas are panoramic views of features such as mountains, forests, the ocean, or urban skylines. As described in the setting above, there are no scenic vistas within the Project Area. Views of the Verdugo Mountains and San Gabriel Mountains, which are 11 miles and 17 miles away, respectively, exist only as intermittent, background views. As no scenic vistas exist with the Project Area, no impact would occur.

***Significance Before Mitigation***

No Impact.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

No Impact.

**Impact AES-2                    Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.**

The Project Area is not within or visible from any existing designated (or eligible) scenic highways. The nearest designated Federal Scenic Byway is California State Route 110, also known as the Arroyo Seco Historic Parkway, between mile posts 25.7 and 31.9 in Los Angeles, approximately 5.5 miles north of the Project Area. Due to the lack of a designated (or eligible) scenic highway, implementation of the Project would not result in impacts to a scenic resource within a state scenic highway.

***Significance Before Mitigation***

No Impact.

***Mitigation Measures***

No mitigation measures are required.

### *Significance After Mitigation*

No Impact.

---

**Impact AES-3                    In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

Project implementation would involve new high-density residential uses, adding up to 874 residential units including 788 newly constructed units and 86 units within adaptively reused buildings, increasing residential density in the Project Area. Implementation of the Project would also increase the intensity of commercial land uses, including approximately 120,059 square feet of retail space, 253,021 square feet of production retail space, and 360,429 square feet of research and development space.

Changes in visual character would occur during the future implementation of the Project, which would result in (1) future infill and compact development including additional housing opportunities, and (2) the diversification of land uses in strategic locations. The Project Area is primarily developed with industrial uses. The Project would include zone changes to four specific areas and provide associated development standards and regulations to guide future development projects.

### ***Construction***

Construction activities associated with future projects would result in short-term visual impacts including the presence of equipment and material storage, as well as grading and earthmoving activities. In a visual sense, construction impacts from future projects could be obtrusive or out of character with the surrounding landscape. The visual impacts would be created by mobile construction equipment including construction trucks that enter and exit the project site, unfinished building pads, and unfinished structures without the final building materials, colors, and landscaping. Construction contractors would be responsible for screening the project sites from view with temporary fencing or other means, to reduce visual intrusion on the neighborhood. While the construction truck trips would result in a change in the visual character surrounding the neighborhood, these activities would be temporary and end once the construction activities are complete. Although this impact could be adverse, it would be short-term, and thus impacts would be less than significant.

## *Operation*

The Project Area is located entirely within an urban area. As shown in **Section 2.0, Project Description**, the Project provides development standards and parking standards that would serve as a roadmap for future development creating a vision for the scenic quality of the entire Project Area. Thus, Project implementation would complement the Project Area and would enhance the scenic quality of the Project Area and surrounding vicinity.

The Project proposes zone changes and general plan amendments at four specific areas within the western portion of the City to allow for mixed-use development. The Project would help enable new investment, increase the City's density and population, and promote diversification of land uses that provide amenities to residents and enhances the City's image. The Project would thematically rezone the Project Area into the following zones.:

- **Mixed Use-City Center Zone (MU-CC):** Future implementation of the Mixed Use City Center Zone would employ new construction and adaptive reuse to revitalize the area and form a mixed-use hub, or “downtown” for the City. Heights would be limited to four stories, or 55 feet within the first 50 feet of frontage and would allow for an unlimited height after 50 feet of frontage. Setbacks would be limited to 15 feet along Santa Fe Avenue, and 20 feet along Vernon Avenue. Currently blank facades would be renovated to add fronting retail. The parking structure's first floor would be also renovated to include retail space. The Project would increase the amount of street-facing open space.
- **Mixed Use-Santa Fe North Zone (MU-N):** The MU-N Zone would include production retail, standalone manufacturing, and retail uses, providing an extension of the uses found in the Downtown Los Angeles Arts and Warehouse Districts. Residential uses and live/workspaces are also proposed as supplementary uses. It is anticipated that the current density would be predominantly maintained with existing moderately scaled brick buildings with open floor plans. Heights would be limited to three stories, or 45 feet within the first 50 feet of frontage, and five stories or 65 feet after 50 feet of frontage. Setbacks would be limited to 10 feet along Santa Fe Avenue, and 5-20 feet along 25<sup>th</sup>, 37<sup>th</sup>, 38<sup>th</sup>, and Vernon Avenue.
- **Mixed Use-Santa Fe South Zone (MU-S):** The MU-S Zone would allow for low- and medium-density residential and live/work uses. There is significant opportunity for adaptive reuse within the MU-S Zone. It anticipated that building heights would increase one- to three-stories. Heights in new developments would be limited to three stories, or 45 feet within the first 50 feet of frontage, and five stories or 65 feet after 50 feet of frontage. Setbacks would not be permitted along Santa Fe Avenue and are limited to 15 feet along local streets.

- **Mixed Use-Pacific Hampton Zone (MU-PH):** The MU-PH Zone would result in the transformation of the smaller-scale, 1940's single-story industrial buildings into production studios, creative offices, commercial kitchens and other office and industrial type uses. The MU-PH Zone would provide more flexible parking and development standards compared to existing conditions. Building heights are not anticipated to change within this zone. Heights would be limited to two stories, or 40 feet within the first 50 feet of frontage, and three stories or 50 feet after 50 feet of frontage. Setbacks would not be permitted feet along Hampton Street, and between 5 and 50 feet along Fruitland Avenue. Setbacks along Pacific Boulevard would match the setbacks of adjacent legacy structures, plus or minus three feet.

The Project would allow for mixed-use development and require community amenities such as open space and greenways. Increased density would change the existing Project Area's visual quality by allowing for greater building heights than what is currently permitted. However, the Project would ensure new development reflects the abovementioned principles, and would apply to all multi-family residential, commercial, and mixed-use construction developments within the Project Area. The Project would implement development standards that address the following topics: adaptive and creative use standards and incentives, building orientation and relationship to context, and ground floor and frontages, standards. Implementation of these standards would help facilitate a cohesive design of the Project Area.

The Project recognizes that the Project Area's industrial buildings are important assets, and presents important adaptive reuse opportunities, as well as historic character of the area's identity. Project implementation would encourage retention of these buildings along with new development. The Project would require future development to incorporate industrial architectural character, such as the use of exposed brick, concrete, steel, and use of scale appropriate to the legacy industrial structures in the immediate area. As a result, it is not anticipated that the implementation of the Project would alter the visual characteristics of the Project Area.

The maximum height permitted by the Project is five stories in the MU-S Zone; five stories in the MU-N Zone; and three stories in the MU-PH Zone. Within the MU-CC Zone, the first 50 feet of frontage permits a maximum height of four stories, after which there is no height limit. While the Project would allow greater heights and density than what currently exists in Vernon's Westside, it provides additional restrictions than the current Municipal Code, which does not include height limits. Additionally, in most cases, height limits are only increasing one- to two-stories beyond current conditions. Unlimited heights within the MU-CC Zone would only occur after the first 50 feet of frontage. Future development would be required to include setbacks. Streetwall and frontage standards would also reduce the impact of a taller building at the street level.



Implementation of the Project would result in new development that would replace parking lots, aging buildings, and infrastructure. Additionally, new infrastructure would be replaced incrementally as new projects are introduced and improve the condition of sidewalks, roads, landscaping, lighting, and the built environment overall. The Project would enable these improvements and future redevelopment for the area. In addition, it would improve the overall visual character by removing aging infrastructure and neighborhood deterioration of the Project Area.

The Project would result in the development of public infrastructure to support the new mix of uses and increase in residential housing units, including the creation of more open space, parking strategies, and bicycle facilities. These improvements would change the visual character of the Project Area by creating a more welcoming environment for pedestrians with the introduction of more greenways. In addition, the proposed zone changes would implement new development standards and regulations regarding ground floor spaces and frontages to contribute to a more pedestrian friendly environment.

The Project would incorporate the development and performance standards included in the City's Municipal Code that relate to visual quality, such as screening for certain uses, weed and debris abatement, barriers, and lighting. The Project would not conflict with any regulations governing scenic quality. Future development projects would be required to comply with the development standards introduced by the Project, as well as all applicable development regulations outlined in the City's Zoning Ordinance. The City's permitting and approval process would ensure compliance. As such, approval of the Project would enable future development projects to be in compliance with applicable zoning and regulations governing scenic quality. Therefore, potential impacts associated with scenic quality would be less than significant.

Furthermore, SB 743 states that, "aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." A significant portion of the Project is located within a Transit Priority Area.<sup>3</sup> Future implementation of the Project in the zone change areas that would be residential, mixed-use residential, or an employment center would not be subject to aesthetic and parking analyses.

### ***Significance Before Mitigation***

Less than Significant Impact.

---

<sup>3</sup> Southern California Association of Governments. Data Map/Book for the City of Vernon. Available online at: <https://scag.ca.gov/sites/main/files/file-attachments/vernon.pdf?1604903429>, accessed November 14, 2022.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

Less than Significant Impact.

**Impact AES-4                    Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.**

Potential future development in the Project Area would increase the area's overall development intensity. New sources of light would be introduced as future development is proposed. The potential sources of new nighttime light include spillover from the windows of new residences and businesses and from outdoor security lighting, lighted signs, streetlights, and building-mounted lighting. New development would also produce glare from sunlight reflecting off the windows of buildings. The number of motor vehicles in the Project Area may increase along with the increase in residential and commercial development. As a result, light and glare would increase from reflections of vehicle windows or vehicle headlights shining at night. However, these new light sources would not substantially increase the amount of nighttime lighting or glare since the Project Area is already an urban built-up environment and most existing buildings implement nighttime security lighting. Furthermore, existing uses are predominantly industrial, which are not occupied at night and therefore would not be sensitive to lighting increases. Additionally, much of the anticipated development resulting from implementation of the Project is non-residential (retail, production retail, and research and development). These uses are not occupied at night, and therefore would not contribute significantly to nighttime lighting or glare. The Project contains development standards and regulations to reduce the impact of new sources of light. Exterior lighting (site, parking lot, and building security lighting) should not impact neighboring properties and preclude direct glare onto adjoining properties, streets, or skyward. Increases in light sources would be incremental and therefore, impacts associated with light and glare would be less than significant.

***Significance Before Mitigation***

Less than Significant Impact.

***Mitigation Measures***

No mitigation measures are required.

### *Significance After Mitigation*

Less than Significant Impact.

#### **3.1.5 CUMULATIVE IMPACTS**

The cumulative aesthetics study area for the Project is the viewshed (locations that can view the Project Area and locations that can be viewed from within the Project Area) that the Project lies within. As described above, there are no existing designated scenic vistas within or nearby the Project Area. The Verdugo and San Gabriel Mountains are visible in the distance on north-south oriented roadways. However, no development is proposed within the roadway, nor are any changes to road orientation that may impact those distance views. Thus, cumulative development in the project vicinity would result in no impact on a scenic vista or scenic highway.

Although the City is largely built out with no areas of undeveloped open space, cumulative development would likely include residential, retail and mixed-use projects, as well as industrial projects and office buildings. Future development in the City has the potential to alter the visual quality and character of the surrounding community through use of new architectural styles and designs as well as increased building heights. However, future projects outside of the Project Area, would be required to adhere to specific development standards in the City's zoning ordinance designed to enhance the visual appeal of development and public views in the City. In addition, as discussed under **Impact AES-3**, the Project would not have a significant negative impact on the visual quality of the Project Area or its surroundings and therefore would not contribute to cumulative aesthetic impacts. As a result, potential impacts related to aesthetics would not be cumulatively considerable and would be less than significant.

Development resulting from implementation of the Project would increase light and glare in the Project Area. However, increased light and glare would be incremental and would not impact sensitive uses in an already urbanized area. Therefore, potential impacts associated with light and glare as a result of implementation of the Project would not be cumulatively considerable and would be less than significant.

#### **3.1.6 REFERENCES**

Caltrans, California State Scenic Highways. Available online at:

<https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>, accessed August 1, 2022.

City of Vernon. *City of Vernon General Plan*. 2007. Available online at:

<https://www.cityofvernon.org/home/showpublisheddocument/1306/637635880850570000>, accessed August 1, 2022.

Southern California Association of Governments. Data Map/Book for the City of Vernon. Available online at: <https://scag.ca.gov/sites/main/files/file-attachments/vernon.pdf?1604903429>, accessed November 14, 2022.

### INTRODUCTION

*This section describes the ambient air quality of the local and regional area and provides a comparison of existing air quality to applicable state and federal pollutant standards. In addition, sources of air emissions in the vicinity of the Project Area are identified and discussed. This section also identifies the plans and policies developed in efforts to improve air quality. Finally, this section evaluates potential air quality impacts associated with construction and operation of the Project and identifies mitigation measures to reduce those potential impacts. Sources utilized in this discussion include the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) and air quality data from the California Air Resources Board (CARB). Air emission calculations estimated for the Project are contained within **Appendix 3.2** of this Environmental Impact Report (EIR).*

#### 3.2.1 ENVIRONMENTAL SETTING

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The City of Vernon is located within the South Coast Air Basin (SCAB), which incorporates approximately 12,000 square miles consisting of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area in Riverside County. SCAB is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the southwest and high mountains around the rest of its perimeters.

##### 3.2.1.1 Climate and Meteorology

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. It is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. This usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. The annual average temperature varies little throughout the SCAB region, ranging from the low 60s to the high 80s, measures in degrees Fahrenheit (F°). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains.

### *Humidity*

Although the SCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent, and low clouds, often referred to as high fog, are a characteristic climate feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SCAB.

### *Wind*

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is higher during the dry summer months than during the rainy winter.

Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall, surface high-pressure systems over the SCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentration of air pollutants during prolonged periods of stable atmospheric conditions.

### *Inversions*

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in Los Angeles.

### 3.2.1.2 Regional Setting

#### *Regional Ambient Air Quality*

Air emissions are generated by a variety of sources in Los Angeles County. Motor vehicles traveling along local roadways are a major source. Agricultural activities such as diesel- and gasoline-powered equipment (e.g., tractors, trucks) and pesticide spraying also emit air pollutants. Commercial and residential land uses in proximity to the site also emit air pollutants in the form of household products and cleaners.

The determination of whether a region's air quality is healthful or unhealthful is made by comparing contaminant levels in ambient air samples to national and state standards. California and the federal government have established health-based air quality standards for the following criteria air pollutants: O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and Pb. These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. The California standards are more stringent than the federal standards, and in the case of PM<sub>10</sub> and SO<sub>2</sub>, much more stringent. California has also established standards for sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. The state and national ambient air quality standards for each of the monitored pollutants and their effects on health are summarized in **Table 3.2-1, Ambient Air Quality Standards**.

**Table 3.2-1  
Ambient Air Quality Standards**

Air Pollutant	Averaging Time	California Standards	National Standards <sup>1</sup>		Health and Other Effects
			Primary <sup>2,3</sup>	Secondary <sup>2,4</sup>	
Ozone (O <sub>3</sub> )	8-hour	0.070 ppm (137 µg/m <sup>3</sup> )	0.070 ppm (137 µg/m <sup>3</sup> )	Same as primary	(a) Pulmonary function decrements and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; and (f) Property damage
	1-hour	0.09 ppm (180 µg/m <sup>3</sup> )	-- <sup>5</sup>	--	
Carbon Monoxide (CO)	8-hour	9 ppm (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )	--	(a) Aggravation of angina pectoris and other aspects of coronary heart

Air Pollutant	Averaging Time	California Standards	National Standards <sup>1</sup>		Health and Other Effects
			Primary <sup>2,3</sup>	Secondary <sup>2,4</sup>	
Nitrogen Dioxide (NO <sub>2</sub> )	1-hour	20 ppm (23 µg/m <sup>3</sup> )	35 ppm (40 µg/m <sup>3</sup> )	--	disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and (d) Possible increased risk to fetuses
	Annual	0.030 ppm (57 µg/m <sup>3</sup> )	0.053 ppm (100 µg/m <sup>3</sup> )	Same as primary	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration
	1-hour	0.18 ppm (339 µg/m <sup>3</sup> )	0.100 ppm <sup>6</sup> (188 µg/m <sup>3</sup> )	--	
Sulfur Dioxide (SO <sub>2</sub> )	Annual	--	0.030 ppm (80 µg/m <sup>3</sup> ) <sup>7</sup>	-	Bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma
	24-hour	0.04 ppm (105 µg/m <sup>3</sup> )	0.14 ppm (365 µg/m <sup>3</sup> ) <sup>7</sup>	-	
	3-hour	-	-	0.5 ppm (1,300 µg/m <sup>3</sup> )	
	1-hour	0.25 ppm (655 µg/m <sup>3</sup> )	0.075 ppm <sup>7</sup> (196 µg/m <sup>3</sup> )	--	
Respirable Particulate Matter (PM <sub>10</sub> )	Annual	20 µg/m <sup>3</sup>	--	--	a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature death from heart or lung diseases in the elderly
	24-hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Same as primary	
Fine Particulate Matter (PM <sub>2.5</sub> )	24-hour	No separate state standard	35 µg/m <sup>3</sup>	--	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature death from heart or lung diseases in the elderly
	Annual	12 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>	--	
Lead	Calendar Quarter	--	1.5 µg/m <sup>3</sup>	Same as primary	(a) Increased body burden; and (b) Impairment of blood formation and nerve conduction
	30-day Average	1.5 µg/m <sup>3</sup>	--	--	



Air Pollutant	Averaging Time	California Standards	National Standards <sup>1</sup>		Health and Other Effects
			Primary <sup>2,3</sup>	Secondary <sup>2,4</sup>	

Source: CARB, Ambient Air Quality Standards, (<https://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm>),

ppm = parts per million by volume;  $\mu\text{g}/\text{m}^3$  = microgram per cubic meter;  $\text{mg}/\text{m}^3$  = milligrams per cubic meter.

<sup>1</sup> Standards, other than for ozone and those based on annual averages, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

<sup>2</sup> Concentrations are expressed first in units in which they were promulgated. Equivalent units given in parenthesis.

<sup>3</sup> Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health. Each state must attain the primary standards no later than three years after that state's implementation plan is approved by the U.S. Environmental Protection Agency (US EPA).

<sup>4</sup> Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

<sup>5</sup> The national 1-hour ozone standard was revoked by US EPA on June 15, 2005. A new 8-hour standard was established in May 2008.

<sup>6</sup> The form of the 1-hour  $\text{NO}_2$  standard is the 3-year average of the 98th percentile of the daily maximum 1-hour average concentration.

<sup>7</sup> On June 2, 2010, the US EPA established a new 1-hour  $\text{SO}_2$  standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of the 1-hour daily maximum. The US EPA also revoked both the existing 24-hour and annual average  $\text{SO}_2$  standards.

Air quality of a region is considered to be in attainment of state standards if the measured ambient air pollutant levels for  $\text{O}_3$ , CO,  $\text{SO}_2$  (1-hour and 24-hour),  $\text{NO}_2$ , PM10, PM2.5 and visibility-reducing particles do not exceed the standards, and all other standards are not equaled or exceeded at any time in any consecutive three-year period.

### 3.2.1.3 Local Ambient Setting

#### Local Ambient Air Quality

The SCAQMD jurisdiction is divided geographically into source receptor areas (SRAs), which utilize information from monitoring stations to measure and record concentrations of regulated pollutants that provide representative air quality conditions in the region. The 38 SRAs are divided based on proximity to air monitoring stations and local meteorological patterns. The Project Area is situated entirely within SRA 1 – Central LA County.

To identify ambient concentrations of the criteria pollutants, the SCAQMD operates air quality monitoring stations throughout the SCAB. Within Los Angeles County, these stations are located in Lancaster, Santa Clarita, Reseda, West Los Angeles, Downtown Los Angeles, Pasadena, Long Beach, Compton, Pico Rivera, Azusa, Glendora, and Pomona. The most representative monitoring station for SRA 1 and the Project Area is the Los Angeles (Main Street) Station located at 1630 N. Main Street in the City of Los Angeles. The Los Angeles (Main Street) Station monitors CO,  $\text{O}_3$ ,  $\text{NO}_2$ , PM10, and PM2.5.

A summary of the monitored values for CO, O<sub>3</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. for the three most recent years for which data is available is presented in **Table 3.2-2, Los Angeles (Main Street) Air Monitoring Station Ambient Pollutant Concentrations.**

**Table 3.2-2  
Los Angeles (Main Street) Air Monitoring Station Ambient Pollutant Concentrations**

Standards <sup>1</sup>	Year				
	2019	2020	2021		
<b>Carbon Monoxide (CO)</b>					
Maximum 1-hour concentration monitored (ppm)			2.0	1.9	2.0
Maximum 8-hour concentration monitored (ppm)			1.6	1.5	1.6
Number of days exceeding state 1-hour standard	20 ppm		0	0	0
Number of days exceeding federal 1-hour standard	35 ppm		0	0	0
<b>Ozone (O<sub>3</sub>)</b>					
Maximum 1-hour concentration monitored (ppm)			0.085	0.185	0.099
Maximum 8-hour concentration monitored (ppm)			0.080	0.118	0.085
Number of days exceeding state 1-hour standard	0.09 ppm		0	14	1
Number of days exceeding federal/state 8-hour standard	0.070 ppm		2	22	2
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>					
Maximum 1-hour concentration monitored (ppm)			0.069	0.062	0.078
Annual average concentration monitored (ppm)			0.018	0.017	0.018
Number of days exceeding state 1-hour standard	0.18 ppm		0	0	0
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>					
Maximum 24-hour concentration monitored (µg/m <sup>3</sup> )			62.0	77.0	64.0
Annual average concentration monitored (µg/m <sup>3</sup> )			25.5	23.0	25.5
Number of samples exceeding state standard	50 µg/m <sup>3</sup>		3	24	3
Number of samples exceeding federal standard	150 µg/m <sup>3</sup>		0	0	0
<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>					
Maximum 24-hour concentration monitored (µg/m <sup>3</sup> )			43.5	47.3	61.0
Annual average concentration monitored (µg/m <sup>3</sup> )			10.8	12.31	12.77
Number of samples exceeding federal standard	35 µg/m <sup>3</sup>		1	2	12

Source: South Coast Air Quality Management District. Historical Data By Year. Available at: <https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year>, accessed February 2023.

NA = not available

<sup>1</sup> Parts by volume per million of air (ppm), micrograms per cubic meter of air (µg/m<sup>3</sup>), or annual arithmetic mean (aam).

<sup>2</sup> The 8-hour federal O<sub>3</sub> standard was revised from 0.075 ppm to 0.070 ppm in 2015. The statistics shown are based on the 2015 standard of 0.070 ppm.

### 3.2.1.4 Project Area Setting

#### *Existing Conditions*

The Project Area encompasses approximately 1.2 square miles, or 780 acres of primarily industrial and commercial development, with transportation infrastructure and small pockets of residential. The Project Area is generally bound to the north by 25<sup>th</sup> Street; to the east by the Atchison, Topeka and Santa Fe (ATSF) Railroad and the eastern frontage of Pacific Boulevard; to the south by Slauson Avenue; and to the west by the Alameda Corridor. Air quality emissions generated by the existing land uses in the Project Area are primarily comprised of mobile source emissions, emissions associated with energy consumption, and area source emissions. Existing Project Area air quality emissions were calculated using the California Emissions Estimator Model (CalEEMod) and are presented below in **Table 3.2-3, Existing Project Area Operational Emissions**. In addition to these sources, the numerous existing industrial and commercial uses in the Project Area generate TAC emissions. **Table 3.2-4, Land Uses That Emit TACs**, provides examples of the typical air pollutants of concern associated with existing industrial and commercial land uses in the Project Area.

**Table 3.2-3  
Existing Project Area Operational Emissions**

Emissions Source	Emissions in Pounds per Day					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM10	PM2.5
Mobile Source	77.80	255.00	2,569.00	6.22	216.00	41.50
Area Source	465.00	0.18	650.00	0.04	0.89	1.18
Energy Source	9.45	172.00	144.00	1.03	13.10	13.10
<b>Emissions Totals</b>	<b>552.25</b>	<b>427.18</b>	<b>3,363.00</b>	<b>7.29</b>	<b>229.99</b>	<b>55.78</b>

Source: Impact Sciences, Inc. See **Appendix 3.2** for CalEEMod data.

Notes: Totals in table may not add exactly due to CalEEMod rounding.

**Table 3.2-4  
Land Uses That Emit TACs**

Facility Type	Air Pollutants of Concern
Manufacturers	Solvents, Metals
Metal Platers, Welders, Metal Spray Operations	Hexavalent Chromium, Nickel, Metals
Chemical Producers	Solvents, Metals
Furniture Manufacturers	Solvents
Hazardous Waste Incinerators	Dioxin, Solvents, Metals
Research & Development	Solvents, Metals
Freight Distribution/Warehousing	Diesel Particulate Matter
Dry Cleaners	Perchloroethylene
Gas Stations	Benzene
Auto Body Shops	Metals, Solvents
Chrome Platers/Chrome Spraying	Hexavalent Chromium
Furniture Repair	Solvents, Methylene Chloride
Film Processing Services	Solvents, Perchloroethylene
Printing Shops	Solvents

Source: SCAQMD, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May, 6 2005, see Table 2-3, Examples of Facilities That Emit Toxic Air Contaminants.*

### ***Sensitive Receptors***

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiovascular diseases.<sup>1</sup>

Residential areas are considered sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Children are considered more susceptible to health effects of air pollution due to their immature immune systems and developing organs.<sup>2</sup> As such, schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are

<sup>1</sup> California Air Resources Board. *Sensitive Receptor Assessment*. Available online at: <https://ww2.arb.ca.gov/capp-resource-center/community-assessment/sensitive-receptor-assessment>, accessed February 24, 2023.

<sup>2</sup> Office of Environmental Health Hazard Assessment and The American Lung Association of California. *Air Pollution and Children's Health*. Available online at: <https://oehha.ca.gov/air/air-pollution-and-childrens-health-fact-sheet-oehha-and-american-lung-association>, accessed February 24, 2023.

generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Based on a review of the range of existing land uses in the Project Area and vicinity, residences, schools, and hospitals/medical facilities have been identified as air quality sensitive receptors.

### 3.2.2 REGULATORY FRAMEWORK

Air quality within the SCAB is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy making, education, and other programs. The agencies primarily responsible for improving the air quality within the SCAB include the U.S. Environmental Protection Agency (U.S. EPA), CARB, Southern California Association of Governments (SCAG), SCAQMD, and the City of Vernon.

#### 3.2.2.1 Federal Regulations

##### *U.S. Environmental Protection Agency*

The U.S. EPA is responsible for enforcing the federal Clean Air Act (CAA) and the National Ambient Air Quality Standards (NAAQS). These standards identify levels of air quality for seven criteria pollutants: ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), respirable particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), and lead (Pb). The prescribed levels are considered to be the maximum levels of ambient (background) air pollutants determined to be safe (with an adequate margin of safety) for the public health and welfare.

The 1990 CAA Amendments were enacted to better protect the public's health and create more efficient methods of lowering pollutant emissions. The major areas of improvement addressed in the amendments include air basin designations, automobile/heavy-duty engine emissions, and toxic air pollutants. The U.S. EPA designates air basins as being in attainment or nonattainment for each of the seven criteria pollutants. Nonattainment air basins are ranked (marginal, moderate, serious, severe, or extreme) according to the degree of nonattainment. An air basin in nonattainment is then required to submit a State Implementation Plan (SIP) that describes how the state will achieve federal standards by specified dates. The Los Angeles County portion of the SIP consists of the South Coast Air Quality Management Plan (discussed later in this EIR section) and is governed by the South Coast Air Quality Management District. The extent of a given SIP depends on the severity of the air quality condition within the state or specific air basin. The status of the SCAB with respect to attainment with the NAAQS is summarized in **Table 3.2-5, National Ambient Air Quality Standards and Status – South Coast Air Basin.**

**Table 3.2-5  
National Ambient Air Quality Standards and Status  
South Coast Air Basin**

Pollutant	Designation/Classification
Ozone (O <sub>3</sub> )	Nonattainment
Carbon Monoxide (CO)	Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment
Respirable Particulate Matter (PM <sub>10</sub> )	Attainment
Fine Particulate Matter (PM <sub>2.5</sub> )	Non-Attainment
Lead (Pb)	Non-Attainment (Partial) <sup>1</sup>

Source: SCAQMD. 2016. *National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for the SCAB.*

<sup>1</sup> The Los Angeles County portion of the SCAB is designated as a non-attainment area for the federal lead standard on the basis of source-specific monitoring at two locations as determined by U.S. EPA using 2007-2009 data. However, all stations in the SCAB, including the near-source monitoring in Los Angeles County, have remained below the lead NAAQS for the 2012 through 2015 period. The SCAQMD will request that the U.S. EPA re-designate the Los Angeles County portion of the SCAB as attainment for lead.

In response to rapid population growth and the associated rise in motor vehicle operations, the 1990 CAA Amendments addressed tailpipe emissions from automobiles, heavy-duty engines, and diesel fuel engines. The amendments established more stringent standards for hydrocarbons, nitrogen oxides (NO<sub>x</sub>), and CO emissions in order to reduce the ozone and carbon monoxide levels in heavily populated areas. Under the 1990 Amendments, new fuels were required to be less volatile, contain less sulfur (particular to diesel fuels), and have higher levels of oxygenates (oxygen-containing substances to improve fuel combustion). The U.S. EPA also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf), and sources that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking. Due to the lack of a substantial reduction in toxic emissions under the 1977 CAA, the 1990 CAA Amendments listed 189 hazardous air pollutants (HAPs), which are carcinogenic, mutagenic, and/or reproductive toxicants, to be reduced. This program (the 1990 CAA Amendments) involves locating all major (greater than 10 tons/year) and area emission sources and implementing Maximum Achievable Control Technology (MACT) to reduce HAP emissions and their associated health impacts.

### 3.2.2.2 State Regulations

#### *California Clean Air Act of 1988*

The California CAA of 1988 (CCAA) allows states to adopt ambient air quality standards and other regulations if they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency (Cal EPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. The CCAA, amended in 1992, requires all air quality management districts (AQMDs) in the state to achieve and maintain the CAAQS. The CAAQS are generally stricter than national standards for the same pollutants and has also established state standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles, for which there are no national standards. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

#### *California Ambient Air Quality Standards*

The federal CAA permits states to adopt additional or more protective air quality standards if needed. California has set standards for certain pollutants, such as particulate matter and ozone, which are more protective of public health than respective federal standards. California has also set standards for some pollutants that are not addressed by federal standards. The state standards for ambient air quality are summarized in **Table 3.2-6, California Ambient Air Quality Standards**.

**Table 3.2-6  
California Ambient Air Quality Standards**

Pollutant	Averaging Time	Level
Carbon monoxide	8 hours	9 ppm
	1 hour	20 ppm
Lead	30-day average	1.5 µg/m <sup>3</sup>
Nitrogen dioxide	1 hour	0.180 ppm
	Annual	0.030 ppm
Ozone	8 hours	0.070 ppm
	1 hour	0.09 ppm
Particulate matter	PM2.5 Annual	12 µg/m <sup>3</sup>
	PM10 24 hours	50 µg/m <sup>3</sup>
	PM10 Annual	20 µg/m <sup>3</sup>
Sulfur dioxide	1 hour	0.25 ppm
	24 hours	0.04 ppm
Sulfates	24 hours	25 µg/m <sup>3</sup>
Hydrogen sulfide	1 hour	0.03 ppm
Vinyl chloride	24 hours	0.01 ppm

Source: California Air Resources Board. May 2016. *Ambient Air Quality Standards*. Available online at: <https://www.arb.ca.gov/research/aaqs/aaqs2.pdf>, accessed February 24, 2023.

### ***California State Implementation Plan***

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as a SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The U.S. EPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register.



### ***California Air Toxics “Hot Spots” Information and Assessment Act (AB 2588)***

The California Air Toxics Program is supplemented by the Air Toxics “Hot Spots” program, which became law (AB 2588, Statutes of 1987) in 1987. In 1992, the AB 2588 program was amended by Senate Bill 1731 to require facilities that pose a significant health risk to the community to perform a risk reduction audit and reduce their emissions through implementation of a risk management plan. Under this program, which is required under the Air Toxics “Hot Spots” Information and Assessment Act (Section 44363 of the California Health and Safety Code), facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks when present.

Typically, land development projects generate diesel emissions from construction vehicles during the construction phase, as well as some diesel emissions from small trucks during the operational phase. Diesel exhaust is mainly composed of particulate matter and gases, which contain potential cancer-causing substances. Emissions from diesel engines currently include over 40 substances that are listed by the U.S. EPA as hazardous air pollutants and by CARB as TACs. On August 27, 1998, CARB identified particulate matter in diesel exhaust as a TAC, based on data linking diesel particulate emissions to increased risks of lung cancer and respiratory disease.<sup>3</sup>

In March 2015, the OEHHA adopted “The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments” in accordance with the Health and Safety Code, Section 44300. The Final Guidance Manual incorporates the scientific basis from three earlier developed Technical Support Documents to assess risk from exposure to facility emissions. The 2015 OEHHA Final Guidance has key changes including greater age sensitivity for children, decreased exposure durations, and higher breathing rate profiles. Because cancer risk could be up to three times greater using this new guidance, it may result in greater mitigation requirements, more agency backlog, and increased difficulty in getting air permits.

The CARB provides a computer program, the Hot Spots Analysis and Reporting Program (HARP), to assist in a coherent and consistent preparation of a Health Risk Assessment (HRA). HARP2, an update to HARP, was released in March 2015. HARP2 has a more refined risk characterization for HRAs and CEQA documents, incorporating the 2015 OEHHA Final Guidance.

---

<sup>3</sup> Diesel exhaust is included within pollutants subject to the hotspot program. Please refer to OEHHA’s Air Toxics Hot Spot Program Risk Assessment Guidelines. <https://oehha.ca.gov/air/cmr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>, accessed February 24, 2023.

### 3.2.2.3 Regional

#### *Southern California Association of Governments*

The Southern California Association of Governments (SCAG) is a council of governments for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. As a regional planning agency SCAG serves as a forum for regional issues relating to transportation, the economy, community development, and the environment.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also known as Connect SoCal, adopted September 3, 2020, identifies growth forecasts that are used in the development of air quality-related land use and transportation control strategies developed by the SCAQMD. This RTP/SCS is discussed in greater detail in **Section 3.4, Greenhouse Gas Emissions**.

#### *South Coast Air Quality Management District*

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the SCAB. To that end, the SCAQMD, a regional agency, works directly with SCAG, county transportation commissions, and local governments, and cooperates actively with all State and federal government agencies. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, monitors air quality, and provides regulatory enforcement through such measures as educational programs, monitors or fines, when necessary.

The SCAQMD is responsible for developing programs to reduce emissions from stationary, mobile, and indirect sources to meet national and state AAQS. It has responded to this requirement by preparing a series of Air Quality Management Plans (AQMP). The most recent of these was adopted by the Governing Board of the SCAQMD on December 2, 2022. This AQMP, referred to as the 2022 AQMP, was prepared to comply with the federal and state Clean Air Acts and amendments, to accommodate growth, to reduce the high levels of pollutants in the SCAB, to meet national and state AAQS, and to minimize the fiscal impact that pollution control measures have on the local economy. The 2022 AQMP identifies the control measures that will be implemented over a 15-year horizon to reduce major sources of pollutants. Implementation of control measures established in the previous AQMPs has substantially decreased the population's exposure to unhealthful levels of pollutants, even while population growth has occurred in the SCAB.

The future air quality levels forecast in the AQMP are based on several assumptions. For example, the SCAQMD assumes that new development in the SCAB will occur in accordance with population growth

and transportation projections identified by SCAG in its most current RTP/SCS. The AQMP also assumes that development projects will include strategies (mitigation measures) to reduce emissions generated during construction and operation in accordance with SCAQMD and local jurisdiction regulations, which are designed to address air quality impacts and pollution control measures. The AQMP acknowledges that the most significant air quality challenge in the Basin is to reduce NOX emissions sufficiently to meet the upcoming ozone standard deadlines.

The SCAQMD has also developed programs to attain and maintain the NAAQS and CAAQS. These include air quality rules and regulations for stationary sources, area sources, point sources, and certain mobile source emissions. The SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases. All projects within SCAQMD jurisdiction are subject to SCAQMD rules and regulations, including, but not limited to the following:

- **Rule 401 Visible Emissions** – This rule prohibits an air discharge that results in a plume that is as dark as or darker than what is designated as No. 1 Ringelmann Chart by the United States Bureau of Mines for an aggregate of three minutes in any one hour.
- **Rule 402 Nuisance** – This rule prohibits the discharge of “such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of people or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”
- **Rule 403 Fugitive Dust** – This rule requires that future projects reduce the amount of particulate matter entrained in the ambient air as a result of fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions from any active operation, open storage piles, or disturbed surface area.
- **Rule 1113 Architectural Coatings** – This rule limits volatile organic compounds (VOCs) in architectural coatings used in the SCAQMD jurisdiction. These limits are application-specific and are updated as availability of low VOC products expands.
- **Rule 1168 Adhesive and Sealant Applications** – This rule reduces emissions of VOCs and eliminates emissions of chloroform, ethylene dichloride, methylene chloride, perchlorethylene, and trichloroethylene from the application of adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primers.

- **Regulation XIII New Source Review** – This regulation contains Rules 1300 through 1325, which set forth pre-construction review requirements for new, modified, or relocated facilities, to ensure that the operation of such facilities does not interfere with progress in attainment of the NAAQS, and that future growth within SCAQMD is not unnecessarily restricted. The specific air quality goal of this regulation is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors.

### *Toxic Air Contaminant Regulations*

CARB's statewide comprehensive air toxics program was established in the early 1980s. The Toxic Air Contaminant Identification and Control Act created California's program to reduce exposure to air toxics. Under the Toxic Air Contaminant Identification and Control Act, CARB is required to use certain criteria in the prioritization for the identification and control of air toxics. In selecting substances for review, CARB must consider criteria relating to "the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community" [Health and Safety Code Section 39666(f)]. The Toxic Air Contaminant Identification and Control Act also requires CARB to use available information gathered from the Air Toxics "Hot Spots" Information and Assessment Act program to include in the prioritization of compounds.

California has established a two-step process of risk identification and risk management to address the potential health effects from air toxic substances and protect the public health of Californians. In the first step (identification), CARB and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified as a TAC in California. During this process, CARB and the OEHHA staff draft a report that serves as the basis for this determination. CARB staff assesses the potential for human exposure to a substance and the OEHHA staff evaluates the health effects. After CARB and the OEHHA staff hold several comment periods and workshops, the report is then submitted to an independent, nine-member Scientific Review Panel (SRP), who reviews the report for its scientific accuracy. If the SRP approves the report, they develop specific scientific findings, which are officially submitted to CARB. CARB staff then prepares a hearing notice and draft regulation to formally identify the substance as a TAC. Based on the input from the public and the information gathered from the report, CARB decides whether to identify a substance as a TAC. In 1993, the California Legislature amended the Toxic Air Contaminant Identification and Control Act by requiring CARB to identify 189 federal HAPs as state TACs.

In the second step (risk management), CARB reviews the emission sources of an identified TAC to determine if any regulatory action is necessary to reduce the risk. The analysis includes a review of controls

already in place, the available technologies and associated costs for reducing emissions, and the associated risk.

The Air Toxics "Hot Spots" Information and Assessment Act (Health and Safety Code Section 44360) supplements the Toxic Air Contaminant Identification and Control Act by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. The Hot Spots Act also requires facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

### ***California's Diesel Risk Reduction Program***

CARB identified particulate emissions from diesel-fueled engine TACs in August 1998. Following the identification process, CARB was required by law to determine if there is a need for further control, which led to the risk management phase of the program.

For the risk management phase, CARB formed the Diesel Advisory Committee to assist in the development of a risk management guidance document and a risk reduction plan. With the assistance of the Diesel Advisory Committee and its subcommittees, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. The Diesel Advisory Committee approved these documents on September 28, 2000, paving the way for the next step in the regulatory process: the control measure phase.

During the control measure phase, specific statewide regulations designed to further reduce diesel particulate matter (DPM) emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce DPM emissions.

#### **3.2.2.4 Local Regulations**

##### ***City of Vernon General Plan***

The following goals and policies of the *City of Vernon General Plan* are applicable to the Project.

##### **Resources Element**

**Goal R-2**                      Contribute to the continued gradual improvement of air quality in the South Coast Air Basin.

- Policy R-2.1** Coordinate and cooperate with the South Coast Air Quality Management District and Southern California Association of Governments in efforts to implement the regional Air Quality Management Plan.
- Policy R-2.2** Encourage and facilitate the use of public transportation to reduce emissions associated with automobile use.
- Policy R-2.3** Consult with the Gateway Cities Council of Governments, regional planning agencies, and surrounding municipalities to coordinate land use, circulation, and infrastructure improvement efforts.

### Housing Element

- Goal H-3** Create opportunities for the development of new housing in areas of the City that have the least potential for adverse impacts associated with established industrial uses and truck routes. Locate such new housing nearby community services.
- Policy H-3.2** Strategically locate sites for new housing so as to minimize noise, vibration, smoke, noxious gases, glare, heat, dust, odors, air pollution, and other adverse impacts associated with industrial uses, slaughtering and rendering uses, businesses that release toxic materials, and trucking and railroad facilities and routes.

### 3.2.3 THRESHOLDS OF SIGNIFICANCE

The following thresholds for determining the significance of impacts related to air quality are based on the environmental checklist form contained in Appendix G of the most recent update of the *State CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts to air quality, if any of the following would occur:

- Conflict with or obstruct implementation of the applicable air quality plan,
- 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,
- Expose sensitive receptors to substantial pollutant concentrations, or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The *State CEQA Guidelines* (Section 15064.7) provide that, when available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make determinations of significance. The potential air quality impacts of the Project are, therefore, evaluated according to thresholds developed by the SCAQMD, which are discussed below.

### 3.2.3.1 SCAQMD Thresholds

#### *AQMP Consistency*

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's 1993 CEQA Air Quality Handbook, and include the following:

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

The SCAQMD recommends quantitative regional significance thresholds for temporary construction activities and long-term project operation in the SCAB, shown in **Table 3.2-7, SCAQMD Regional Significance Thresholds**.

**Table 3.2-7**  
**SCAQMD Regional Significance Thresholds**

Pollutant	Construction Thresholds (Pounds per day)	Operational Thresholds (Pounds per day)
Volatile Organic Compounds (VOC)	75	55
Nitrogen Oxides (NO <sub>x</sub> )	100	55
Carbon Monoxide (CO)	550	550
Sulfur Oxides (SO <sub>x</sub> )	150	150
Respirable Particulates (PM <sub>10</sub> )	150	150
Fine Particulates (PM <sub>2.5</sub> )	55	55

Source: SCAQMD. 2019. *South Coast AQMD Air Quality Significance Thresholds*. Available at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>, accessed February 24, 2023.

### Localized Significance Thresholds

In addition to the above regional thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the CEQA Air Quality Handbook (1993). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO<sub>x</sub>, CO, PM10, and PM2.5. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size. LSTs have been developed for emissions generated in construction areas up to five acres in size. However, LSTs only apply to emissions in a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway. As such, LSTs are typically applied only to construction emissions because most operational emissions are associated with project-generated vehicle trips. **Table 3.2-8, SCAQMD LSTs for Construction Emissions in SRA 1**, shows the LST's for each pollutant for SRA 1 - Central LA County.

**Table 3.2-8**  
**SCAQMD LSTs for Construction Emissions in SRA 1**

Pollutant	Localized Significance Thresholds		
	1 acre at 25 meters	2 acres at 25 meters	5 acres at 25 meters
Nitrogen Oxides (NO <sub>x</sub> )	74 lbs/day	108 lbs/day	161 lbs/day
Carbon Monoxide (CO)	680 lbs/day	1,048 lbs/day	1,861 lbs/day
Respirable Particulates (PM10)	5 lbs/day	8 lbs/day	16 lbs/day
Fine Particulates (PM2.5)	3 lbs/day	5 lbs/day	8 lbs/day

Source: South Coast Air Quality Management District. 2009. *Final Localized Significance Threshold Methodology, Appendix C – Mass Rate LST Looks-Up Tables*. Available at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2>

### Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal 1-hour standard of 35.0 parts per million (ppm) or the federal and State 8-hour standard of 9.0 ppm.



### ***Toxic Air Contaminants***

CARB's Air Quality and Land Use Handbook (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). SCAQMD published similar recommendations in its Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning (2005). Together, the CARB and SCAQMD guidelines recommend siting distances both for the development of sensitive land uses in proximity to TAC sources and for the addition of new TAC sources in proximity to existing sensitive land uses.

### ***Odors***

According to the SCAQMD CEQA Air Quality Handbook (1993) land uses associated with odor complaints to be agricultural uses, wastewater treatment plants, chemical and food processing plants, composting, refineries, landfills, dairies, and fiberglass molding.

### **3.2.4 METHODOLOGY**

Construction and operational criteria air pollutant emissions were calculated with CalEEMod and were compared to the SCAQMD's significance thresholds. Air quality impacts resulting from implementation of the Project are analyzed at a programmatic level because information on specific development projects is not known for the Project as a whole. The SCAQMD CEQA Air Quality Handbook states that the air quality assessment should be as comprehensive as possible at a programmatic level. In the absence of SCAQMD programmatic thresholds, the EIR evaluates broad air quality impacts and examines the Project's consistency with the 2022 AQMP. Consistency with the AQMP would ensure compliance with regional and local air quality goals.

### **3.2.5 ENVIRONMENTAL IMPACTS**

#### **Impact AQ-1                      Conflict with or obstruct implementation of the applicable air quality plan.**

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality

attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

Drafted by the SCAQMD, the 2022 AQMP was developed in coordination with CARB, SCAG, and the U.S. EPA to establish a program of rules and regulations to reduce air pollutant emissions to achieves CAAQS and NAAQS. The AQMP's pollutant control strategies are based on SCAG's 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS).

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's 1993 CEQA Air Quality Handbook, and include the following:

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

With respect to the first criterion, area air quality planning, including the AQMP, assumes that there will be emissions from new growth, but that such emissions may not impede the attainment and may actually contribute to the attainment of applicable air quality standards within the SCAB. Construction-related emissions would be temporary in nature, lasting only for the duration of the construction period, and would not have a long-term impact on the region's ability to meet state and federal air quality standards. Furthermore, the development projects resulting from implementation of the Project will be required to comply with applicable SCAQMD rules and regulations for new or modified sources. For example, the Project must comply with SCAQMD Rule 403 for the control of fugitive dust during construction. By meeting SCAQMD rules and regulations, future construction activities within the Project Area will be consistent with the goals and objectives of the AQMP to improve air quality in the SCAB. With respect to operations, (see **Impact AQ-2**), the Project would not result in operational air quality emissions that exceed the SCAQMD thresholds of significance. Furthermore, as discussed in more detail under consistency with the second criterion, projects, land uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP (i.e., the RTP/SCS) would not jeopardize attainment of the air quality levels identified in the AQMP. As such, air quality emissions associated with the Project would not directly delay the attainment of criteria pollutants for which the SCAB region is in nonattainment. Thus, the Project would be consistent with the first criterion.

With respect to the second criterion, the AQMP was prepared to achieve national and state air pollution standards within the region. A project that is considered to be consistent with the AQMP would not

interfere with attainment of AQMP goals because the growth from the project is included in the regional projections used to formulate the AQMP. The Project would add approximately 874 housing units to the Project Area. This growth, along with increases in commercial and office development, would be concentrated in the mixed-use zones identified in the Project Area. As discussed in **Section 3.9, Population and Housing**, the Project would potentially add 2,486 residents to the City. While the Project would increase population and housing projections, the growth is not considered significant as it would only account for approximately 0.02 percent of the existing Los Angeles County population. While SCAG relies on local input, including plans, from local jurisdictions to develop the housing forecast, the timing of the input does not always line up with the RTP/SCS, which is updated every four years. In this case, potential development under the Project was not considered in the AQMP growth forecast because the Project was not yet proposed. Thus, in this regional context, the Project's growth projections would not be considered substantial, and the objectives of the Project would help the State, SCAG region and City achieve its goals of increasing housing and implementing pedestrian oriented mixed-use development. Please refer to **Section 3.9, Population and Housing; Section 3.7, Land Use Planning; and Section 3.11 Transportation**, for a full discussion of the less-than-significant impacts associated with growth and regional planning associated with the Project. As detailed therein, the Project would not conflict with regional growth projections identified in SCAG's RTP/SCS used in the formulation of the AQMP. Thus, the Project is also consistent with the second criterion. As the Project is consistent with Criterion Nos. 1 and 2, it would not conflict with or obstruct implementation of any applicable air quality plan, and this impact is less than significant.

### *Significance Before Mitigation*

Less than Significant Impact.

### *Mitigation Measures*

No mitigation measures are required.

### *Significance After Mitigation*

Less than Significant Impact.

---

**Impact AQ-2**                    **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.**

### **Regional Construction Emissions**

Criteria pollutants include O<sub>3</sub>, CO, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and lead. As shown in **Table 3.2-5 National Ambient Air Quality Standards and Status – South Coast Air Basin**, and **Table 3.2-6, California Ambient Air Quality Standards**, the SCAB is a non-attainment area for the federal standards for O<sub>3</sub> and PM<sub>2.5</sub> and state standards for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The Los Angeles County portion of the SCAB is also designated non-attainment for lead. Because the Project does not include any measurable sources of lead emissions, this pollutant is not discussed further in this analysis. Therefore, this analysis focuses on air quality impacts related to those criteria pollutants for which the region is nonattainment, which are O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

Construction activities associated with Project include the following: demolition, grading, construction worker travel to and from the Project Area, delivery and hauling of construction supplies and debris to and from the Project Area, and fuel combustion by on-site construction equipment. These activities would generate emissions of ozone precursors (ROG and NO<sub>x</sub>), CO, and dust (PM<sub>10</sub>, and PM<sub>2.5</sub>). Construction activity associated with implementation of the Project has the potential to create air quality impacts through emissions produced by the use of heavy-duty construction equipment and by vehicle trips generated by construction worker commuting, construction vendor material deliveries, and haul truck trips to and from individual development sites within the Project Area. Fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions would primarily result from demolition and site preparation (e.g., grading) activities. NO<sub>x</sub> emissions, a precursor emission to ozone for which the SCAB is also designated nonattainment, would primarily result from the use of construction equipment. During the finishing phase, paving operations and the application of architectural coatings (e.g., paints) and other building materials would release VOCs, the other precursor emission to O<sub>3</sub>. 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.

Construction emissions were estimated for equipment exhaust emissions and truck trips for a number of example individual construction projects using CalEEMod. Equipment emission factors in CalEEMod are based on CARB data. CalEEMod can include worker and vendor trip lengths based on the Metropolitan Planning Organization (MPO), in this case SCAG, which is in turn based on the local Transportation Analysis Zone data aggregated to the SCAG jurisdictional boundary. Truck emission factors in CalEEMod are from EMFAC2021 and trucks were assumed to travel 40 miles per day, with a one-way distance of 20 miles to the disposal site. Architectural coating emissions are qualitatively discussed because it would be speculative to quantify the size of buildings to be coated. Without specific projects to model in CalEEMod,

the construction assumptions used in the model provide a range of construction emissions. This analysis identified four scales of intensity with respect to equipment usage and truck trips, as itemized below.

- Example 1: crew of 10 workers, two pieces of heavy-duty equipment, and 25 truck trips per day
- Example 2: crew of 20 workers, four pieces of heavy-duty equipment, and 50 truck trips per day
- Example 3: crew of 50 workers, eight pieces of heavy-duty equipment, and 100 truck trips per day
- Example 4: crew of 100 workers, 10 pieces of heavy-duty equipment, and 150 truck trips per day

These crew sizes, equipment inventories, and truck volumes are representative of a reasonable range of construction activity intensity for individual projects which could occur under the Project. However, they represent a conservative estimation of emissions as in practice many urban infill sites available for redevelopment may not be able to accommodate six, eight or ten pieces of equipment. Further, many sites could be redeveloped as adaptive reuse which would require less exterior work than ground up construction. Maximum daily regional and localized emissions were quantified for these construction scenarios and assessed in the context of the SCAQMD significance thresholds. It is not practicable to estimate the incremental change in daily off-road equipment activity or daily vehicle miles traveled (VMT) associated with construction projects within the Project Area resulting from implementation of the Project with any reasonable degree of accuracy. The analysis of emissions from reasonably expected construction projects under implementation of the Project assumes a baseline of zero for daily criteria pollutants emissions, which is extremely conservative given that there are generally construction projects going on in the City and Project Area at any given time.

SCAQMD's Rule 403, Fugitive Dust, is a control requirement for preventing, mitigating, and controlling the release of airborne particulate matter emissions from earth moving activities. It is mandatory for all construction projects in the SCAB to comply with Rule 403 or face violations that would incur fines. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would help reduce PM<sub>2.5</sub> and PM<sub>10</sub> emissions associated with construction activities.

Predicted maximum daily construction-generated emissions for projects which would occur under the Project are summarized in **Table 3.2-9, Construction-Related Criteria Pollutant and Precursor Emissions – Maximum Pounds per Day**. As shown in **Table 3.2-9**, the peak daily emissions generated under example

construction scenarios anticipated for the construction of the Project would not exceed any of the regional emission thresholds recommended by the SCAQMD. However, it is unknown the number and location of individual construction projects that could occur under the Project. Since details regarding individual projects under the Project are not available, it is reasonable to assume that multiple projects under the Project could occur simultaneously. Therefore, while none of the example construction scenarios analyzed below would exceed any regional thresholds on their own, when multiple projects are constructed simultaneously, impacts from Project construction could result in a cumulatively considerable net increase of a criteria air pollutant for which the region is in nonattainment. As such, construction impacts are conservatively considered potentially significant, and mitigation is required (see **Mitigation Measures AQ-1** through **AQ-8**).

**Table 3.2-9**  
**Construction-Related Criteria Pollutant and Precursor Emissions – Maximum Pounds per Day**

Example Scenarios - Daily Activity <sup>1</sup>	Pounds per Day					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2 Pc. Heavy-Duty Equipment, 25 Truckloads	7.20	17.8	14.5	0.03	4.12	2.18
4 Pc. Heavy-Duty Equipment, 50 Truckloads	7.24	33.0	27.3	0.06	7.88	4.21
8 Pc. Heavy-Duty Equipment, 100 Truckloads	7.38	63.6	53.5	0.11	15.5	8.30
10 Pc. Heavy-Duty Equipment, 150 Truckloads	7.57	81.4	68.0	0.15	19.9	10.5
<i>Regional Significance Threshold</i>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
<b>Exceed Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

<sup>1</sup> Equipment exhaust was estimated conservatively assuming eight hour per day of operation. Truck emissions were estimated assuming a round trip length of 40 miles.

## Regional Operational Emissions

Emissions for the Project would be comprised of mobile source emissions, area source emissions, and emissions associated with energy consumption. The operational emissions associated with implementation of the Project by 2040 are shown in **Table 3.2-10, Estimated Operational Emissions**. Future emissions from the Project were compared to existing conditions emissions as well as future conditions without the Project. As shown, when compared to both existing and future without Project scenarios, net emissions from Project operations would not exceed SCAQMD regional thresholds of significance for any criteria pollutants. Impacts would be less than significant.

**Table 3.2-10  
Estimated Operational Emissions**

Emissions Source	Emissions in Pounds per Day					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM10	PM2.5
<b>Future (2040) With Project</b>						
Mobile Source	49.60	91.00	1,503.00	5.00	223.00	41.20
Area Source	494.00	20.70	714.00	0.14	2.09	2.38
Energy Source	9.63	175.00	146.0	1.05	13.30	13.30
<b>Emissions Totals</b>	<b>553.23</b>	<b>286.70</b>	<b>2,363.00</b>	<b>6.19</b>	<b>238.39</b>	<b>56.88</b>
<b>Future (2040) Without Project</b>						
Mobile Source	48.7	89.4	1476.0	4.91	219.0	40.5
Area Source	465.0	0.22	651.0	0.04	0.89	1.17
Energy Source	9.45	172.0	144.0	1.03	13.1	13.1
<b>Emissions Totals</b>	<b>523.15</b>	<b>261.62</b>	<b>2,271.0</b>	<b>5.98</b>	<b>232.99</b>	<b>54.77</b>
<b>Future (2040) With Project Compared to Existing Conditions</b>						
Existing Emissions (Table 3.2-3)	552.25	427.18	3,363.0	7.29	229.99	55.78
<b>Net Emissions</b>	<b>0.98</b>	<b>-140.48</b>	<b>-1,000.00</b>	<b>-1.10</b>	<b>8.40</b>	<b>1.10</b>
<i>SCAQMD Threshold</i>	55	55	550	150	150	55
<b>Exceeds Threshold?</b>	No	No	No	No	No	No
<b>Future (2040) With Project Compared to Future (2040) Without Project</b>						
<b>Net Emissions</b>	<b>30.08</b>	<b>25.08</b>	<b>92.00</b>	<b>0.21</b>	<b>5.40</b>	<b>2.11</b>
<i>SCAQMD Threshold</i>	55	55	550	150	150	55
<b>Exceeds Threshold?</b>	No	No	No	No	No	No

Source: Impact Sciences, Inc. See **Appendix 3.2** for CalEEMod data.

Notes: Totals in table may not add exactly due to CalEEMod rounding. Emissions presented are the highest of the winter and summer modeled emissions.

## Public Health

On December 24, 2018, the California Supreme Court published its opinion on the *Sierra Club et al. v. County of Fresno et. al.* (Case No. S219783), which determined that an environmental review must adequately analyze a project's potential impacts and inform the public how its bare numbers translate to a potential adverse health impact or explain how existing scientific constraints cannot translate the emissions numbers to the potential health impacts.

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health. The national and state ambient air quality standards have been set at levels to protect human health with a determined margin of safety.<sup>4</sup> As discussed previously, the SCAB is in state non-attainment for PM2.5, PM10, and Ozone (O<sub>3</sub>) and federal non-attainment for PM2.5 and O<sub>3</sub>. Therefore, an increase in emissions of

<sup>4</sup> SCAQMD, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, May 6, 2005.

particulate matter or ozone precursors (ROG and NO<sub>x</sub>) has the potential to push the region further from reaching attainment status and, as a result, are the pollutants of greatest concern in the region.

As shown in **Table 3.2-10, Estimated Operational Emissions**, net emissions from Project operations would not exceed SCAQMD regional thresholds of significance for ROG and PM<sub>2.5</sub>. No specific development projects are proposed at this time and the actual level of future development in the Project Area and associated emissions may be lower than shown herein. It should also be noted that each individual project considered under Project buildout would be substantially smaller in size compared to the assumptions under full Project buildout, and individual projects would likely not exceed regional operational project-level thresholds. Also discussed previously, the Project would not conflict with or obstruct implementation of the AQMP, which has been prepared to achieve the national and state air pollution standards set at levels to protect human health. Therefore, public health impacts associated with air quality would be less than significant.

### *Significance Before Mitigation*

Impacts with respect to regional construction emissions would be potentially significant and impacts with respect to regional operational emissions and public health would be less than significant.

### *Mitigation Measures*

#### **AQ-1            Dust Control Compliance with SCAQMD Rule 403**

- a. **Applicability Threshold:** Any project whose construction activities involve the use of construction equipment and require a permit from City of Vernon Department of Public Works.
- b. **Standard:** Consistent with SCAQMD Rule 403, best available dust control measures shall be implemented during Ground Disturbance Activities and active construction operations capable of generating dust.

#### **AQ-2            Equipment Maintenance**

- a. **Applicability Threshold:** Any project whose construction activities involve the use of construction equipment and require a permit from City of Vernon Department of Public Works.
- b. **Standard:** Maintain construction equipment in good, properly tuned operating condition, as specified by the manufacturer, to minimize exhaust emissions.



Documentation demonstrating that the equipment has been maintained in accordance with the manufacturer's specifications shall be maintained per the proof of compliance requirements for a minimum of five years after the Certificate of Occupancy is issued.

All construction equipment shall achieve emissions reductions that are no less than what could be achieved by a Tier 3 diesel emission control strategy for a similarly sized engine as defined by CARB regulations.

**AQ-3 Vehicle Idling Limit and Notification Signs**

- a. **Applicability Threshold:** Any project whose construction activities involve the use of construction equipment and require a permit from City of Vernon Department of Public Works.
- b. **Standard:** Vehicle idling during construction activities shall be limited to five minutes as set forth in the California Code of Regulations, Title 13, Section 2449. Signs shall be posted in areas where they will be seen by vehicle operators stating idling time limits.

**AQ-4 Non-Diesel Fueled Electrical Power**

- a. **Applicability Threshold:** Any project whose construction activities involve the use of construction equipment and require a permit from City of Vernon Department of Public Works.
- b. **Standard:** Electricity from power poles rather than temporary gasoline or diesel-powered generators shall be used to the extent available and feasible.

**AQ-5 Emissions Standards for Off-Road Construction Equipment Greater than 50 Horsepower**

- a. **Applicability Threshold:** Any project whose construction activities involve the use of construction equipment, require a permit from City of Vernon Department of Public Works, and involve at least 5,000 cubic yards of on-site cut/fill on any given day.
- b. **Standard:** All off-road diesel-powered construction equipment equal to or greater than 50 horsepower shall meet the U.S. Environmental Protection Agency's (U.S. EPA) Tier 4 emission standards during construction. Operators shall maintain records of all off-road equipment associated with Project construction to document that each piece of

equipment used meets these emission standards per the proof of compliance requirement for a minimum of five years after the Certificate of Occupancy is issued.

In lieu of compliance with the above requirement, an air quality study prepared in accordance with the SCAQMD's Air Quality Handbook may be provided by the Applicant or Owner demonstrating that Project construction activities would not exceed the SCAQMD's regional and localized construction thresholds.

#### **AQ-6 Use of Low Polluting Fuels**

- a. Applicability Threshold:** Any project whose construction activities involve the use of construction equipment, require a permit from City of Vernon Department of Public Works, and involve at least 5,000 cubic yards of on-site cut/fill on any given day.
- b. Standard:** Construction equipment less than 50 horsepower shall use low polluting fuels (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline).

In lieu of compliance with the above requirement, an air quality study prepared in accordance with the SCAQMD's Air Quality Handbook may be provided by the Applicant or Owner demonstrating that Project construction activities would not exceed the SCAQMD's regional and localized construction thresholds.

#### **AQ-7 Emission Standards for On-Road Haul Trucks**

- a. Applicability Threshold:** Any project whose construction activities involve the use of construction equipment, require a permit from City of Vernon Department of Public Works, and involve more than 90 round-trip haul truck trips on any given day for demolition debris and import/export of soil.
- b. Standard:** Construction haul truck operators for demolition debris and import/export of soil shall use trucks that meet the California Air Resources Board's (CARB) 2010 engine emissions standards at 0.01 g/bhp-hr. of particulate matter (PM) and 0.20 g/bhp-hr. of nitrogen oxides (NOX) emissions. Operators shall maintain records of all trucks associated with Project construction to document that each truck used meets these emission standards per the proof of compliance requirements in Subsection I.D.6.

In lieu of compliance with the above requirement, an air quality study prepared in accordance with the SCAQMD's Air Quality Handbook may be provided by the

Applicant or Owner demonstrating that Project construction activities would not exceed the SCAQMD's regional and localized construction thresholds.

#### **AQ-8 Routes for On-Road Haul Trucks**

- a. Applicability Threshold:** Any project whose construction activities involve the use of construction equipment and require a permit from City of Vernon Department of Public Works.
- b. Standard:** Construction contractors shall reroute construction trucks away from congested streets or Sensitive Uses, as feasible. The burden of proving that compliance is infeasible shall be upon the Applicant or Owner. Where avoiding Sensitive Uses and congested streets altogether is infeasible, routing away from Sensitive Uses shall be prioritized over routing away from congested streets.

### *Significance After Mitigation*

#### **Construction**

While **Mitigation Measures AQ-1** through **AQ-8** would reduce construction related emissions from projects under the Project, it is still possible that multiple construction projects could occur simultaneously. Therefore, without knowing the number of construction projects which could occur simultaneously, impacts would be considered significant and unavoidable.

#### **Operations**

Impacts would be less than significant for regional operational emissions and public health, and no mitigation measures are required.

---

**Impact AQ-3 Expose sensitive receptors to substantial pollutant concentrations.**

#### **Localized Construction Emissions**

The SCAQMD has developed localized significance thresholds (LST) that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the applicable federal or State ambient air quality standard. For a conservative analysis, the 1.0-acre LST in SRA 1 with sensitive receptors located within 25 meters has been used to address potential localized NO<sub>x</sub>, CO, PM<sub>10</sub>,

and PM2.5 impacts. As shown in **Table 3.2-11, Localized Significance of Construction Emissions – Maximum Pounds per Day**, the Project could exceed the localized thresholds of significance for PM10 and PM2.5 during construction of large projects. Furthermore, it is possible that multiple construction projects would occur simultaneously within the Project Area. Therefore, impacts related to localized criteria pollutants (PM10 and PM2.5) would be potentially significant.

**Table 3.2-11  
Localized Significance of Construction Emissions – Maximum Pounds per Day**

<b>Construction Scenario</b>	<b>NOx</b>	<b>CO</b>	<b>PM10</b>	<b>PM2.5</b>
2 Pc. Heavy-Duty Equipment, 25 Truckloads	15.3	12.9	3.49	2.01
4 Pc. Heavy-Duty Equipment, 50 Truckloads	28.1	24.1	6.63	3.85
8 Pc. Heavy-Duty Equipment, 100 Truckloads	53.8	46.5	12.87	7.55
10 Pc. Heavy-Duty Equipment, 150 Truckloads	66.6	57.7	16.05	9.40
<i>SCAQMD Localized Thresholds</i>	<i>74.00</i>	<i>680.00</i>	<i>5.00</i>	<i>3.00</i>
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>

*Source: Impact Sciences, Inc. See Appendix 3.2 for CalEEMod data.*

*Notes: Calculations assume compliance with SCAQMD Rule 403 – Fugitive Dust. Analysis applies a 1-acre LST with a receptor distance of 25 meters (82 feet) in SCAQMD’s SRA 1.*

## **Carbon Monoxide (CO) Hotspots**

The Project would not result in potentially significant CO “hot spots” and a Project-specific CO hotspots analysis is not required to reach this conclusion. It has long been recognized that CO exceedances (“hot spots”) are caused by vehicular emissions, primarily when idling at intersections. Vehicle emissions standards have become increasingly more stringent in the last twenty years. With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations for the SCAB are substantially below the California one-hour or eight-hour CO standards, and even very busy intersections do not have the potential to exceed the standard. As shown in **Table 3.2-2, Los Angeles (Main Street) Air Monitoring Station Ambient Pollutant Concentrations**, SRA-1 has not exceeded either the federal or state one-hour CO standards in any of the most recent 3 years for which data is available. The maximum ambient one-hour and eight-hour CO levels recorded for SRA-1 is 2.0 ppm and 1.7 ppm, respectively. These levels are substantially below the one-hour and eight-hour California standards of 20.0 ppm and 9.0 ppm. Therefore, the Project would not have the potential to cause or

contribute to an exceedance of the California one-hour or eight-hour CO standards. Impacts with respect to localized CO concentrations would be less than significant.

### Toxic Air Contaminants

The primary sources of potential TACs associated with construction would result in the generation of DPM emissions from the use of off-road diesel equipment required for demolition, grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The use of diesel-powered construction equipment would be temporary and episodic (i.e., intermittent during the construction period). The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current methodology for conducting health risk assessments is associated with long term exposure periods (9, 30, and 70 years). Therefore, short-term construction activities would not generate a significant health risk. Additionally, SCAQMD CEQA guidance does not require preparation of a health risk assessment for short-term construction emissions. Furthermore, construction would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than 5-minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions.<sup>5</sup> For these reasons, the Project would not expose sensitive receptors to substantial concentrations of air toxics and this impact is less than significant.

The greatest potential during long-term operations for exposure to TACs is from the use of heavy-duty diesel trucks and stationary generators that use diesel fuel. The Project promotes cleaner industrial land uses within the Project Area to provide more compatible uses near the increased residential uses. It is expected that quantities of hazardous TACs generated on-site (e.g., cleaning solvents, paints, landscape pesticides, etc.) for the types of proposed land uses would be below thresholds warranting further study under the California Accidental Release Program. Furthermore, development under the Project would be required to comply with SCAQMD Rule 1401 (New Source Review of Toxic Air Contaminants), which regulates new or modified facilities. For these reasons, the Project would not expose nearby sensitive receptors to substantial amounts of air toxics and this impact would be less than significant.

---

<sup>5</sup> California Air Resources Board. *In-Use Off Road Diesel Fueled Fleets Regulation Overview*. 2016. Available online at: [https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/faq/overview\\_fact\\_sheet\\_dec\\_2010-final.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/faq/overview_fact_sheet_dec_2010-final.pdf) , accessed February 24, 2023.

## Hazardous Materials

During construction of future site-specific development projects pursuant to the Project, hazardous materials in the form of paints, solvents, glues, roofing materials, and other common construction materials containing toxic substances would be transported to individual construction sites. In addition, asbestos, lead, PCBs, or other hazardous materials could exist within buildings that would be demolished or remodeled under the Project. Therefore, hazardous material surveys and abatement activities for buildings constructed prior to the 1980s would be required pursuant to the existing U.S. DOT, DTSC, Title 27 of the California Code of Regulations, CalEPA, Cal/OSHA regulations, and Section 19827.5 of the California Health and Safety Code. In addition, all PCBs, asbestos-containing materials, and lead based paints are required to be abated in accordance with SCAQMD, Cal/OSHA, and California Health and Safety Code requirements prior to demolition or renovation activities commence.

The asbestos, lead, PCBs, or other hazardous materials that may be encountered during demolition or construction activities would be transported and disposed of in compliance with all applicable regulations for the handling of such waste, including SCAQMD Rule 1403 (asbestos) and the California Code of Regulations. Additionally, appropriate documentation for hazardous waste that is transported in connection with activities at development sites (such as disposal of asbestos or building materials containing lead-based paint or PCBs) would be required by the City's Public Works Department prior to issuance of any demolition or construction permits (as required by federal, state, and city regulations) to ensure compliance with the existing hazardous materials regulations described above. These requirements were developed to protect human health and the environment and compliance with these existing regulations would reduce impacts related to demolition, transport, and disposal of hazardous materials to a less than significant level. However, given the high level of contamination in the Project Area, implementation of **Mitigation Measure HAZ-1** identified in **Section 3.5, Hazards and Hazardous Materials**, would be required.

### *Placement of Sensitive Receptors*

Existing uses within the Project Area include industrial uses and other activity which contribute to elevated ambient pollutant concentration that can be harmful to public health. The Project would create mixed use-zones and would introduce sensitive receptors such as new residents to the Project Area.

Regarding health risks from existing emissions sources, the California Supreme Court ruling in *California Building Industry Association vs. Bay Area Air Quality Management District* (December 17, 2015) held that, "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project's risks exacerbate those

environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment – and not the environment's impact on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." Assessing health risks from existing land uses equates to assessing the environment's impact on the project. The California Supreme Court ruled that this analysis would not be consistent with CEQA.

With respect to the Project's potential to exacerbate existing air quality conditions within the Project Area and beyond, the Project would not generate operational air quality emissions exceeding the SCAQMD thresholds of significance. As such, the Project would not have the potential to exacerbate long term air quality conditions and this impact is less than significant.

With respect to land use compatibility, the Project promotes cleaner industrial land uses within the Project Area to provide more compatible uses near the increased residential uses. The Project would also implement key development features and requirements for future development within the areas zoned as a mixed-use. These features are intended to minimize potential conflicts between residential or live/work uses and on-site or neighboring uses. **Table 2.0-1, Key Development Features and Regulations, in Section 2.0, Project Description**, summarizes the development standards for future development within each proposed zone. Most notably, the Project would minimize exposure to ambient air quality conditions through the use of setbacks, buffering and orientation, enhanced air filtration, and unit design.

### *Significance Before Mitigation*

Impacts with respect to localized construction emissions would be potentially significant, and impacts with respect to CO Hotspots, TAC emissions, and placement of sensitive receptors would be less than significant.

### *Mitigation Measures*

See **Mitigation Measures AQ-1 through AQ-8** provided above. Impacts associated with the potential release of asbestos would be mitigated by a Phase I investigation as outlined in **Mitigation Measure HAZ-1, in Section 3.5, Hazards and Hazardous Materials**.

### *Significance After Mitigation*

While **Mitigation Measures AQ-1 through AQ-8** would reduce localized construction related emissions from the Project, it is still possible that multiple construction projects could occur simultaneously, possibly in proximity to each other and sensitive receptors. Therefore, without knowing the number of construction projects which could occur simultaneously, impacts would be considered significant and unavoidable.

Impacts with respect to CO Hotspots, TAC emissions, and the placement of sensitive receptors would be less than significant and no mitigation measures are required.

---

**Impact AQ-4                      Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.**

The SCAQMD CEQA Air Quality Handbook (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project Area already includes many of the above referenced industrial land uses, which are a known source of odors. The Project promotes cleaner industrial land uses within the Project Area and, thus, would not exacerbate existing odors by including new odor sources within the Project Area. Instead, the Project aims to create pedestrian friendly mixed-use zones which would not include any of the land uses that have been identified by the SCAQMD as odor sources. The Project would also reduce the amount of industrial square footage compared to existing conditions, likely reducing the number of odor sources throughout the Project Area. Development under the Project would also be required to comply with SCAQMD Rule 402, Nuisance to address any odors adversely affecting a number of people and industrial uses generating odors would continue to operate as required by SCAQMD permitting.

Construction activities associated with the Project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon Project buildout. In addition, individual development projects under the Project would be required to comply with the California Code of Regulations, Title 13, sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would reduce the detectable odors from heavy-duty equipment exhaust. Development projects under the Project would also be required to comply with the SCAQMD Rule 1113 – Architectural Coating, which would minimize odor impacts from ROG emissions during architectural coating. Any odor impacts to existing adjacent land uses would be short-term and not substantial. As such, the Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people and this impact would be less than significant.

***Significance Before Mitigation***

Less than Significant Impact.



### *Mitigation Measures*

No mitigation measures are required.

### *Significance After Mitigation*

Less than Significant Impact.

## **3.2.6 CUMULATIVE IMPACTS**

As discussed in **Section 3.2.1, Environmental Setting**, the SCAB includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. Cumulative projects would include any reasonably anticipated development in the SCAB for regional air quality impacts.

**AQMP Consistency.** AQMP consistency is discussed under **Impact AQ-1**. As discussed therein, the Project would not conflict with the 2022 AQMP. The AQMP was prepared to accommodate growth, to reduce the high levels of pollutants within areas under the SCAQMD jurisdiction, and to minimize the impact on the economy. Consistency with the AQMP is assessed by determining how a project accommodates increases in population or employment consistent with the applicable assumptions in the AQMP. The population and employment assumptions used by the SCAQMD to estimate regional emissions in the AQMP are obtained from SCAG projections for cities and unincorporated areas in the SCAQMD's jurisdiction. The Project's growth is not considered significant as it would only account for approximately 0.02 percent of the existing Los Angeles County population. Thus, in this regional context, the Project's growth projections would not be considered substantial. Therefore, implementation of the Project would not conflict with the AQMP. Impacts related to AQMP consistency would be less than significant and would not be cumulatively considerable.

**Criteria Pollutant Emissions for which the Region is Non-Attainment (Ozone, PM10 and PM2.5).** In order to assess cumulative impacts of emissions, the SCAQMD recommends that projects be evaluated to determine whether they would be consistent with AQMP performance standards and project-specific emissions thresholds. In the case of the Project, air pollutant emissions would be considered to be cumulatively considerable if the new sources of emissions exceed SCAQMD project-specific emissions thresholds. As discussed under **Impact AQ-2**, construction activities under the Project could result in multiple construction projects simultaneously. Mitigation measures **AQ-1** through **AQ-8** would reduce construction related emissions to the extent feasible. However, without knowing the number of construction projects which could occur simultaneously, impacts would be significant and unavoidable and would be cumulatively considerable.

The nature of a Project analysis is cumulative in itself since it evaluates the potential for numerous individual projects to occur over the horizon year. SCAQMD indicates that projects that have significant impacts at a project level must also be determined to be significant at a cumulative level. As shown in **Table 3.2-10, Estimated Operational Emissions**, operational activities would not exceed SCAQMD regional thresholds of significance for any criteria pollutants. Thus, the incremental effect of the Project related to nonattainment pollutants would be less than significant and would not be cumulatively considerable.

**Sensitive Receptors and Substantial Pollutant Concentrations.** As discussed under **Impact AQ-3**, localized construction emissions would exceed the localized thresholds of significance for PM10 and PM2.5 during construction of large projects. Furthermore, it is possible that multiple construction projects would occur simultaneously within the Project Area. Impacts would be significant and unavoidable and would be cumulatively considerable.

As indicated under **Impact AQ-3**, land uses associated with proposed mixed-use development under the Project typically do not generate TAC emissions that would expose people to substantial pollutant concentrations. The use of toxic compounds would be strictly regulated through the SCAQMD permitting process, which requires detailed HRAs, when applicable. New potential sources of substantial TAC emissions (i.e., gasoline dispensing facilities) are subject to SCAQMD Rule 1401 (New Source Review of Toxic Air Contaminants). Compliance with the SCAQMD permitting process and Regulation XIV would ensure that new land uses would not generate TAC emissions exceeding the SCAQMD standards or adversely affect sensitive land uses. Impacts would be less than significant with respect to exposing sensitive receptors to substantial TAC emissions and would not be cumulatively considerable.

**Odor.** As indicated under **Impact AQ-4**, the Project is not anticipated to facilitate the development of uses typically associated with odor complaints. The Project would reduce the total square footage of industrial uses, potentially reducing the number of odor sources in the Project Area. All new development and existing industrial uses would be required to follow SCAQMD rules and permitting regulations. While construction activity can emit odors, construction activity has not been identified as a source of odor complaints. Accordingly, future development occurring under the Project would not cause a construction-related odor nuisance. Impacts related to odors would be less than significant and would not be cumulatively considerable.

### 3.2.7 REFERENCES

California Air Resources Board. *Ambient Air Quality Standards*. 2016. Available online at: <https://www.arb.ca.gov/research/aaqs/aaqs2.pdf>, accessed February 24, 2023.

California Air Resources Board. *In-Use Off Road Diesel Fueled Fleets Regulation Overview*. 2016. Available at: [https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/faq/overview\\_fact\\_sheet\\_dec\\_2010-final.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/faq/overview_fact_sheet_dec_2010-final.pdf), accessed February 24, 2023.

California Air Resources Board. *Sensitive Receptor Assessment*. Available online at: <https://ww2.arb.ca.gov/capp-resource-center/community-assessment/sensitive-receptor-assessment>, accessed February 24, 2023.

California Air Resources Board, *2020 Mobile Source Strategy*, 2021. Available online at: [https://ww2.arb.ca.gov/sites/default/files/2021-12/2020\\_Mobile\\_Source\\_Strategy.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-12/2020_Mobile_Source_Strategy.pdf), accessed February 24, 2023.

CARB South Coast AQMP Mobile Source Working Group, *CARB Strategies for Reducing Emissions from Off-Road Construction Equipment*, 2021. Available online at: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/combined-construction-carb-amp-aqmp-presentations-01-27-21.pdf?sfvrsn=8>, accessed February 24, 2023.

CARB South Coast AQMP Mobile Source Working Group, *Development of Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation*, 2021. Available online at: <https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/workshop/offroadworkshop-050621.pdf>, accessed February 24, 2023.

Office of Environmental Health Hazard Assessment, Air Toxics Hot Spot Program Risk Assessment Guidelines. <https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>, accessed February 24, 2023.

Office of Environmental Health Hazard Assessment and The American Lung Association of California. *Air Pollution and Children's Health*. Available online at: <https://oehha.ca.gov/air/air-pollution-and-childrens-health-fact-sheet-oehha-and-american-lung-association>, accessed February 24, 2023.

South Coast Air Quality Management District. *Air Quality Management Plan*. 2022. Available online at: <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan>, accessed February 24, 2023.

South Coast Air Quality Management District. Final Localized Significance Threshold Methodology, Appendix C – Mass Rate LST Looks-Up Tables. 2009 Available at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2>, accessed February 24, 2023.

South Coast Air Quality Management District, *Final Program Environmental Impact Report for the 2022 Air Quality Management Plan*, 2022. Available online at: <http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2022/2022-aqmp-final-peir.pdf?sfvrsn=8>, accessed February 24, 2023.

South Coast Air Quality Management District, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, May 6, 2005.

South Coast Air Quality Management District. Historical Data By Year. Available at:  
<https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year>,  
accessed February 24, 2023.

South Coast Air Quality Management District, *Overview – Fugitive Dust Mitigation Measure Tables*, 2007.

## 3.3 CULTURAL, TRIBAL CULTURAL & PALEONTOLOGICAL RESOURCES

---

### INTRODUCTION

*This section presents an overview of the existing cultural resource conditions within the boundaries of the proposed Vernon Westside Mixed Use Zone Change and General Plan Amendment Project (Project). It also discusses the potential impacts to Cultural Resources (i.e., historical resources and archeological resources), Tribal Cultural Resources, and paleontological resources as a result of construction and operation activities associated with the implementation of the Project.*

#### 3.3.1 ENVIRONMENTAL SETTING

##### 3.3.1.1 Ethnographic and Prehistoric Background

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

Numerous pre-8000 B.C. sites have been identified along the mainland coast and Channel Islands of southern California (Erlandson 1991, Johnson et al. 2002, Jones and Klar 2007, Moratto 1984, Rick et al. 2001:609). The Arlington Springs site on Santa Rosa Island produced human femurs dated to approximately 13,000 years ago (Arnold et al. 2004, Johnson et al. 2002). On nearby San Miguel Island, human occupation at Daisy Cave (SMI-261) has been dated to nearly 13,000 years ago and included basketry greater than 12,000 years old, the earliest on the Pacific Coast (Arnold et al. 2004).

Although few Clovis or Folsom-style, fluted points have been found in southern California (Dillon 2002 Erlandson et al. 1987), Early Man Horizon sites are generally associated with a greater emphasis on hunting than later horizons. Recent data indicate that the Early Man economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources in coastal areas (Jones et al. 2002) and on inland Pleistocene lakeshores (Moratto 1984). A warm and dry 3,000-year period called the Altithermal began around 6000 B.C. The conditions of the Altithermal are likely responsible for the change in human subsistence patterns at this time, including a greater emphasis on plant foods and small game.

###### *Milling Stone Horizon (6000–3000 B.C.)*

Wallace defined the Milling Stone Horizon as “marked by extensive use of milling stones and mullers, a general lack of well-made projectile points, and burials with rock cairns” (1955:219). The dominance of such artifact types indicates a subsistence strategy oriented around collecting plant foods and small animals. A broad spectrum of food resources were consumed by the inhabitants of the area, including small and large

terrestrial mammals, sea mammals, birds, shellfish, fishes, and other littoral and estuarine species, yucca, agave, and seeds and other plant products (Kowta 1969; Reinman 1964). Variability in artifact collections over time and from the coast to inland sites indicates that Milling Stone Horizon subsistence strategies adapted to environmental conditions (Byrd and Raab 2007:220). The Topanga Canyon site in the Santa Monica Mountains is considered one of the definitive Milling Stone Horizon sites in Los Angeles County.

Lithic artifacts associated with Milling Stone Horizon sites are dominated by locally available tool stone and in addition to ground stone tools such as manos and metates, chopping, scraping, and cutting tools are very common. Kowta (1969) attributes the presence of numerous scraper-plane tools in Milling Stone Horizon collections to the processing of agave or yucca for food or fiber. The mortar and pestle, associated with acorns or other foods processed through pounding, were first used during the Milling Stone Horizon and increased dramatically in later periods (Wallace 1955, 1978; Warren 1968).

Mortuary practices observed at Milling Stone Horizon sites include extended and loosely flexed burials. Flexed burials oriented north were common in Orange and San Diego counties, with reburials common in Los Angeles County (Wallace 1955, 1978; Warren 1968).

### ***Intermediate Horizon (3000 B.C. – A.D. 500)***

Wallace's Intermediate Horizon dates from approximately 3000 B.C. - A.D. 500 and is characterized by a shift toward a hunting and maritime subsistence strategy and a greater use of plant foods.

During the Intermediate Horizon, a noticeable trend occurred toward greater adaptation to local resources including a broad variety of fish, land mammal, and sea mammal remains along the coast. Tool kits for hunting, fishing, and processing food and materials reflect this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. Many archaeologists believe this change in milling stones signals a change from the processing and consuming of hard seed resources to the increasing reliance on acorn (Glassow et al. 1988, True 1993). Mortuary practices during the Intermediate typically included fully flexed burials oriented toward the north or west (Warren 1968:2-3).

### ***Late Prehistoric Horizon (A.D. 500 – Historical Contact)***

During the Late Prehistoric Horizon, according to Wallace (1955, 1978), the diversity of plant food resources and land and sea mammal hunting increased even more than during the Intermediate Horizon. More classes of artifacts were observed during this period and high-quality exotic lithic materials were used for

small, finely worked projectile points associated with the bow and arrow. Steatite containers were made for cooking and storage and an increased use of asphalt for waterproofing is noted. More artistic artifacts were recovered from Late Prehistoric sites and cremation became a common mortuary custom. Larger, more permanent villages supported an increased population size and social structure (Wallace 1955:223).

Warren (1968) attributes the dramatic change in material culture, burial practices, and subsistence focus to the westward migration of desert people he called the Takic, or Numic, Tradition into Los Angeles, Orange, and western Riverside counties. This Takic Tradition was formerly referred to as the “Shoshonean wedge” (Warren 1968), but this nomenclature is no longer used to avoid confusion with ethnohistoric and modern Shoshonean groups (Heizer 1978:5; Shipley 1978:88, 90). Modern Gabrieliño/Tongva in Los Angeles County are generally considered by archaeologists to be descendants of these prehistoric Uto-Aztecan, Takic-speaking populations that settled along the California coast during the Late Prehistoric Horizon.

### *Ethnographic History*

The Project Area and the City of Vernon are located in the traditional territory of the Gabrieliño tribal group. The name Gabrieliño was applied by the Spanish to those Native Americans who were associated with or living near the Mission San Gabriel Arcángel (Bean and Smith 1978:538). Today, most contemporary Gabrieliño identify themselves as Tongva and this term will be used in this section to refer the Gabrieliño tribal group (King 1994:12).

Tongva territory included the eastern reaches of the Los Angeles basin, to the southern Channel Islands in the west, and extended from Aliso Creek in the south to Topanga Creek in the north.

Tongva territory encompassed several biotic zones including Coastal Marsh, Coastal Strand, Prairie, Chaparral, Oak Woodland, and Pine Forest (Bean and Smith 1978).

The Tongva language belongs to the Takic branch of the Uto-Aztecan language family and can be traced to the Great Basin region (Mithun 2004). This language family includes dialects spoken by the nearby Juaneño and Luiseño but is considerably different from those of the Chumash people living to the north and the Diegueño (including Ipai, Tipai, and Kumeyaay) people living to the south.

Tongva society was organized in patrilineal, non-localized clans, a common Takic pattern. Each clan had a ceremonial leader and comprised several lineages. The Tongva established large permanent villages and smaller satellite camps throughout their territory. Recent ethnohistoric work (O’Neil 2002) suggests a total tribal population of nearly 10,000, considerably more than earlier estimates of around 5,000 people (Bean and Smith 1978:540).

Tongva subsistence was oriented around acorns supplemented by the roots, leaves, seeds, and fruits of a wide variety of plants. Meat sources included large and small mammals, freshwater and saltwater fish, shellfish, birds, reptiles, and insects. (Bean and Smith 1978, Langenwalter et al. 2001, Kroeber 1925, McCawley 1996). The Tongva employed a wide variety of tools and implements to gather and hunt food. The digging stick, used to extract roots and tubers, was frequently noted by early European explorers (Rawls 1984). Other tools included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Like the Chumash, the Tongva made ocean-going plank canoes (known as a *ti'at*) capable of holding six to 14 people and used for fishing, travel, and trade between the mainland and the Channel Islands. Tule reed canoes were employed for near-shore fishing (Blackburn 1963, McCawley 1996:117-127).

Chinigchinich, the last in a series of heroic mythological figures, was central to Tongva religious life at the time of Spanish contact (Kroeber 1925:637–638). The belief in Chinigchinich was spreading south among other Takic-speaking groups at the same time the Spanish were establishing Christian missions. Elements of Chinigchinich beliefs suggest it was a syncretic mixture of Christianity and native religious practices (McCawley 1996:143-144).

Prior to European contact, deceased Tongva were either buried or cremated, with burial more common on the Channel Islands and the adjacent mainland coast and cremation on the remainder of the coast and in the interior (Harrington 1942, McCawley 1996:157). After pressure from Spanish missionaries, cremation essentially ceased during the post-contact period (McCawley 1996:157).

Vernon is located at the site of former Tongva village known as Huutnga. Major Tongva villages located near Vernon include Yaanga, Ahwiinga, and Seobit (Tongva People n.d.).

### 3.3.1.2 Historical Background

#### *Historic Period*

In 1847, the Mexican militia fought U.S. troops under the command of U.S. Army General Stephen Watts Kearny and U.S. Navy Captain Robert F. Stockton along the San Gabriel River. The battle of La Mesa, in present-day Vernon, occurred on January 9, 1847, and ended with the Mexicans overwhelmed by a strong American advance. On January 10, Mexican leaders surrendered peacefully to the Americans, who promptly occupied the city of Los Angeles.

Vernon was first settled in the 1840s by farmers, including a Civil War hero named Captain George R. Vernon. The area was known as both Vernondale and Vernon, and it included a large portion of South Los Angeles. It was primarily agrarian until 1887, when developer Ezra F. Kysor began to subdivide a portion



of Vernon for a suburban housing tract and built a 10-acre park for his new residents. The park was located on Central Avenue between 49<sup>th</sup> and 50<sup>th</sup> streets and was known as, “Central Park.” By the 1890s, much of Vernon had been subdivided and developers had begun to suburbanize vast tracks of land. The western portion of Vernon was annexed by the City of Los Angeles in 1896. The remaining eastern portion of Vernon, which was still ranches and farms, was bought by merchant John B. Leonis. Leonis planned to turn Vernon into an industrial city.

On September 16, 1905, the remaining citizens of Vernon voted to incorporate as a city, exclusively for manufacturing purposes. Leonis, and his partners James and Thomas Furlong were on the board of trustees. A deal was made with the railroad to build tracks off the main Downtown Los Angeles lines. By 1907, Vernon was known for saloons and gambling. An outdoor boxing ring was constructed where 20 world championship boxing matches were held. Vernon also had a baseball park that was home for the Vernon Tigers, and Vernon became a capital of sporting events in Southern California.

The transition to an industrial city was gradual. By the 1920s, Vernon was attracting large stockyards and meatpacking facilities, including slaughtering operations. While the stockyards have vanished, meat processing remains a signature business in the City. As a result, most of Vernon’s residents left the City. Refrigerated food storage began as an outgrowth of the early meat packing and processing activities and is now a significant activity as well.

To provide for the service requirements of these activities, including the electrical demands of the cold storage and refrigerated facilities, in the early 1930s the City began building municipal water supply and distribution facilities. In 1932, the City constructed its own electrical power plant, which remains in operation. The capability of the City to provide these two critical services at a relatively low cost continues to be a competitive advantage for Vernon in attracting industry.

During the 1920s and 1930s, Vernon became the location of choice for many heavy industrial plants, including steel, aluminum, paper, and glass producers. Automobile assembly, canning, and other manufacturing operations also were established in the City in this period. As economic conditions have changed over the decades, however, many of these large-scale industrial operations have relocated out of Southern California or even out of the country.

Today, the focus of businesses has shifted to smaller, more specialized manufacturing, processing, and storage operations. The City’s business-friendly environment, competitive-cost utilities (largely due to the recent completion of the Malburg Generating Station), and key location for trucking and rail transport continue to position Vernon as an ideal location for industrial uses.

The industrial buildings that house these diverse industries well serve their industrial functions, but also display architecture representative of distinct periods and styles. The busy building period of the 1920s and 1930s produced several Streamline Moderne structures, and brick buildings can be found throughout the City. A notable landmark is the Farmer John mural surrounding the company's meat processing facility on Vernon Avenue.

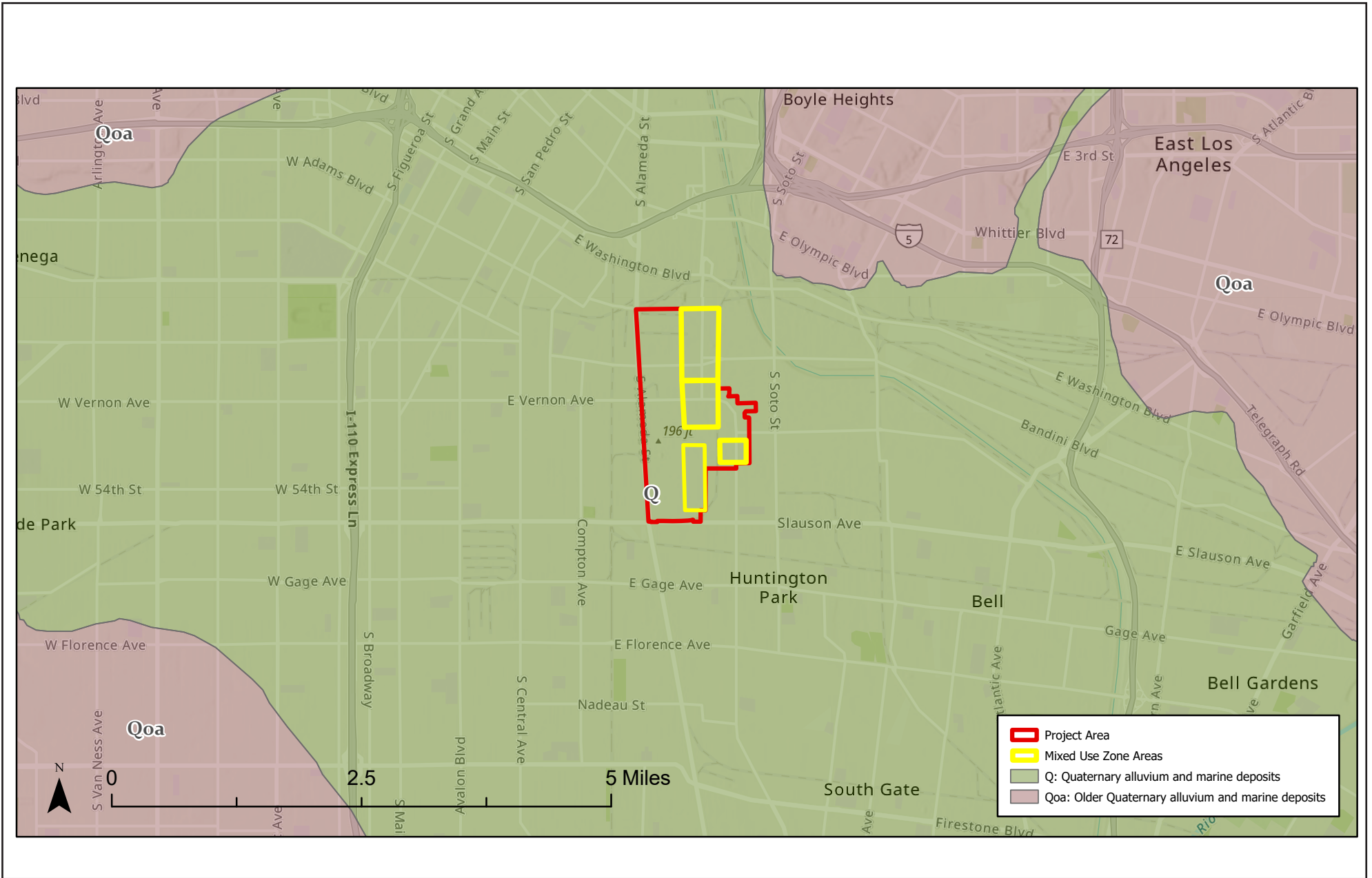
### 3.3.1.3 Paleontological Background

Paleontological resources include fossil remains, fossil localities, and formations that have produced fossil material. Paleontological resources are limited, nonrenewable, sensitive scientific resources, including fossils preserved either as impressions of soft (fleshy) or hard (skeletal) parts, mineralized remains of skeletons, tracks, or burrows, or other trace fossils, coprolites (fossilized excrement), seeds or pollen, and other microfossils from terrestrial, aquatic, or aerial organisms. Paleontological resources are not evenly distributed; the potential for fossil occurrence depends on the rock type exposed at the surface in a given area. Sedimentary rocks contain the bulk of fossils, although metamorphic rocks occasionally also contain fossils.

The City of Vernon is located in the Central Block of the Los Angeles Basin and is underlain by Quaternary-aged alluvial deposits (Q) from the mid- to late-Pleistocene to the Holocene (as shown in **Figure 3.3-1, Local Geology Map**).<sup>1</sup> Quaternary older alluvium has a high paleontological resource potential because they have proven to yield scientifically significant vertebrate fauna. The Holocene-age young alluvial-fan deposits have been determined to have a low to high paleontological resource potential, increasing with depth.

---

<sup>1</sup> California Department of Conservation. *California Geological Survey*. Available online at: <https://maps.conservation.ca.gov/cgs/gmc/>, accessed August 10, 2022.



SOURCE: USGS, 2022

FIGURE 3.3-1

Local Geology

### 3.3.2 REGULATORY FRAMEWORK

Cultural Resources, Tribal Cultural Resources, and Paleontological Resources are regulated at the federal, state, and local levels as discussed below.

#### 3.3.2.1 Federal

##### *National Historic Preservation Act, Section 106*

The National Historic Preservation Act (NHPA) establishes the National Register of Historic Places (NRHP) and defines federal criteria for determining the historical significance of archaeological sites, historic buildings and other resources. To be determined eligible for the NRHP, a potential historic property must meet one of four historical significance criteria (listed below), and also must possess sufficient deposition, architectural, or historic integrity to retain the ability to convey the resource's historic significance. Resources determined to meet these criteria are eligible for listing in the NRHP and are termed historic properties. A resource may be eligible at the local, state, or national level of significance.

Properties are eligible for the NRHP if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and they:

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

These factors are known as "Criteria A, B, C, and D."

A resource that lacks integrity or does not meet one of the NRHP criteria of eligibility is not considered a historic property under federal law, and effects to such a resource are not considered significant under the NHPA. Archaeological sites are generally evaluated under Criterion D, which concerns the potential to yield information important in prehistory or history.

### 3.3.2.2 State Laws and Regulations

#### *California Environmental Quality Act*

Under CEQA, public agencies must consider the effects of their actions on both “historical resources” and “unique archaeological resources.” Pursuant to California Public Resources Code (PRC) Section 21084.1, a “project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” PRC 21083.2 requires agencies to determine whether a proposed project would have an effect on “unique archaeological resources.”

“Historical resource” is a term of art with a defined statutory meaning (see PRC 21084.1 and *State CEQA Guidelines* Sections 15064.5(a) and 15064.5(b)). The term embraces any resource listed in or determined to be eligible for listing in the California Register of Historic Resources (CRHR). The CRHR includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California State Landmarks and Points of Historical Interest.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be “historical resources” for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC 5024.1 and 14 CCR 4850). Unless a resource listed in a survey has been demolished or has lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource potentially eligible for the CRHR.

In addition to assessing whether historical resources potentially impacted by a proposed project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project’s impacts to historical resources (PRC 21084.1 and *State CEQA Guidelines* Section 15064.5(a)(3)). In general, a historical resource, under this approach, is defined as any object, building, structure, site, area, place, record, or manuscript that:

- A. Is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California; and
- B. Meets any of the following criteria:
  - 1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
  - 2. Is associated with the lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history (*State CEQA Guidelines* Section 15064.5(a)(3)).

These factors are known as “Criteria 1, 2, 3, and 4” and parallel Criteria A, B, C, and D under the NHPA (discussed earlier). The fact that a resource is not listed or determined to be eligible for listing does not preclude a lead agency from determining that it may be a historical resource (PRC 21084.1 and *State CEQA Guidelines* Section 15064.5(a)(4)).

CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource, as described above, and “unique archaeological resources.” Under CEQA, an archaeological resource is considered “unique” if it:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC 21083.2(g)).

CEQA states that if a proposed project would result in an impact that might cause a substantial adverse change in the significance of a historical resource, then an environmental impact report (EIR) must be prepared, and mitigation measures should be considered. A “substantial adverse change” in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (*State CEQA Guidelines* Section 15064.5(b)(1)).

The *State CEQA Guidelines* (Section 15064.5(c)) also provide specific guidance on the treatment of archaeological resources, depending on whether they meet the definition of a historical resource or a unique archaeological resource. If the site meets the definition of a unique archaeological resource, it must be treated in accordance with the provisions of PRC 21083.2.

*State CEQA Guidelines* Section 15126.4(b) sets forth principles relevant to means of mitigating impacts on historical resources. It provides as follows:

- Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant.
- In some circumstances, documentation of a historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur.
- Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered and discussed in an EIR for a project involving such an archaeological site:
  - Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
  - Preservation in place may be accomplished by, but is not limited to, the following:
    - Planning construction to avoid archaeological sites;
    - Incorporation of sites within parks, greenspace, or other open space;
    - Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site.
    - Deeding the site into a permanent conservation easement.
  - When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code. If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation.

- Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center.

Section 15064.5(f) deals with potential discoveries of cultural resources during project construction. That provision states that, “[a]s part of the objectives, criteria, and procedures required by Section 21082 of the Public Resources Code, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the building site while historical or unique archaeological resource mitigation takes place.

*State CEQA Guidelines* Section 15064.5(e), requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission (NAHC) must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as identified in a timely manner by the NAHC. Section 15064.5 of the *State CEQA Guidelines* directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

### ***Senate Bill 18***

Senate Bill (SB) 18 requires cities and counties to contact and consult with California Native American tribes prior to making land use decisions. The bill requires local governments to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of general plans (defined in Government Code §65300 et seq.). For projects proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes that are on the contact list maintained by the NAHC for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.995 of the Public Resources Code that are located within the city or county’s jurisdiction.

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of



cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government.

### ***Assembly Bill 52***

AB 52, which was approved in September 2014 and became effective on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. A provision of the bill, chaptered in CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a Tribal Cultural Resource (TCR) is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:
  - a. Included or determined to be eligible for inclusion in the CRHR; or
  - b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

- a. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
- b. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe(s) pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TRCs

with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

### 3.3.2.3 Local Plans and Policies

The following goals and policies of the *City of Vernon General Plan* are applicable to the Project.

**Goal R-4 Recognize and preserve Vernon’s contributions to the industrial and architectural history of Los Angeles**

**Policy R-4.1:** Expand available cultural resource information by establishing a City-maintained database of historic sites and facilities.

**Policy R-4.2:** Support the efforts of interested agencies or private organizations to undertake surveys or other research efforts to document buildings and places in Vernon of historic and/or architectural significance.

**Policy R-4.3:** Ensure compliance with CEQA provisions regarding cultural resources at the time buildings or places of identified or potential historic or architectural merit are proposed for demolition.

**Policy R-4.4:** Establish local programs and practices that recognize places of local or other historic significance.

### 3.3.3 IMPACTS AND MITIGATION MEASURES

#### 3.3.3.1 Thresholds of Significance

The following thresholds for determining the significance of impacts related to Cultural Resources, including Historical Resources, Tribal Cultural Resources and Paleontological Resources are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts if any of the following would occur:

**Impacts related to Cultural Resources are considered significant if the project would:**

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- Disturb any human remains, including those interred outside of dedicated cemeteries.

**Impacts related to Tribal Cultural Resources are considered significant if the project would:**

- 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:
  - 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
  - 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.

**Impacts related to Paleontological Resources are considered significant if the project would:**

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

### 3.3.4 ENVIRONMENTAL IMPACTS

**Impact CUL-1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.**

Future development resulting from implementation of the Project may have a significant impact on historical resources if such activities would cause a substantial adverse change in the significance of a historical resource. Historical resources include properties designated in or eligible for listing in the National Register of Historic Places or CRHR. As explained in Section 15064.5, “[s]ubstantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.”

Although there are no specific development projects associated with the Project, implementation of the Project would guide development in the Project Area through the year 2040. As areas with future

development opportunities age, the Project Area may potentially contain historical resources. Although a review of the NRHP and the California Historic Resources Inventory for Los Angeles County did not identify any known qualifying historical resources, historic maps and aerial photographs indicate there are numerous properties that are of historic age and have the potential to be qualifying historical resources as defined by CEQA should they be determined to possess significant architectural and/or historical associations. Further, the Project Area contains properties that will pass the age threshold (45 years of age) generally signaling the need for evaluation over the life of the Project.

The Project would change the zoning and land use designations for four specific areas within the western portion of the City. Future development projects resulting from the implementation of the Project may involve demolition or alteration of an identified resource, which could result in a change to that resource's defining features thereby resulting in a significant impact. Thus, significant historical resources could be adversely impacted by future development projects that require demolition or significant alteration of historic-age buildings and structures; impacts to historical resources under the Project therefore have the potential to be significant.

To ensure that development within the Project Area does not have a detrimental effect on historical resources if demolition or significant alteration is required, each project would be assessed as it is proposed, to determine the age of the properties proposed to be impacted by project implementation. **Mitigation Measure MM CUL-1** would reduce impacts on historical resources to the extent feasible, because historical resources would be evaluated under each project application.

### *Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measure*

The following mitigation measure is required to mitigate potential future impacts to historic resources.

#### **MM CUL-1 Historical Built Environment Studies**

For projects where demolition of structures greater than 45 years is proposed, prior to the issuance of any demolition permits, the applicant shall prepare an inventory of buildings proposed for demolition located on the project site. The project applicant, under the direction of the City, shall retain a historian or architectural historian who meets or exceeds the Secretary of Interior's Professional Qualifications Standards to document and evaluate the historical significance of the affected buildings or structures in accordance with CEQA.

If such documentation and evaluation indicate that the building or structure qualifies as a significant historical resource, the resource shall be avoided, and significant features shall be preserved in place if feasible. If avoidance or preservation is not feasible, a Historical Resources Treatment Plan, or similar proposed plan, shall be prepared and implemented. Further documentation may be required and may include but is not limited to archival quality photographs, measured drawings, oral histories, interpretive signage, and/or other measures including, potentially, alteration of the resource in accordance with Secretary of the Interior's Standards or relocation of the resource.

As defined in the California Code of Regulations (CCR) Title 4(3) Section 15126.4 (b)(2), in some circumstances, documentation of a historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to point where clearly no significant effect on the environment would occur. In these cases, the Historical Resources Treatment Plan, or comparable plan, shall also evaluate the feasibility of retaining significant buildings or structures in their original locations and rehabilitating them according to the Secretary of the Interior's Standards and Guidelines for Rehabilitating Historic Buildings.

### *Significance After Mitigation*

Implementation of **Mitigation Measure MM CUL-1** would reduce impacts to historical resources by requiring steps to identify resources and the preparation of a mitigation plan on a project-by-project basis. Compliance with **Mitigation Measure MM CUL-1** would reduce potential impacts to less than significant.

---

**Impact CUL-2**                      **Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.**

Effects to archaeological resources are only known once a specific project has been proposed because they are highly dependent on both the individual project site conditions and the characteristics of the proposed ground-disturbing activity. A Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search was conducted on May 9, 2022, and the search results were negative. However, site-specific information is not currently available. Ground-disturbing activities in those portions of the Project Area that have not been subject to an archaeological investigation or where excavation depths exceed those previously attained have the potential to damage or destroy previously unknown prehistoric or historic

period archaeological resources. Consequently, damage to or destruction of previously unknown archaeological resources could occur as a result of development under the Project.

The Project does not include any implementation programs or policies designed to reduce impacts to archaeological resources. In order to ensure that development in the Project Area does not have a detrimental effect on archaeological resources, each individual development project would need to be assessed as it is proposed. Without mitigation, impacts would be potentially significant. **Mitigation Measure MM CUL-2** requires an archaeological resources study and the identification of project-specific mitigation measures for future projects facilitated by the Project. **Mitigation Measure MM CUL-2** would reduce impacts to archaeological resources on a on a project-by-project basis by requiring identification and treatment of archaeological resources.

### *Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

#### **MM CUL-2 Archaeological Resource Studies**

Prior to any approval by the City for projects that involve any demolition, grading, trenching, or other ground disturbance, a Phase 1 Cultural Resources Study conducted by a qualified archaeologist meeting the Secretary of the Interior standards in archaeology shall be required. A Phase 1 study shall include a pedestrian survey of the project site to identify potential surficial archaeological resources and sufficient background archival research and field sampling to determine whether subsurface prehistoric or historic remains may be present. If the project site is completely paved and/or developed, a pedestrian survey may not be required. Archival research should include, at minimum, a records search conducted at the South Central Coast Information Center (SCCIC) and a Sacred Lands File (SLF) search conducted with the NAHC.

Any cultural resources identified shall be avoided and preserved in place if feasible. Where preservation is not feasible, each resource shall be subject to a Phase 2 evaluation for significance and eligibility for listing in the CRHR. Phase 2 evaluation shall include any necessary archival research to identify significant historical associations as well as mapping of surface artifacts, collection of functionally or temporally diagnostic tools and debris, and excavation of a sample of the cultural deposit to characterize the nature of the

### 3.3 Cultural, Tribal Cultural, and Paleontological Resources

sites, define the artifact and feature contents, determine horizontal boundaries and depth below surface, and retrieve representative samples of artifacts and other remains.

Cultural materials collected from the sites shall be processed and analyzed in the laboratory according to standard archaeological procedures. The age of archaeological resources shall be determined using radiocarbon dating or other appropriate procedures; lithic artifacts, faunal remains, and other cultural materials shall be identified and analyzed according to current professional standards. The significance of the sites shall be evaluated according to the criteria of the CRHR. The results of the investigations shall be presented in a technical report following the standards of the California Office of Historic Preservation publication "Archaeological Resource Management Reports: Recommended Content and Format (1990 or latest edition)". Upon completion of the work, all artifacts, other cultural remains, records, photographs, and other documentation shall be curated at an appropriate curation facility. All fieldwork, analysis, report production, and curation shall be fully funded by the applicant.

If any of the resources meet CRHR significance standards, the City shall ensure that all feasible recommendations for mitigation of impacts are incorporated into the final design and any permits issued for development. Any necessary archaeological data recovery excavation shall be carried out by a Registered Professional Archaeologist according to a research design reviewed and approved by the City prepared in advance of fieldwork and using appropriate archaeological field and laboratory methods consistent with the California Office of Historic Preservation Planning Bulletin 5 (1991), Guidelines for Archaeological Research Design, or the latest edition thereof.

As applicable, the final Phase 1 Inventory, Phase 2 Testing and Evaluation, Phase 3 Data Recovery reports shall be submitted to the City prior to final inspection of a construction permit.

Recommendations contained therein shall be implemented throughout all ground disturbance activities including, at minimum, requirements to follow for unanticipated archaeological discoveries during construction.

### ***Significance After Mitigation***

Implementation of **Mitigation Measure MM CUL-2** would reduce impacts to archeological resources to a less than significant level by requiring steps to identify resources and prepare a mitigation plan on a project-by-project basis.

---

#### **Impact CUL-3                      Disturb any human remains, including those interred outside of dedicated cemeteries.**

The Project Area does not include any locations identified as a formal cemetery and is not known to have been used for disposal of historic or prehistoric human remains, and human remains are not expected to be encountered during construction of the proposed project. In the unlikely event that human remains are uncovered during ground-disturbing activities, there are regulatory provisions to address the handling of human remains in California Health and Safety Code § 7050.5, PRC § 5097.98, and *CEQA Guidelines* § 15064.5(e). Pursuant to these codes, in the event that human remain are discovered, it requires that disturbance of the site shall be suspended, and the City of Vernon and the Los Angeles County Coroner would be immediately notified. The coroner shall conduct an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation or to his or her authorized representative, in the manner provided in § 5097.98 of the PRC. The coroner is required to make a determination within two working days of notification of the discovery of the human remains. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, he or she shall consult with the NAHC by telephone within 24 hours, to designate a Most Likely Descendant (MLD) who shall recommend appropriate measures to the landowner regarding the treatment of the remains. If the owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC. Compliance with these protocols would reduce impacts to a less than significant level.

### ***Significance Before Mitigation***

Less than Significant Impact.

### ***Mitigation Measures***

No mitigation measures are required.



### *Significance After Mitigation*

Less than Significant Impact.

---

**Impact CUL-4**

**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 the local register of historical resources as defined in Public Resources Code Section 5020.1(k), or**
- 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.**

Impact Sciences requested a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search on May 9, 2022. The search results were negative. The City sent SB 18 and AB 52 notice letters on September 27, 2022, to the following Native American groups: the Gabrieleño Band of Mission Indians – Kizh Nation, the Gabrieleño/Tongva San Gabriel Band of Mission Indians, the Gabrielino/Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, the Gabrielino-Tongva Tribe, the Santa Rosa Band of Cahuilla Indians, and the Soboba Band of Lusseno Indians (refer to **Appendix 3.3, Tribal Consultation**). Under AB 52, tribes have 30 days to respond, and under SB 18 tribes have 90 days to respond. As of the date of the publication of this Draft EIR, no responses have been received.

Development accommodated under the Project may involve ground disturbance which has the potential to impact previously unidentified tribal cultural resources (TCRs).

As of the date of this draft, AB 52 consultation has not identified any specific TCRs in the Project Area. However, new TCRs may be identified or established over the course of the Project.

If unknown TCRs are encountered during construction activities, there is a potential to result the destruction, damage, or loss of the TCRs. The ground-disturbing construction activities that could result in such adverse impacts include demolition, grading, excavation, drilling, or any other activity that disturbs surface or subsurface deposits associated with TCRs. Given the potential to damage these unknown tribal cultural resources, impacts are considered significant without mitigation.

### *Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measure*

#### **MM CUL-3 Unanticipated Discovery of Tribal Cultural Resources**

In the event that a cultural resource of Native American origin is identified in the Project Area during the implementation of **Mitigation Measure MM CUL-2** or during any project-related ground disturbance, the City of Vernon, as Lead Agency, shall consult with local Native American tribes who have requested notification of projects under AB 52. If the City, in consultation with the local Native American tribe(s), determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with representatives of the Native American tribe(s). The mitigation plan may include but would not be limited to avoidance, capping in place, excavation and removal of the resource, interpretive displays, sensitive area signage, or other mutually agreed upon measures.

### *Significance After Mitigation*

Implementation of **Mitigation Measure MM CUL-3** would reduce impacts to tribal cultural resources to a less than significant level by requiring steps to identify resources and prepare a mitigation plan on a project-by-project basis.

---

**Impact CUL-5                      Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Paleontological resources include fossil remains or traces of past life forms, including both vertebrate and invertebrate species, as well as plants. Paleontological resources are generally found within sedimentary rock formations.

The Project Area is located in a highly urbanized area, which has been previously disturbed by past development activities and contains existing buildings, roadways, associated parking and other infrastructure. However, build out of the Project could involve grading and excavation to greater depths than previously undertaken. These activities could disturb unknown paleontological resources buried in site soils. In the event of an unexpected disturbance of such resources, significant impacts to paleontological resources could occur. In the event of an unexpected discovery, significant impacts to paleontological resources could occur. Implementation of **Mitigation Measure MM CUL-4** would mitigate any potential significant impacts.

***Significance Before Mitigation***

Potentially significant impact.

***Significance Before Mitigation***

**MM CUL-4                      Unanticipated Discovery of Paleontological Resources**

In the event that paleontological resources are unearthed during ground-disturbing activities, the City of Vernon Public Works Division will be notified immediately, and all work will cease in the area of the find until a qualified paleontologist evaluates the find. Construction activity may continue unimpeded on other portions of the project site. The paleontologist shall determine the location, the time frame, and the extent to which any monitoring of earthmoving activities shall be required. The found deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in California PRC § 21083.2.

***Significance After Mitigation***

Implementation of **Mitigation Measure MM CUL-4** would reduce impacts to paleontological resources to a less than significant level by requiring steps to identify resources and prepare a mitigation plan on a project-by-project basis.

### 3.3.5 CUMULATIVE IMPACTS

Impacts upon cultural resources (including historical resources), TCRs, and paleontological resources tend to be site specific and are assessed on a site-by-site basis. Where such resources exist, implementation of the Project together with other development in the City and region would result in an incremental adverse impact to cultural resources, TCRs, and paleontological resources. In this case, the cumulative impact would be to unknown cultural resources, TCRs, and paleontological resources. However, provided that proper mitigation, as defined by *State CEQA Guidelines* Section 15126.4(b), is implemented in conjunction with cumulative development in the area, no significant cumulative impacts are anticipated.

### 3.3.6 REFERENCES

California Department of Conservation. *California Geological Survey*. Available online at: <https://maps.conservation.ca.gov/cgs/gmc/>, accessed August 10, 2022

Pricilla Torres-Fuentes, *Re: City of Vernon Westside Specific Plan Project, Los Angeles County*, Native American Heritage Commission, June 1, 2022.

Impact Sciences, Inc., Hussain, Yasmeeen. *Sacred Lands File Search Request for the City of Vernon Westside Specific Plan*, May 9, 2022.

## 3.4 GREENHOUSE GAS EMISSIONS

---

### INTRODUCTION

This section discusses the global, national, and statewide conditions related to greenhouse gases (GHG) and global climate change. This section also provides a discussion of the applicable federal, state, regional, and local agencies that regulate, monitor, and control GHG emission, potential GHG impacts from implementation of the Project, and applicable mitigation measures. Calculations made to estimate GHG emissions associated with the Project and supporting technical data are found in *Appendix 3.2* of this Environmental Impact Report (EIR).

#### 3.4.1 ENVIRONMENTAL SETTING

##### 3.4.1.1 Global Climate Change

###### *Global Climate Change Background*

Global climate change refers to any significant change in climate measurements, such as temperature, precipitation, or wind, lasting for an extended period (i.e., decades or longer).<sup>1</sup> Climate change may result from:

- Natural factors, such as changes in the sun’s intensity or slow changes in the Earth’s orbit around the sun;
- Natural processes within the climate system (e.g., changes in ocean circulation, reduction in sunlight from the addition of GHG and other gases to the atmosphere from volcanic eruptions); and
- Human activities that change the atmosphere’s composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, desertification).

In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. Impacts are due to observed climate change, irrespective of its cause, indicating the sensitivity of natural and human systems to changing climate.<sup>2</sup> Continuing changes to the global climate system and ecosystems, and to California, are projected to include:

---

<sup>1</sup> U.S. EPA. *Overview of Greenhouse Gases*. Available online at: <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>, accessed February 24, 2023.

<sup>2</sup> Intergovernmental Panel on Climate Change. *Climate Change 2013: The Physical Science Basis*. 2013. Available online at: <http://www.climatechange2013.org/>, accessed February 24, 2023.

- Rapidly diminishing sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;<sup>3</sup>
- Rising average global sea levels primarily due to thermal expansion and the melting of glaciers, ice caps, and ice sheets;
- Changing weather patterns, including changes to precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;
- Changing levels in snowpack, river flow and sea levels indicating that climate change is already affecting California's water resources;<sup>4</sup>
- Dry seasons that start earlier and end later, evoking more frequent and intense wildland fires;<sup>5</sup> and
- Increasing demand for electricity due to rising temperatures.<sup>6</sup>

The natural process through which heat is retained in the troposphere<sup>7</sup> is called the "greenhouse effect." Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases, play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere as short-wave radiation. It travels through the atmosphere without warming it and is absorbed by the Earth's surface. When the Earth re-emits this radiation back toward space, the radiation changes to long wave radiation. GHGs are transparent to incoming short wave solar radiation but absorb outgoing long wave radiation. As a result, radiation that otherwise would escape back into space is now retained, warming the atmosphere. This phenomenon is known as the greenhouse effect.

---

<sup>3</sup> Intergovernmental Panel on Climate Change. *Climate Change 2013: The Physical Science Basis*. 2013. Available online at: <http://www.climatechange2013.org/>, accessed February 24, 2023

<sup>4</sup> California Environmental Protection Agency (Cal EPA), *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2010.

<sup>5</sup> California Environmental Protection Agency (Cal EPA), *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2010.

<sup>6</sup> California Environmental Protection Agency (Cal EPA), *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2010.

<sup>7</sup> The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface from 6 to 7 miles.

## Greenhouse Gas Compounds

Global warming potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO<sub>2</sub>). CO<sub>2</sub>, by definition, has a GWP of 1 regardless of the time period used, because it is the gas being used as the reference. CO<sub>2</sub> remains in the climate system for a very long time: CO<sub>2</sub> emissions cause increases in atmospheric concentrations of CO<sub>2</sub> that will last thousands of years. Methane (CH<sub>4</sub>) is estimated to have a GWP of 28–36 over 100 years. CH<sub>4</sub> emitted today lasts about a decade on average, which is much less time than CO<sub>2</sub>. But CH<sub>4</sub> also absorbs much more energy than CO<sub>2</sub>. The net effect of the shorter lifetime and higher energy absorption is reflected in the GWP. Nitrous Oxide (N<sub>2</sub>O) has a GWP 265–298 times that of CO<sub>2</sub> for a 100-year timescale. N<sub>2</sub>O emitted today remains in the atmosphere for more than 100 years, on average. Chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) are sometimes called high-GWP gases because, for a given amount of mass, they trap substantially more heat than CO<sub>2</sub>. (The GWPs for these gases can be in the thousands or tens of thousands.)<sup>8</sup>

California State law defines GHGs to include the following six compounds:

- **Carbon Dioxide** (CO<sub>2</sub>) is released to the atmosphere when solid waste, fossil fuels (oil, natural gas, and coal), and wood and wood products are burned. CO<sub>2</sub> emissions from motor vehicles occur during operation of vehicles and operation of air conditioning systems.
- **Methane** (CH<sub>4</sub>) is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in solid waste landfills, raising livestock, natural gas and petroleum systems, stationary and mobile combustion, and wastewater treatment.
- **Nitrous Oxide** (N<sub>2</sub>O) is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels. N<sub>2</sub>O is also emitted from motor vehicles generally occurring from operation of vehicles.
- **Hydrofluorocarbons** (HFCs) are one of several GWP gases that are not naturally occurring and are generated from industrial processes. HFC (refrigerant) emissions from vehicle air conditioning systems occur due to leakage, losses during recharging, or release from scrapping vehicles at end of their useful life.

---

<sup>8</sup> U.S. Environmental Protection Agency. *Understanding Global Warming Potentials*. Available online at: <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>, accessed February 24, 2023.

- **Perfluorocarbons** (PFCs) are another high GWP gas that are not naturally occurring and are generated in a variety of industrial processes. Emissions of PFCs are generally negligible from motor vehicles.
- **Sulfur Hexafluoride** (SF<sub>6</sub>) is another high GWP gas that is not naturally occurring and is generated in a variety of industrial processes. Emissions of SF<sub>6</sub> are generally negligible from motor vehicles.

### *State of California Greenhouse Gas Emissions Inventory*

The California Air Resources Board (CARB) compiles GHG inventories for the State of California. Based on the 2019 GHG inventory data (i.e., the latest year for which data are available), California emitted 418.2 MMTCO<sub>2e</sub> in 2019.<sup>9</sup> **Table 3.4-1, GHG Emissions in California**, provides a summary of GHG emissions reported in California in 2000 and 2019 separated by categories defined by the United Nations Intergovernmental Panel on Climate Change (IPCC).

Between 2000 and 2019, the population of California grew by approximately 5.6 million, from 33.9 to 39.5 million.<sup>10</sup> This represents an increase of approximately 14 percent from 2000 population levels. In addition, the California economy, measured as gross state product, grew from \$1.4 trillion in 2000 to \$3.1 trillion in 2019, doubling the 2000 gross state product.<sup>11</sup> Despite the population and economic growth, California's net GHG emissions decreased by approximately 11 percent. The California Energy Commission (CEC) attributes decrease in GHG emissions to the success of California's renewable energy programs and its commitment to clean air and clean energy.

---

<sup>9</sup> California Air Resources Board, *California Greenhouse Gas Inventory 2000-2019 - by IPCC Category*, 2021. Available online at: [https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg\\_inventory\\_ipcc\\_sum\\_2000-19.pdf](https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_ipcc_sum_2000-19.pdf), accessed February 24, 2023.

<sup>10</sup> U.S. Census Bureau, *Explore Census Data*, Available online at: <https://data.census.gov/cedsci/>, accessed February 24, 2023..

<sup>11</sup> California Department of Finance, *Gross State Product*, Available online at: <https://dof.ca.gov/forecasting/economics/economic-indicators/gross-state-product/>, accessed October 14, 2022. Amounts are based on current dollars as of the data of the report (May 2022).



**Table 3.4-1  
GHG Emissions in California**

Source Category	2000 (MMTCO <sub>2</sub> e)	Percent of Total	2019 (MMTCO <sub>2</sub> e)	Percent of Total
<b>Energy</b>	<b>411.4</b>	<b>87.91%</b>	<b>343.6</b>	<b>82.16%</b>
Energy Industries	159.16	--	105.11	--
Manufacturing Industries & Construction	22.65	--	20.89	--
Transport	177.20	--	165.36	--
Other Sectors (Residential/Commercial/Institutional)	44.65	--	43.26	--
Fugitive Emissions from Solid Fuels	0.04	--	0.02	--
Fugitive Emissions from Oil & Natural Gas	6.56	--	8.11	--
Fugitive Emissions from Geothermal Energy Production	1.13	--	0.83	--
Pollution Control Devices	0.02	--	0.00	--
<b>Industrial Processes &amp; Product Use</b>	<b>18.9</b>	<b>4.04%</b>	<b>33.1</b>	<b>7.91%</b>
Mineral Industry	5.60	--	4.98	--
Chemical Industry	0.06	--	0.00	--
Metal Industry	0.07	--	0.00	--
Non-Energy Products from Fuels & Solvent Use	2.52	--	1.73	--
Electronics Industry	0.20	--	0.14	--
Substitutes for Ozone Depleting Substances	5.57	--	20.30	--
Other Product Manufacture and Use	1.52	--	1.14	--
Other	3.31	--	4.77	--
<b>Agriculture, Forestry, &amp; Other Land Use</b>	<b>28.4</b>	<b>6.07%</b>	<b>30.7</b>	<b>7.34%</b>
Livestock	19.12	--	22.60	--
Aggregate Sources & Non-CO <sub>2</sub> Sources on Land	9.27	--	8.06	--
<b>Waste</b>	<b>9.3</b>	<b>1.99%</b>	<b>10.9</b>	<b>2.61%</b>
Solid Waste Disposal	7.24	--	8.48	--
Biological Treatment of Solid Waste	0.13	--	0.38	--
Wastewater Treatment & Discharge	1.93	--	2.00	--
<b>Emissions Summary</b>				
Gross California Emissions	<b>468.0</b>		<b>418.2</b>	

*Sources:*

<sup>1</sup> California Air Resources Board, *California Greenhouse Gas Inventory for 2000-2019 - by IPCC Category*. 2021. Available online at [https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg\\_inventory\\_ipcc\\_sum\\_2000-19.pdf](https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_ipcc_sum_2000-19.pdf), accessed October 14, 2022.

### ***Project Area Greenhouse Inventory (Existing Conditions)***

The Project Area encompasses approximately 1.2 square miles, or 780 acres of primarily industrial and commercial development, with transportation infrastructure and small pockets of residential. The Project Area is generally bound on the north by 25<sup>th</sup> Street; to the east by the Atchison, Topeka and Santa Fe (ATSF)

Railroad and the eastern frontage of Pacific Boulevard; to the south by Slauson Avenue; and to the west by the Alameda Corridor GHG emissions generated by the existing land uses in the Project Area are primarily generated by mobile sources (motor vehicles), energy use (electricity and natural gas), area sources, water demand, and generation of solid waste and wastewater. Existing Project Area annual GHG emissions were calculated using CalEEMod and are presented below in **Table 3.4-2, Existing Project Area Annual GHG Emissions**.

**Table 3.4-2  
Existing Project Area Annual GHG Emissions**

<b>Emissions Source</b>	<b>Metric Tons of Carbon Dioxide Equivalent (per year)</b>
Mobile Sources	103,130
Area Sources	315
Energy Sources	80,030
Water Sources	12,246
Waste Sources	5,796
Refrigerants	644
<b>Total Existing GHG Emissions</b>	<b>202,161</b>

*Source: Impact Sciences, Inc. See Appendix 3.2 for CalEEMod data. Column total does not add exactly due to model rounding.*

## 3.4.2 REGULATORY FRAMEWORK

### 3.4.2.1 Federal Regulations

#### *Paris Climate Agreement*

The Paris Climate Agreement is an international treaty on climate change adopted on December 12, 2015. The goal of the agreement is to limit global warming to 1.5 degrees Celsius as compared to pre-industrial levels. Countries will aim to reach global peaking of GHG emissions as soon as possible to achieve a climate neutral world by mid-century. In order to achieve these reductions, the Paris Climate Agreement works on a 5-year cycle of increasingly ambitious climate action carried out by countries. Therefore, by 2020, countries were required to submit their plans for climate action, known as nationally determined contributions. Additionally, the Agreement provides a framework for financial, technical and capacity building support to those countries who need it. Developed counties will take a lead in providing financial

assistance to other countries since large scale investments are required for GHG mitigation and climate adaptation.<sup>12</sup>

The United States joined 190 other countries in the Paris Climate Agreement under the Obama administration in September 2016.<sup>13</sup> Under the Trump administration, the former President announced his intention to withdraw from the Agreement in June 2017 and formally notified the United Nations in November 2019. However, the Agreement requires a year-long waiting period before a formal withdrawal will be recognized. As a result, the United States officially withdrew from the Agreement in November 2020.<sup>14</sup> However, on January 20, 2021, President Biden accepted and rejoined the Paris Climate Agreement.<sup>15</sup>

### 3.4.2.2 State Regulations

#### *Title 24 Building Standards Code*

The California Energy Commission first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods.

The California Green Building Standards Code, which is Part 11 of the California Code of Regulations (the “CCR”), is commonly referred to as the CALGreen Code. CALGreen was added to Title 24 to represent base standards for reducing water use, recycling construction waste, and reducing polluting materials in new buildings. In contrast, Title 24 focuses on promoting more energy-efficient buildings and considers the building envelope, heating and cooling, water heating, and lighting restrictions. The first edition of the CALGreen Code in 2008 contained only voluntary standards. The 2010 edition included mandatory

---

<sup>12</sup> United Nations. *The Paris Agreement*. Available online at: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>, accessed February 24, 2023

<sup>13</sup> The White House. *President Obama: The United States Formally Entered the Paris Agreement*. Available online at: <https://obamawhitehouse.archives.gov/blog/2016/09/03/president-obama-united-states-formally-enters-paris-agreement>, accessed February 24, 2023

<sup>14</sup> NPR. *U.S. Officially Leaving Paris Climate Agreement*. Available online at: <https://www.npr.org/2020/11/03/930312701/u-s-officially-leaving-paris-climate-agreement>, accessed February 24, 2023.

<sup>15</sup> The White House. *Paris Climate Agreement*. 2021. Available online at: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/>, accessed February 24, 2023.

requirements for state-regulated buildings and structures throughout California, including requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation and more. The CALGreen Code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The CALGreen Code also requires building commissioning which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems are functioning at their maximum efficiency. The most recent 2019 CALGreen Code became effective January 1, 2020 and includes new requirements for residential and non-residential development.

### ***Assembly Bill 1493***

In response to the transportation sector's contribution of more than half of California's CO<sub>2</sub> emissions, Assembly Bill 1493 (AB 1493, Pavley) was enacted on July 22, 2002. AB 1493 requires CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles whose primary use is noncommercial personal transportation. In 2004, CARB approved the Pavley regulations to require automakers to control greenhouse gas emissions from new passenger vehicles for the 2009 through 2016 model years. On July 8, 2009, the U.S. EPA formally approved California's waiver request under the federal CAA, which preempts state regulation of motor vehicle emission standards.

In 2012, CARB approved the LEV III greenhouse gas regulation, which requires further reductions in passenger greenhouse gas emissions for 2017 and subsequent vehicle model years.<sup>16</sup>

### ***Executive Order S-3-05***

On June 1, 2005, Governor Schwarzenegger issued Executive Order S-3-05, which set the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels. The California Environmental Protection Agency (Cal EPA) formed a Climate Action Team (CAT) that recommended strategies that can be implemented by state agencies to meet GHG emissions targets. The Team reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in the Executive Order.<sup>17</sup> Furthermore, the report provided to then Governor Schwarzenegger, indicated

---

<sup>16</sup> California Air Resources Board. *Low-Emission Vehicle Greenhouse Gas Program*. Available online at: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/lev-program/low-emission-vehicle-greenhouse-gas>, accessed February 24, 2023.

<sup>17</sup> California Climate Action Team, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, March 2006.

that smart land use and increased transit availability should be a priority in the State of California.<sup>18</sup> According to the California Climate Action Team, smart land use is an umbrella term for strategies that integrate transportation and land-use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development (TOD), and encourage high-density residential/commercial development along transit corridors. These strategies develop more efficient land-use patterns within each jurisdiction or region to match population increases, workforce, and socioeconomic needs for the full spectrum of the population.

### ***Assembly Bill 32***

In furtherance of the goals established in Executive Order S-3-05, the Legislature enacted Assembly Bill 32 (AB 32, Nuñez and Pavley), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. AB 32 represents the first enforceable statewide program to limit GHG emissions from all major industries with penalties for noncompliance. AB 32 requires the State to undertake several actions—the major requirements are discussed below.

### **CARB Early Action Measures**

CARB is responsible for carrying out and developing the programs and requirements necessary to achieve the goals of AB 32—the reduction of California's GHG emissions to 1990 levels by 2020. The first action under AB 32 resulted in CARB's adoption of three early action greenhouse gas emission reduction measures on June 21, 2007. On October 25, 2007, CARB approved an additional six early action GHG reduction measures under AB 32. CARB has adopted regulations for all early action measures. The early action measures are divided into three categories:

- Group 1 - GHG rules for immediate adoption and implementation;
- Group 2 - Several additional GHG measures under development; and
- Group 3 - Air pollution controls with potential climate co-benefits.

The original three adopted early action regulations meeting the narrow legal definition of “discrete early action GHG reduction measures” include:

- A low-carbon fuel standard to reduce the “carbon intensity” of California fuels;

---

<sup>18</sup> California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006, p. 57.

- The reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of “do-it-yourself” automotive refrigerants; and
- Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The additional six early action regulations adopted on October 25, 2007, also meeting the narrow legal definition of “discrete early action GHG reduction measures,” include:

- The reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology;
- The reduction of auxiliary engine emissions of docked ships by requiring port electrification;
- The reduction of perfluorocarbons from the semiconductor industry;
- The reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products);
- The requirement that all tune-up, smog check and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency; and
- The restriction on the use of sulfur hexafluoride from non-electricity sectors if viable alternatives are available.

### ***2022 Scoping Plan for Achieving Carbon Neutrality***

In response to the passage of AB 1279 and the identification of the 2045 GHG reduction target, CARB published the 2022 Scoping Plan for Achieving Carbon Neutrality on November 16, 2022 and it was approved on December 15, 2022.<sup>19</sup> The 2022 Scoping Plan lays out the sector-by-sector roadmap for California, the world’s fifth largest economy, to achieve carbon neutrality by 2045 or earlier, outlining a technologically feasible, cost-effective, and equity-focused path to achieve the state’s climate target. The 2022 Scoping Plan includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands (NWL) to reduce emissions and sequester carbon, and the capture and storage of carbon.

---

<sup>19</sup> California Air Resources Board, *2022 Scoping Plan Documents, Notice of Decision*. 2022. Available online at: <https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp-appendix-b-notice-of-decision.pdf>; accessed February 24, 2023.

The 2022 Scoping Plan assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan, addresses recent legislation and direction from Governor Newsom, extends and expands upon these earlier plans, and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California’s climate work. As stated in the 2022 Scoping Plan, “The plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the state’s NWL and using a variety of mechanical approaches.” Specifically, the 2022 Scoping Plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California’s dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California’s most impacted communities as driving principles throughout the document.
- Incorporates the contribution of NWL to the State’s GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Scoping Plan includes emissions and carbon sequestration in NWL and explores how NWL contribute to long-term climate goals. Under the Scoping Plan Scenario, California’s 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030

reduction target. Every sector of the economy will need to begin to transition in this decade to meet our GHG reduction goals and achieve carbon neutrality no later than 2045. The 2022 Scoping Plan approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

The 2022 Scoping Plan discusses the role of local governments in meeting the State’s GHG reductions goals because local governments have jurisdiction and land use authority related to: community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations. Furthermore, local governments may have the ability to incentivize renewable energy, energy efficiency, and water efficiency measures. As discussed in detail in Appendix D (Local Actions) of the 2022 Scoping Plan, local jurisdictions can do much to enable statewide priorities, such as taking local action to help the state develop the housing, transport systems, and other tools we all need. Indeed, state tools—such as the Cap-and-Trade Program or zero-emission vehicle programs—do not substitute for these local efforts. Multiple legal tools are open to local jurisdictions to support this approach, including development of a climate action plan (CAP), sustainability plan, or inclusion of a plan for reduction of GHG emissions and climate actions within a jurisdiction’s general plan. Any of these can help to align zoning, permitting, and other local tools with climate action.

### ***Senate Bill 375***

The California Legislature passed Senate Bill 375 (SB 375) on September 1, 2008, and SB 375 was signed by former Governor Schwarzenegger and chaptered into law on September 30, 2008. SB 375 requires CARB, working in consultation with the metropolitan planning organizations (MPOs), to set regional greenhouse gas reduction targets for the automobile and light truck sector for 2020 and 2035. CARB must provide each MPO with its reduction target by September 30, 2010. The target must then be incorporated within that region’s Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and policies (e.g., general plan) are not required to be consistent with either the RTP or SCS.

In accordance with SB 375, on January 23, 2009, CARB appointed a Regional Targets Advisory Committee (RTAC) to provide recommendations and methodologies to be used in the target setting process. The RTAC provided its recommendations in a report to CARB on September 29, 2009. On August 9, 2010, CARB staff issued the *Proposed Regional Greenhouse Gas Emission Reduction Targets For Automobiles And Light Trucks*



Pursuant to Senate Bill 375.<sup>20</sup> CARB staff proposed draft reduction targets for the four largest MPOs (Bay Area, Sacramento, Southern California, and San Diego) of 7 to 8 percent for 2020 and reduction targets between 13 to 16 percent for 2035. For the Southern California Association of Governments (SCAG), which is the MPO for the region the proposed project is located; CARB established a draft target of 8 percent for 2020 and 13 percent for 2035, subject to SCAG Board approval. CARB staff proposed a draft reduction target for the combined San Joaquin Valley MPOs of 5 percent for 2020 and 10 percent for 2035, acknowledging that the growth rate in the San Joaquin Valley is projected to be double that of most other areas of California. The remaining six MPOs represent about 5 percent of both the State's greenhouse gas emissions and vehicle miles traveled from passenger vehicles. For these MPOs, CARB staff is proposing to use the most current greenhouse gas per capita projections from each MPO, adjusted for the impacts of the recession, as the basis for individual MPO targets for this first target-setting cycle. This approach allows the focus of this first target-setting cycle to appropriately remain on the largest and fastest growing regions of the state. Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and low carbon fuel standard regulations. As indicated above, CARB was required to adopt the final targets by September 30, 2010. However, further discussion on the draft targets was requested by SCAG, with an additional meeting occurring and SCAG approving the draft targets in February 2011. The draft targets were finalized by Executive Order on February 15, 2011.

### ***California Climate Action Registry***

The California Climate Action Registry (CCAR) is a private non-profit organization formed by the State of California that serves as a voluntary GHG registry to protect and promote early actions to reduce GHG emissions by organizations. Senate Bill 1771 (SB 1771, Sher) formally established the CCAR with technical changes made to the statute in SB 527, which finalized the structure of the CCAR. The CCAR began with 23 charter members and currently has over 300 corporations, universities, cities and counties, government agencies and environment organizations voluntarily measuring, monitoring, and publicly reporting their GHG emissions using the CCAR protocols. The CCAR has published a General Reporting Protocol, as well as project- and industry-specific protocols for landfill activities, livestock activities, the cement sector, the power/utility sector, and the forest sector. The protocols provide the principles, approach, methodology, and procedures required for participation in the CCAR.

Due to the growth of the CCAR, it now operates under the Climate Action Reserve,<sup>21</sup> which is a national offsets program for the United States carbon market. As part of this transition, the California Climate Action

---

<sup>20</sup> California Air Resources Board, *Staff Report: Proposed Regional Greenhouse Gas Emission Reduction Targets For Automobiles And Light Trucks Pursuant To Senate Bill 375*, (2010).

<sup>21</sup> Additional information about the Climate Action Reserve may be obtained at the following website: <http://www.climateactionreserve.org/>.

Registry was instrumental in establishing The Climate Registry, with the mission of expanding the California Registry's emissions reporting work to include all of North America.<sup>22</sup> Emissions inventory reporting is being transitioned to the Climate Registry and reports for the 2009 reporting year will be the last the California Registry will accept. However, even after that year, the California Registry will continue to represent its members' emissions reports to the state of California.

### ***Senate Bill 32 (SB 32) and AB 197***

On September 8, 2016, California signed into law Senate Bill 32 (SB 32), which adds Section 38566 to the Health and Safety Code and requires a commitment to reducing statewide GHG emissions by 2020 to 1990 levels and by 2030 to 40 percent less than 1990 levels. SB 32 was passed with companion legislation AB 197 Chapter 250, Statutes of 2016), which provides greater legislative oversight of CARB's GHG regulatory programs, requires CARB to account for the social costs of GHG emissions, and establishes a legislative preference for direct reductions of GHG emissions.

In November 2017, CARB adopted California's 2017 Climate Change Scoping Plan (2017 Update), which outlines the proposed framework of action for achieving California's SB 32 2030 GHG target: a 40 percent reduction in GHG emissions by 2030 relative to 1990 levels.<sup>23</sup> The 2030 target is intended to ensure that California remains on track to achieve the goal set forth by E.O. B-30-15 to reduce statewide GHG emissions by 2050 to 80 percent below 1990 levels.

The 2017 Update identifies key sectors of the implementation strategy, which includes improvements in low carbon energy, industry, transportation sustainability, natural and working lands, waste management, and water. Through a combination of data synthesis and modeling, CARB determined that the target statewide 2030 emissions limit is 260 MMTCO<sub>2e</sub>, and that further commitments will need to be made to achieve an additional reduction of 50 MMTCO<sub>2e</sub> beyond current policies and programs. Key elements of the 2017 Update include a proposed 20 percent reduction in GHG emissions from refineries and an expansion of the Cap-and-Trade program to meet the aggressive 2030 GHG emissions goal and ensure achievement of the 2050 limit set forth by E.O. B-30-15. For the transportations sector, the 2017 Update indicates that while most of the GHG reductions will come from technologies and low carbon fuels, a reduction in the growth of vehicle miles traveled (VMT) is also needed. The 2017 Update indicates that stronger SB 375 GHG reduction targets will enable the State to make significant progress toward this goal, but alone will not provide all of the VMT growth reductions that will be needed. It notes that there is a gap between what SB 375 can provide and what is needed to meet the State's 2030 and 2050 goals. The 2017

---

<sup>22</sup> Additional information about The Climate Registry may be obtained at the following website:  
<http://www.theclimateregistry.org/>.

<sup>23</sup> CARB, *California's 2017 Climate Change Scoping Plan*, November 2017.

Update recommends that local governments consider policies to reduce VMT, including: land use and community design that reduces VMT; transit-oriented development; street design policies that prioritize transit, biking, and walking; and increasing low carbon mobility choices, including improved access to viable and affordable public transportation and active transportation opportunities.

### ***Assembly Bill (AB) 1279***

AB 1279 establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO<sub>2</sub> removal solutions and carbon capture, utilization, and storage (CCUS) technologies. This bill is reflected directly in the 2022 Scoping Plan described previously.

### ***California Climate Commitment***

In September 2022, Governor Gavin Newsom signed a sweeping package of legislation to cut pollution, protect Californians from big polluters, and accelerate the state’s transition to clean energy. The Governor partnered with legislative leaders to advance groundbreaking measures to achieve carbon neutrality no later than 2045 and 90% clean energy by 2035, establish new setback measures protecting communities from oil drilling, capture carbon pollution from the air, advance nature-based solutions, and more.

Over the next two decades, the California Climate Commitment will create 4 million new jobs, cut air pollution by 60%, reduce state oil consumption by 91%, save California \$23 billion by avoiding the damages of pollution, reduce fossil fuel use in buildings and transportation by 92%, and cut refinery pollution by 94%. Taken together, these measures represent the most significant action on the climate crisis in California’s history and raises the bar for governments around the world.<sup>24</sup>

### **3.4.2.3 Regional Regulations**

#### ***SCAQMD Draft Guidance Regarding Interim CEQA GHG Significance Thresholds***

SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds. In its October 2008 document, the SCAQMD proposed a 30% emission reduction target to determine significance for commercial/residential projects that emit greater than 3,000 metric tons per year. On December 5, 2008, the

---

<sup>24</sup> California Climate Commitment Fact Sheet available at [www.gov.ca.gov/wp-content/uploads/2022/09/Fact-Sheet-California-Climate-Commitment.pdf?emrc=997f0c](http://www.gov.ca.gov/wp-content/uploads/2022/09/Fact-Sheet-California-Climate-Commitment.pdf?emrc=997f0c), Accessed February 24, 2023.

SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary source/industrial projects where the SCAQMD is lead agency. However, SCAQMD has yet to adopt a GHG significance threshold for land use development projects (e.g., residential/commercial projects) and has formed a GHG Significance Threshold Working Group to further evaluate potential GHG significance thresholds.

***SCAG 2020 Connect SoCal Plan RTP/SCS***

On September 3, 2020, the Southern California Association of Governments (SCAG) Regional Council unanimously voted to approve and fully adopt Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]).

Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whole collaboration can improve the quality of life for Southern Californians. In addition, Connect SoCal is supported by a combination of transportation and land use strategies that outline how the region can achieve California’s greenhouse gas emission reduction goals and federal CAA requirements. The plan also strives to achieve broader regional objectives, such as the preservation of natural lands, improvement of public health, increased roadway safety, support for the region’s vital goods movement industries and more efficient use of resources.

**3.4.2.4 Local Regulations**

***City of Vernon General Plan***

**Goal R-1** Conserve and protect the region's water and energy resources.

**Policy R-1.2:** Support the use of energy-saving designs and equipment in all new development and reconstruction projects.

**Goal R-2** Contribute to the continued gradual improvement of air quality in the South Coast Air Basin.

**Policy R-2.1:** Coordinate and cooperate with the South Coast Air Quality Management District and Southern California Association of Governments in efforts to implement the regional Air Quality Management Plan.

**Policy R-2.2:** Encourage and facilitate the use of public transportation to reduce emissions associated with automobile use.

**Policy R-2.4:** Maximize the amount of clean electrical power produced while minimizing emissions from power production plants.

**Goal CI-6.** Improve the City’s capability to generate and supply electric power to achieve energy self-sufficiency.

**Policy CI-6.5:** Expand the City’s capability to generate and provide natural gas to enhance the power/energy supply system.

### 3.4.3 THRESHOLDS OF SIGNIFICANCE

In accordance with *State CEQA Guidelines* (Appendix G), the following significance threshold criteria should be used to evaluate the potential GHG impacts of proposed projects. The Project would have a significant GHG emissions impact if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Neither the City nor the SCAQMD have adopted GHG significance thresholds applicable to the Project. While the SCAQMD has adopted significance thresholds for industrial-type projects for which it is the lead agency under CEQA,<sup>25</sup> those industrial thresholds are not applicable to the Project. In the absence of adopted thresholds and pursuant to *CEQA Guidelines* Section 15064.4, the City has the discretion to use a significance threshold relevant to the Project. *CEQA Guidelines* Section 15064.4 is stated below:

*Section 15064.4. Determining the Significance of Impacts from Greenhouse Gas Emissions.*

*(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:*

---

<sup>25</sup> SCAQMD, *SCAQMD Air Quality Significance Thresholds*, 2019.

- (1) *Quantify greenhouse gas emissions resulting from a project; and/or*
  - (2) *Rely on a qualitative analysis or performance based standards.*
- (b) *In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment:*
- (1) *The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;*
  - (2) *Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*
  - (3) *The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.4(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.*
- (c) *A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a*

*model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.*

Based on these considerations, the Project would have a significant GHG emissions impact if it would conflict with the state's laws and programs to address climate change (i.e., AB 32, SB 32, AB 1279 and SB 375); regional plans to address climate change consistent with state laws and plans (i.e., 2020-2045 RTP/SCS); and local plans and policies to address climate change (i.e., City of Vernon General Plan).

#### **3.4.4 METHODOLOGY**

GHG emissions were calculated with CalEEMod. Operational GHG emissions result from both direct and indirect sources. Direct emissions include emissions from fuel combustion in vehicles and natural gas combustion from stationary sources. Indirect sources include off-site emissions occurring as a result of electricity and water consumption and solid waste.

GHG emissions would also be generated by construction activity through exhaust from off-road equipment and on-road vehicles that consume fuel. No specific development projects have been proposed as part of the Project, and an annualized quantification of the incremental increase in construction emissions resulting from implementation of the Project would be speculative. Quantification of short-term construction related GHG emissions is generally based on the size of each individual project, the equipment inventory, and the construction schedule. Such detailed information is not available for development within the Project Area over the life of the Project, and it is not practicable to attempt to estimate the incremental changes in annual construction-related GHG emissions that would result from implementation of the Project. Therefore, construction emissions are addressed qualitatively.

#### **3.4.5 ENVIRONMENTAL IMPACTS**

**Impact GHG-1                      Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**

##### **Construction Emissions**

GHG emissions associated with Project construction activities would occur from off-road equipment usage, hauling vehicles, delivery, and worker trips to and from sites within the Project Area. GHG emissions would be generated by construction of each individual project; such emissions are temporary on each site –lasting only for the duration of construction activities on each site. As detailed in **Section 3.2, Air Quality**, example construction projects were modeled to account for four scales of intensity with respect to equipment usage and truck trips. Annual GHG emissions for the example construction projects would

range from approximately 7.17 to 43.7 metric tons per year of CO<sub>2</sub>e (see **Appendix 3.2** to this Draft EIR). Construction-related GHG emissions represent a fraction of total regional emissions when considering the emissions generated by mobile, building energy, and other sources. Implementation of the Project would have a negligible effect on annual average construction-related GHG emissions in the context of the regional and statewide inventories.<sup>26</sup> Therefore, construction related GHG emissions impacts would be less than significant.

## Operational Emissions

The operations of the Project would generate GHG emissions from the usage of mobile sources (on-road motor vehicles), area sources, energy sources, water, and generation of solid waste and wastewater. Emissions of operational GHGs are shown in **Table 3.4-3, Project Greenhouse Gas Emissions Compared to Existing Conditions**. As shown, GHG emissions of the Project in 2040 would total 184,307 CO<sub>2</sub>e MTY. This would be a reduction of approximately 17,854 CO<sub>2</sub>e MTY compared to existing conditions.

**Table 3.4-4, Project Greenhouse Gas Emissions Compared to Future Without Project**, shows the net greenhouse gas emissions from the Project in relation to the future without Project scenario. As shown, the future without Project scenario would have operational emissions of 180,103 CO<sub>2</sub>e MTY. Therefore, under the Project, there would be an increase of approximately 4,204 CO<sub>2</sub>e MTY compared to future without Project conditions. **Table 3.4-3** and **Table 3.4-4** also show that per capita GHG emissions under the Project would be lower than the future without Project scenario. Thus, while accommodating an increase in overall square-footage to the Project Area, the Project would improve per capita GHG emissions compared to the no project scenario.

This quantified estimate of the Project's GHG emissions satisfies Section 15064.4(a) of the *CEQA Guidelines*, which states a lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. As described in **Impact GHG-2**, the significance determination is based on the Project's consistency with the state's laws and programs to address climate change (i.e., AB 32, SB 32, AB 1279 and SB 375), regional plans to address climate change consistent with state laws and plans (i.e., 2020-2045 SCS/RTP), and local plans and policies to address climate change (i.e., City of Vernon General Plan). Based on the discussion under **Impact GHG-2**, the Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, and this impact is less than significant.

---

<sup>26</sup> SCAG's Connect SoCal Program EIR states that construction related emissions account for less than 0.3 percent of total annual emissions within the SCAG region.



**Table 3.4-3  
Project Greenhouse Gas Emissions Compared to Existing Conditions**

<b>Emissions Source</b>	<b>Metric Tons of Carbon Dioxide Equivalent (per year)</b>
Mobile Sources	82,526
Area Sources	543
Energy Sources	82,188
Water Sources	12,424
Waste Sources	5,979
Refrigerants	647
<b>Total GHG Emissions (With Project)</b>	<b>184,307</b>
<b>Per Capita GHG Emissions (With Project)<sup>a</sup></b>	<b>4.64</b>
<b>Existing Annual Emissions (Table 3.4-2)</b>	<b>202,161</b>
<b>Total Net GHG Emissions (With Project vs. Existing)</b>	<b>-17,854</b>

Source: Impact Sciences, Inc. See *Appendix 3.2* for CalEEMod data.

<sup>a</sup> To determine Per Capita GHG emissions, GHG emissions total was divided by service population of 39,747.

**Table 3.4-4  
Project Greenhouse Gas Emissions Compared to Future Without Project**

<b>Emissions Source</b>	<b>Metric Tons of Carbon Dioxide Equivalent (per year)</b>
<b>Future (2040) Without Project Emissions</b>	
Mobile Sources	81,074
Area Sources	315
Energy Sources	80,028
Water Sources	12,246
Waste Sources	5,796
Refrigerants	644
<b>Total GHG Emissions (Without Project)</b>	<b>180,103</b>
<b>Per Capita GHG Emissions (Without Project)<sup>a</sup></b>	<b>4.78</b>
<b>Project Annual Emissions (Table 3.4-3)</b>	<b>184,307</b>
<b>Total Net GHG Emissions (With vs. Without Project)</b>	<b>4,204</b>

Source: Impact Sciences, Inc. See *Appendix 3.2* for CalEEMod data.

<sup>a</sup> To determine Per Capita GHG emissions, GHG emissions total was divided by service population of 37,677.

***Significance Before Mitigation***

Less than Significant Impact.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

Less than Significant Impact.

---

**Impact GHG-2                      Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gas emissions.**

As stated previously, the Project would have a significant GHG emissions impact if it would conflict with the state's laws and programs to address climate change (i.e., AB 32, SB 32, AB 1279 and SB 375); regional plans to address climate change consistent with state laws and plans (i.e., 2020-2045 SCS/RTP); and local plans and policies to address climate change (i.e., City of Vernon General Plan). As discussed in more detail below, the Project would be consistent with AB 32, SB 32, AB 1279, SB 375, the SCS/RTP, and the City's General Plan. As such, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gas emissions and this impact would be less than significant.

**Consistency with AB 32, SB 32, AB 1279 & SB 375**

The Project would be consistent with applicable statewide regulatory programs designed to reduce GHG emissions consistent with the goals established in AB 32, SB 32, AB 1279 and SB 375.

AB 32 required CARB to adopt a scoping plan indicating how reductions in significant GHG sources will be achieved through regulations, market mechanisms, and other actions. In 2008, CARB released the Climate Change Proposed Scoping Plan that contained an outline of the proposed state strategies to achieve the 2020 greenhouse gas emission limits as outlined in AB 32. In response to SB 32, CARB adopted California's 2017 Climate Change Scoping Plan, which outlines the proposed framework of action for achieving California's SB 32 2030 GHG target: a 40 percent reduction in GHG emissions by 2030 relative to

1990 levels.<sup>27</sup> The 2030 target is intended to ensure that California remains on track to achieve the goal set forth by E.O. B-30-15 to reduce statewide GHG emissions by 2050 to 80 percent below 1990 levels. In response to the passage of AB 1279 and the identification of the 2045 GHG reduction target, CARB published the 2022 Scoping Plan for Achieving Carbon Neutrality. The 2022 Scoping Plan lays out the sector-by-sector roadmap for California, the world's fifth largest economy, to achieve carbon neutrality by 2045 or earlier, outlining a technologically feasible, cost-effective, and equity-focused path to achieve the state's climate target.

The Project would be consistent with CARB's Scoping Plan, which is intended to reduce GHG emissions in accordance with AB 32, SB 32, and AB 1279. The Scoping Plan provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other strategies to reduce GHGs.

The 2022 Scoping Plan states that local governments have the primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth, economic growth, and the changing needs of their jurisdictions. They also make critical decisions on how and when to deploy transportation infrastructure, and can choose to support transit, walking, bicycling, and neighborhoods that do not force people into cars. Local governments also have the option to adopt building ordinances that exceed statewide building code requirements and play a critical role in facilitating the rollout of ZEV infrastructure. As a result, local government decisions play a critical role in supporting state-level measures to contain the growth of GHG emissions associated with the transportation system and the built environment—the two largest GHG emissions sectors over which local governments have authority.

While no specific development projects have been proposed as part of the Project, all future development within the Project Area would be built to meet or exceed California Title 24 and CALGreen standards. These regulations require projects to comply with specific standards related to building energy efficiency and green building.

For the transportation sector, the Scoping Plan indicates that while most of the GHG reductions will come from technologies and low carbon fuels, a reduction in the growth of vehicle miles traveled (VMT) is also needed. The Scoping plan indicates that stronger SB 375 GHG reduction targets will enable the State to make significant progress toward this goal. The Scoping Plan recommends that local governments consider policies to reduce VMT, including land use and community design that reduces VMT; transit-oriented development; street design policies that prioritize transit, biking, and walking; and increasing low carbon mobility choices, including improved access to viable and affordable public transportation and active

---

<sup>27</sup> CARB, *California's 2017 Climate Change Scoping Plan*, November 2017.

transportation opportunities. As discussed in **Section 3.11, Transportation**, the Project scenario reduces VMT per service population to 20.2 for the Project Area and 20.7 for the City. This would be below the existing baseline scenario of 20.9 and 21.2 VMT/service population for the Project Area and City, respectively. Because the Project would reduce VMT per service population, the Project would reduce GHG emissions associated with transportation in a manner consistent with the objectives of the Scoping Plan and SB 375. The Project's consistency with SB 375, as demonstrated through compliance with SCAG's RTP/SCS, is discussed in further detail below.

### Consistency with SCAG RTP/SCS

The State of California has adopted plans and policies designed to reduce regional and local GHG emissions. SB 375 requires that each MPO prepare an SCS in the RTP that demonstrates how the region will meet greenhouse gas emissions targets. SB 375 establishes a collaborative relationship between MPOs and CARB to establish GHG emissions targets for each region in the state. Under the guidance of the goals and objectives adopted by SCAG's Regional Council, the RTP/SCS was developed to provide a blueprint to integrate land use and transportation strategies to help achieve a coordinated and balanced regional transportation system. The RTP/SCS represents the culmination of several years of work involving dozens of public agencies, 191 cities, hundreds of local, county, regional and state officials, the business community, environmental groups, as well as various nonprofit organizations. Adoption of the 2020 RTP/SCS substantiated that the growth forecasts for the SCAG region, taking into account efforts to reduce climate change impacts from GHG emissions, were consistent with the goals of SB 375.

The primary goal of the SCS is to provide a vision for future growth in southern California that will decrease per capita GHG emissions from passenger vehicles. However, the strategies contained in the SCS will produce benefits for the region far beyond simply reducing GHG emissions. The SCS integrates the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The regional vision of the SCS maximizes current voluntary local efforts that support the goals of SB 375. The SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas on existing main streets, in downtowns, and on commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. The Project Area is located within a high-quality transit area as designated by SCAG.<sup>28</sup>

---

<sup>28</sup> Southern California Association of Governments. *High Quality Transit Areas (HQTAs) 2016 – SCAG Region*. Available online at: <https://gisdata-scag.opendata.arcgis.com/datasets/1f6204210fa9420b87bb2e6c147e85c3/explore?location=33.923330%2C-118.282793%2C10.61scag.opendata.arcgis.com/datasets/1f6204210fa9420b87bb2e6c147e85c3/explore?location=33.923330%2C-118.282793%2C10.61>, accessed February 24, 2023.

As demonstrated in **Table 3.4-5, Consistency Analysis of the Project with the SCAG 2020 RTP/SCS**, the Project would be consistent with the RTP/SCS, thereby furthering the goals established in AB 32, SB 32, AB 1279 and SB 375.

**Table 3.4-5  
Consistency Analysis of the Project with the SCAG 2020 RTP/SCS**

Connect SoCal RTP/SCS Goals	Discussion
<b>Goal 1:</b> Encourage regional economic prosperity and global competitiveness	<b>Consistent.</b> The Project encourages the redevelopment of the Project Area with land uses that increase regional competitiveness through the area's proximity to Downtown Los Angeles and the Arts District. It preserves industrial uses, while increasing economic opportunity through the development of new industries and uses. The diversity of land uses will increase the competitiveness of Vernon as a desirable place to live and work.
<b>Goal 2:</b> Improve mobility, accessibility, reliability, and travel safety for people and goods	<b>Consistent.</b> Improvements for pedestrian safety are included in the Project, with a heavy emphasis placed on creating a revitalized Santa Fe Avenue, to include roadside parking and tree wells.
<b>Goal 3:</b> Enhance the preservation, security, and resilience of the regional transportation system	<b>Not Applicable.</b> This Goal is directed towards SCAG and does not apply to the Project. While this strategy calls on enhancing the preservation, security, and resilience of the transportation system, the Project would not interfere with such policymaking.
<b>Goal 4:</b> Increase person and goods movement and travel choices within the transportation system	<b>Consistent.</b> The Project aims to provide access to employment, retail services, and other daily needs via alternate modes of transportation. The Project encourages a walkable, vibrant, and safe community with the advancement of active modes of transportation such as bike lanes and pedestrian amenities within walking distance to the LA Metro bus network.
<b>Goal 5:</b> Reduce greenhouse gas emissions and improve air quality	<b>Consistent.</b> As shown in <b>Table 3.4-3, Project Greenhouse Gas Emissions Compared to Existing Conditions</b> , the Project would have a net reduction in GHG emissions compared to existing conditions due to the changes in land use and improvements to mobile source emissions.
<b>Goal 6:</b> Support healthy and equitable communities	<b>Consistent.</b> The Project would maintain and create additional employment opportunities adjacent to new residential uses, introducing new retail and office uses while preserving existing industrial and commercial jobs in the remainder of the Project Area.
<b>Goal 7:</b> Adapt to a changing climate and support an integrated regional development pattern and transportation network	<b>Consistent.</b> While goals associated with climate adaptation are not directly applicable to the Project, the Project would serve to support an integrated regional development pattern and transportation network. The Project would respond to increased development pressures in the surrounding region, particularly from Downtown Los Angeles and the Los Angeles Arts District. The Project would encourage the development of multi-family residential buildings within walking distance to multiple bus lines. The Project Area is also located within a HQTA with access to local buses which connect to other regional transit opportunities such as rail lines and Los Angeles Union Station.

Connect SoCal RTP/SCS Goals	Discussion
<b>Goal 8:</b> Leverage new transportation technologies and data-driven solutions that result in more efficient travel	<b>Not Applicable.</b> This Goal is directed towards SCAG and does not apply to the Project. This strategy calls on SCAG to use new transportation technologies and data-driven solutions to increase travel efficiency. The Project would not interfere with this goal.
<b>Goal 9:</b> Encourage development of diverse housing types in areas that are supported by multiple transportation options	<b>Consistent.</b> The Project would encourage the development of multi-family residential buildings within walking distance to multiple bus lines. The Project Area is also located within a HQTAs with access to local buses which connect to other regional transit opportunities such as rail lines and Los Angeles Union Station.
<b>Goal 10:</b> Promote conservation of natural and agricultural lands and restoration of habitats	<b>Consistent.</b> The Project is located in an urban area devoid of natural and agricultural lands and minimal habitat. By adding housing in already developed infill areas, pressure to develop natural and agricultural lands would be reduced.
<b>Strategy 1:</b> Focus growth near destinations and mobility options	<b>Consistent.</b> The Project concentrates growth within walking distance to multiple bus lines and provides improved pedestrian and bicycle infrastructure. The Project Area is also located within a HQTAs with access to local buses which connect to other regional transit opportunities such as rail lines and Los Angeles Union Station.
<b>Strategy 2:</b> Promote diverse housing choices.	<b>Consistent.</b> The Project would encourage the development of multi-family residential buildings, while preserving existing single-family homes.
<b>Strategy 3:</b> Leverage technology innovations	<b>Not Applicable.</b> This strategy is directed to SCAG and does not apply to the Project. This strategy aims to promote low emission technologies, improve access to services through technology, and identify ways to incorporate “micro-power grids” in communities. The Project would not interfere with this strategy.
<b>Strategy 4:</b> Support implementation of sustainability policies	<b>Consistent.</b> The Project incorporates Sustainability Guidelines that encourage sustainable features such as stormwater best management practices and green roofs. The Project would also create greenways along old railroad spurs and add bicycle infrastructure.
<b>Strategy 5:</b> Promote a Green Region	<b>Consistent.</b> The Project would promote the creation of a bikeway system and increased open space available to residents. It would also promote the planting of street trees and landscaping. The Project would also result in a net reduction of GHG emissions compared to existing conditions as well as a reduction in VMT rates, which serve to improve the region’s contribution to GHG emissions.

### Consistency with City of Vernon General Plan

Development under the Project and its elements would be consistent with the City of Vernon General Plan. **Table 3.4-6, Consistency Analysis of the Project with the City’s General Plan**, includes the goals and policies included in the *General Plan* pertinent to the Project and GHG reduction goals.

**Table 3.4-6  
Consistency Analysis of the Project with the City's General Plan**

<b>General Plan Policy</b>		<b>Discussion</b>
<b>Land Use Element</b>		
<b>Goal LU-2: Phase out aging industrial building and sites through modernization and replacement</b>		
<b>Policy LU-2.3:</b> Continue to enforce all applicable building and health and safety codes.	<b>Consistent.</b> The Project will comply with the Vernon Municipal Code.	
<b>Policy LU-2.4:</b> Provide incentives to property owners to revitalize industrial structures or recycle/demolish obsolete or vacant structures.	<b>Consistent.</b> The Project encourages adaptive reuse of underutilized industrial structures for mixed-use development.	
<b>Policy LU-2.5:</b> Assist in the reuse of properties from one industrial use to another.	<b>Consistent.</b> The Project would support the reuse of properties from one industrial use to another industrial use and would encourage adaptive reuse of industrial uses to commercial and residential uses throughout the Project Area.	
<b>Policy LU-2.7:</b> Consider and facilitate proposals for more intensive employment-generating, nonresidential development near transit stops.	<b>Consistent.</b> The Project would increase commercial, production retail, and research and development uses which would generate an increase in employment opportunities within a HQTAs.	
<b>Goal LU-3. Maintain Vernon as a highly desirable location for industry and continue to attract the types of industry the City is well positioned to serve.</b>		
<b>Policy LU-3.2:</b> Foster a City government and governmental structure that is responsive to the needs of industry located in a metropolitan area.	<b>Consistent.</b> The Project would preserve industrial uses throughout the majority of the Project Area.	
<b>Policy LU-3.5:</b> Use development proposals as opportunities to encourage modernization and broaden property improvements goals.	<b>Consistent.</b> The Project would encourage the redevelopment and modernization of existing underutilized industrial buildings.	
<b>Circulation and Infrastructure Element</b>		
<b>Goal CI-1. Provide a balanced transportation system for the safe and efficient movement of people, goods, and emergency services throughout the City.</b>		
<b>Policy CI-1.4:</b> Evaluate implementing measures that reduce the maneuvering of trucks on streets with substantial traffic during periods of high traffic volumes.	<b>Consistent.</b> The Project would reduce VMT per service population compared to existing conditions, improving strain on the system.	
<b>Policy CI-1.6:</b> Encourage the continued improvement of services provided by the Los Angeles County Metropolitan Transit Authority to Vernon and adjacent cities to provide good access from home to job and job to home for persons employed in Vernon	<b>Consistent.</b> The Project increases the density of housing within a major employment center, increasing the ability for employees to live where they work. Additionally, the Project locates housing within walking distance to multiple bus lines. Green corridors would also connect the Project Area to the metro light rail line to the west.	
<b>Housing Element</b>		
<b>Goal H-3: Create opportunities for the development of new housing in areas of the City that have the least potential for adverse impacts associated with established industrial uses and truck routes. Locate such new housing nearby community services.</b>		

General Plan Policy	Discussion
<p><b>Policy H-3.1:</b> Implement the Housing Overlay Zone via the Zoning Ordinance and Zoning map to allow for a limited amount of new housing construction.</p>	<p><b>Not Consistent.</b> The adoption of the Project would change the zoning ordinance to allow mixed-use development, including housing in identified clusters, outside the Housing Overlay Zone.</p>
<p><b>Policy H-3.2:</b> Strategically locate sites for new housing so as to minimize noise, vibration, smoke, noxious gases, glare, heat, dust, odors, air pollution, and other adverse impacts associated with industrial uses, slaughtering and rendering uses, businesses that</p>	<p><b>Consistent.</b> The Project implements zoning standards that govern where housing can be located. These standards ensure that housing is not located within close proximity to heavy industrial uses that would negatively impact residents. Buffers to ensure adequate screening from adjacent industrial uses or transportation routes would be implemented.</p>
<p><b>Policy H-3.3:</b> Encourage development of residential uses in strategic proximity to schools, recreational facilities, commercial areas, parks and other public spaces, and transit routes</p>	<p><b>Consistent.</b> The Project provides for a flexibility of land uses, including residential, retail, research and development, and production uses within development nodes.</p>

Source: City of Vernon General Plan. 2015. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/1306/637635880850570000>, accessed October 20, 2022. City of Vernon Westside Project. 2022.

### Significance Before Mitigation

Less than Significant Impact.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Less than Significant Impact.

## 3.4.6 CUMULATIVE IMPACTS

As demonstrated above, the Project’s potential GHG emissions have been analyzed in a manner consistent with CEQA Guidelines Section 15064.4(b) and considers whether the incremental contributions of the Project could be cumulatively considerable. As shown previously, the Project would result in a net decrease of GHG emissions compared to existing conditions, and per capita GHG emissions under the Project would be lower than the future without project scenario. Thus, while accommodating an increase in overall square-footage to the Project Area, the Project would improve per capita GHG emissions compared to the no project scenario. Furthermore, as discussed above, the Project would be consistent with AB 32, SB 32, AB 1279, SB 375, the SCS/RTP, and the City’s General Plan and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gas emissions. As



GHG impacts would be less than significant under the Project, cumulative impacts related to GHG emissions would also be less than significant and would not be cumulatively considerable.

### 3.4.7 REFERENCES

- California Air Resources Board, *Staff Report: Proposed Regional Greenhouse Gas Emission Reduction Targets For Automobiles And Light Trucks Pursuant To Senate Bill 375*, (2010).
- California Air Resources Board. *California's 2017 Climate Change Scoping Plan*. 2017. Available online at: [https://ww3.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf), accessed February 24, 2023.
- California Air Resources Board, *California Greenhouse Gas Inventory 2000-2019 - by IPCC Category*. 2021. Available online at: [https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg\\_inventory\\_ipcc\\_sum\\_2000-19.pdf](https://ww3.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_ipcc_sum_2000-19.pdf), accessed February 24, 2023.
- California Air Resources Board. "Low-Emission Vehicle Greenhouse Gas Program." Available online at: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/lev-program/low-emission-vehicle-greenhouse-gas>, accessed February 24, 2023.
- California Air Resources Board, *2022 Scoping Plan Documents, Notice of Decision*. 2022. Available online at: <https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp-appendix-b-notice-of-decision.pdf>; accessed February 24, 2023.
- California Climate Action Team, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, March 2006.
- California Department of Finance, "Gross State Product," Available online at: <https://dof.ca.gov/forecasting/economics/economic-indicators/gross-state-product/>, accessed February 24, 2023.
- California Environmental Protection Agency (Cal EPA), *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, 2010.
- City of Vernon. *City of Vernon General Plan*. 2015. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/1306/637635880850570000>, accessed February 24, 2023.
- Intergovernmental Panel on Climate Change. "Climate Change 2013: The Physical Science Basis." 2013. Available online at: <http://www.climatechange2013.org/>, accessed February 24, 2023..
- NPR. *U.S. Officially Leaving Paris Climate Agreement*. Available online at: <https://www.npr.org/2020/11/03/930312701/u-s-officially-leaving-paris-climate-agreement>, accessed February 24, 2023.

Southern California Association of Governments. *High Quality Transit Areas (HQTA) 2016 – SCAG Region*. Available online at: <https://gisdata-scag.opendata.arcgis.com/datasets/1f6204210fa9420b87bb2e6c147e85c3/explore?location=33.923330%2C-118.282793%2C10.61scag.opendata.arcgis.com/datasets/1f6204210fa9420b87bb2e6c147e85c3/explore?location=33.923330%2C-118.282793%2C10.61>, accessed February 24, 2023.

The White House. *President Obama: The United States Formally Entered the Paris Agreement*. 2016. Available online at: <https://obamawhitehouse.archives.gov/blog/2016/09/03/president-obama-united-states-formally-enters-paris-agreement>, accessed February 24, 2023.

The White House. *Paris Climate Agreement*. 2021. Available online at: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/>, accessed February 24, 2023.

United Nations Climate Change. *The Paris Agreement*. Available online at: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>, accessed February 24, 2023.

U.S. Census Bureau, “Explore Census Data,” Available online at: <https://data.census.gov/cedsci/>, accessed February 24, 2023.

U.S. EPA. “Overview of Greenhouse Gases.” Available online at: <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>, accessed February 24, 2023.

U.S. Environmental Protection Agency. “Understanding Global Warming Potentials.” Available online at: <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>, accessed February 24, 2023.

## 3.5 HAZARDS AND HAZARDOUS MATERIALS

---

### INTRODUCTION

*This section presents an overview of the existing conditions with regard to the presence of hazards and/or hazardous materials within the boundaries of the Project Area. It also discusses the potential impacts resulting from hazards or hazardous materials as a result of construction and operation activities associated with the Project.*

#### 3.5.1 ENVIRONMENTAL SETTING

##### 3.5.1.1 Hazardous Materials

Section 25501(m) of the California Health and Safety Code defines a “hazardous material” as:

*A material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. “Hazardous Materials” include, but are not limited to, hazardous substances, hazardous wastes, and any materials which a handler or the unified program agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment.*

“Hazardous waste” is any hazardous material that is abandoned, discarded, or recycled, as defined by Sections 25117 and 25124 of the California Health and Safety Code. In addition, hazardous waste may occasionally be generated by actions that change the composition of previously nonhazardous materials. The criteria used to characterize a material as hazardous include ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity.

As will be discussed in more detail below, hazardous materials and wastes are defined and regulated in the United States by federal, state, and local regulations, including those administered by the U.S. Environmental Protection Agency (U.S. EPA), the California Environmental Protection Agency (Cal/EPA), the U.S. Occupational Safety and Health Administration, the U.S. Department of Transportation, the U.S. Nuclear Regulatory Commission, and various other agencies. Hazardous materials include hazardous wastes and, in the discussion, below (except as noted) hazardous materials refers to both hazardous materials and wastes.

Public health is potentially at risk whenever hazardous materials are, or would be, used and when hazardous wastes are disposed of, including transportation of hazardous materials and wastes. It is necessary to differentiate between the “hazard” of these materials and the acceptability of the “risk” they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The California Department of Toxic Substances Control

(DTSC) determines the risk to health and public safety by the probability of exposure, in addition to the inherent toxicity of a material. Factors that can influence the health effects when human beings are exposed to hazardous materials or wastes include: the dose the person is exposed to, the frequency of exposure, the duration of exposure, the exposure pathway (route by which a chemical enters a person's body), and the individual's unique biological susceptibility.

### 3.5.1.2 Existing Land Uses

The Project Area is comprised of four specific areas within the western portion of the City, the Project Area is generally industrial, with a handful of residential units, and pockets of civic and commercial uses. See **Section 2.0, Project Description**, for a more detailed description of land uses within the Project Area and its surroundings.

#### *Transportation of Hazardous Materials*

The transportation of hazardous materials within the State of California is subject to various federal, state, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit loading or delivery of such materials (California Vehicle Code Sections 31602(b), 32104(a)). The California Highway Patrol, (CHP) designates through routes to be used for the transportation of hazardous materials. Transportation of hazardous materials in the City is restricted to these routes except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users. There are several risks associated with the transportation of hazardous materials. Transport of hazardous materials via truck, rail, and other modes involves a degree of risk of accident and release. The use of hazardous materials and the generation of hazardous waste in the construction and maintenance of the transportation system are other avenues for risk or exposure. Past disposal of hazardous materials in a manner that creates residual contamination of soil or water can be a source of risk when such sites are disturbed during construction and development. Each of these avenues is discussed below.

#### *Existing Land Uses*

The existing land uses within the City are primarily industrial, including nine open storage parcels, 125 light manufacturing parcels, 29 parking lots, 189 warehousing distribution and storage parcels, seven food processing plants, 57 general industrial parcels, one mineral processing plant, and 36 heavy manufacturing parcels. The Project Area encompasses approximately 780 acres. As discussed in **Section 2.0, Project Description**, the entire City is currently zoned for industrial uses. The northern and eastern sections of the Project Area include Commercial-1, Commercial-2, and Truck and Freight Terminal Overlay Zone areas, primarily along Santa Fe Avenue and Pacific Boulevard. The vast majority of

industrial properties in the Project Area are used for warehousing, distribution, and storage. Much of the warehousing and storage uses have replaced heavy manufacturing in the area, such as the now closed Bethlehem Steel Corporation and the aluminum plant Alcoa. However, some heavy manufacturing still remains. Light manufacturing, which makes up the second most common use, include small-scale fashion and furniture manufacturing. In 2023, a new data center is anticipated to open, and the Farmer John meatpacking plant will close, signaling a further shift away from manufacturing uses.

With over 100 years of industrial history, many of the parcels within the Project Area have a history of contamination, or actively store or transport hazardous materials. Businesses using or producing hazardous materials are regulated through the environmental review process, which regulates land uses and ensures that such uses are removed from residential development, schools, and other sensitive land uses.

Schools are considered sensitive to hazardous materials. **Table 3.5-1, Schools within the Project Area or a ¼ Mile Radius**, lists preschools and primary and secondary schools in or near the Project Area.

**Table 3.5-1  
Schools within Project Area or ¼ mile Radius**

School Name	Location
Vernon City Elementary School	2360 E. Vernon Avenue
Pacific Boulevard Elementary School	2660 E. 57 <sup>th</sup> Street
Holmes Avenue Elementary School	5108 Holmes Avenue
Dr. Julian Nava Learning Academy	1420 E. Adams Boulevard

Operational activities associated with specific uses in the Project Area routinely use, store, and transport hazardous materials within the Project Area. The majority of existing uses include warehousing, distribution, and storage, which use or store cleaning substances, solvents, adhesives, chemicals or other hazardous materials. However, according to the Hazard Waste Tracking System, there are 181 active handlers of hazardous waste in the City as a whole.<sup>1</sup> These uses are varied, but include meat processing, apparel production, building equipment contractors, pharmaceutical preparation manufacturing, paper production, and many others.

<sup>1</sup> California Department of Toxic Substances Control. Hazardous Waste Tracking System. Available online at: [https://hwts.dtsc.ca.gov/search?keyword=&epa\\_id=false&facility=false&street=&city=vernon&active=true&&zipCode=&sort=EPA\\_ID&sortBy=ASC&addressType=physical&manifestType=all&epaIdCategory=all&epaIdType=all&type=all&page=1&pageSize=100&issueFDate=&issueTDate=&total\\_records=0&=&multiCounty=&county=Los%20Angeles](https://hwts.dtsc.ca.gov/search?keyword=&epa_id=false&facility=false&street=&city=vernon&active=true&&zipCode=&sort=EPA_ID&sortBy=ASC&addressType=physical&manifestType=all&epaIdCategory=all&epaIdType=all&type=all&page=1&pageSize=100&issueFDate=&issueTDate=&total_records=0&=&multiCounty=&county=Los%20Angeles), accessed February 28, 2023.

### 3.5.1.3 Soil and Groundwater

Industrial uses make up the majority of the Project Area. As described above, warehousing distribution and storage make up the majority of uses, while light manufacturing is the second most common. General industrial and heavy manufacturing are the third and fourth most common use. These uses could utilize hazardous materials that may cause soil or groundwater contamination.

#### *Known Local Soil or Groundwater Contamination Sources*

The potential to encounter hazardous materials in soil and groundwater in the Project Area was based on a search of federal, State, and local regulatory databases that identify permitted hazardous materials uses, environmental cases, and spill sites. The following sources were reviewed to identify contaminated sites:

- California Department of Toxic Substances Control (DTSC) EnviroStor Database
- State Water Resources Control Board (SWRCB) Geo Tracker Database
- U.S. EPA Superfund Enterprise Management Systems (SEMS) Database

The records search reviewed federal, state, and local databases to characterize the general environmental regulatory status of properties within and in the vicinity of the Project Area. The EnviroStor database contains information on properties in California where hazardous substances have been released or where the potential for a release exists. The GeoTracker database contains information on properties in California for sites that require cleanup, such as leaking underground storage tank (LUST) sites, which may impact, or have potential impacts, to water quality, with emphasis on groundwater. The SEMS database lists Superfund sites that are found on the NPL.

#### **Envirostor Database**

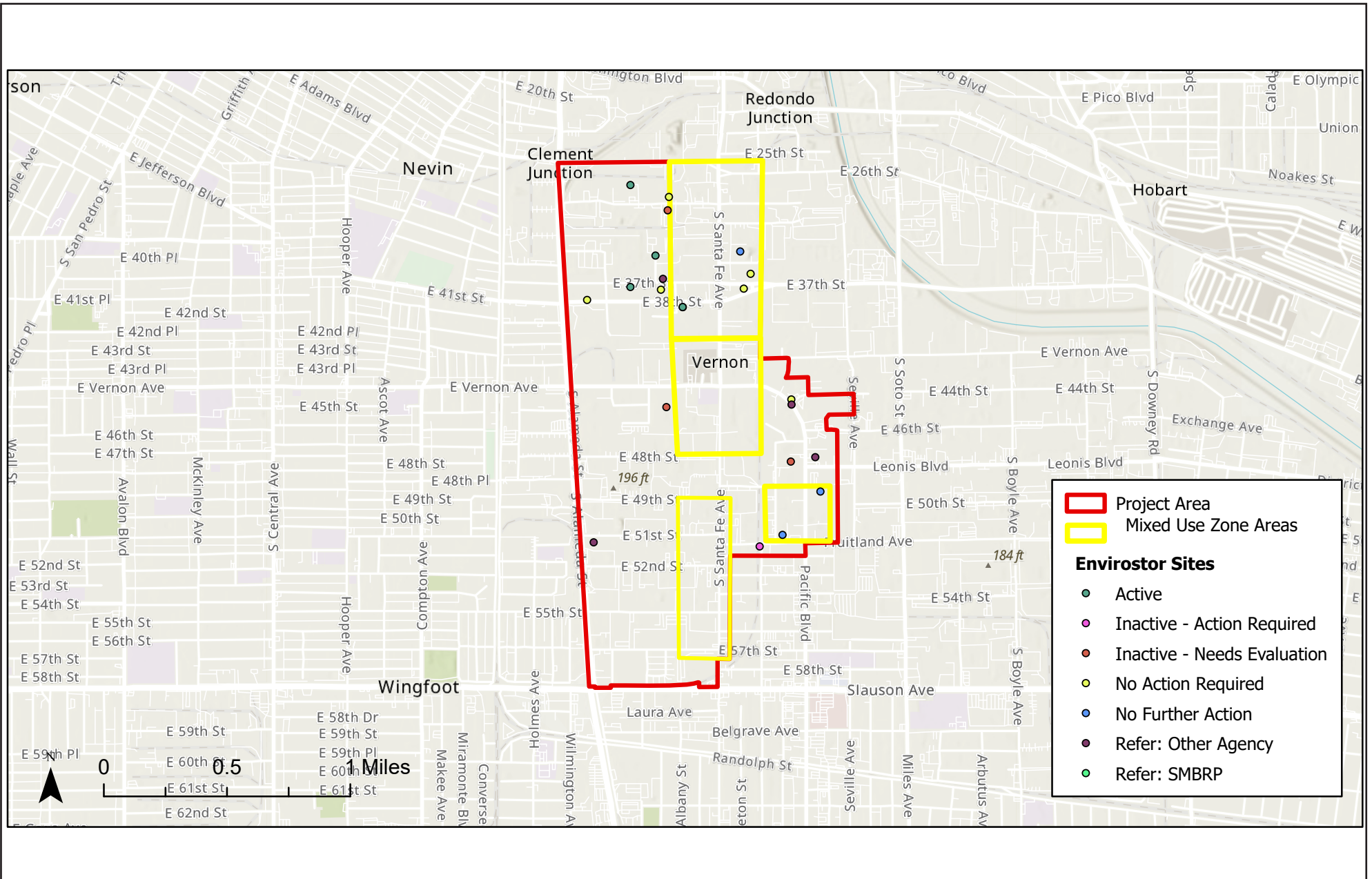
The Department of Toxic Substances Control's (DTSC) Envirostor database contains information on properties in California where hazardous substances have been released or where the potential for a release exists. A search of this database was conducted in February 2023 and four "Active" cleanup sites were identified within the Project Area. **Table 3.5-2, Department of Toxic Substances Control Cleanup Sites within the Project Area**, lists the cleanup sites in the Project Area. **Figure 3.5-1, Envirostor Sites in the Project Area**, maps the DTSC sites in the Project Area.

**Table 3.5-2  
Department of Toxic Substances Control Cleanup Sites within the Project Area**

<b>Project Type</b>	<b>Name</b>	<b>Address</b>	<b>Status</b>
State Response	AAD Distribution & Dry Cleaning, Inc.	2306 East 38 <sup>th</sup> Street	Active
Historical	M-5 Steel, Inc.	2901-2921 Saco Street	Refer: Other Agency
Evaluation	Rittenhouse	2440 East 38 <sup>th</sup> Street	No Action Required
Evaluation	Rebilt Metalizing	2229 East 38 <sup>th</sup> Street	No Action Required
Evaluation	TC Toys	4545 Pacific Boulevard	No Action Required
Evaluation	Commercial Die Casting	2053 East 38 <sup>th</sup> Street	No Action Required
Evaluation	New Star	2115 East 27 <sup>th</sup> Street	No Action Required
Evaluation	Christensen Plating Works	2455 East 52 <sup>nd</sup> St	Inactive - Action Required
Evaluation	Flowserve Corporation	2300 East Vernon Avenue	Inactive - Needs Evaluation
Voluntary Cleanup	Socal Industrial Properties (Former Vernon Machining Facility)	2150 E. 37 <sup>th</sup> Street	Active
Voluntary Cleanup	Vernon Perchlorate	Saco Street	Active
Voluntary Cleanup	2011-2031 East 27 <sup>th</sup> Street	2011 East 27 <sup>th</sup> Street	Active
Tiered Permit	Punch Press Products, Inc. / All Bright Pltg	1916 E. 51 <sup>st</sup> Street	Refer: Other Agency
Tiered Permit	Kennedy Name Plate Co.	4501 Pacific Boulevard	Refer: Other Agency
Military Evaluation	Lincoln Foundry Corp.		Inactive - Needs Evaluation
Military Evaluation	Los Angeles USN Repair Depot		Inactive - Needs Evaluation
Corrective Action	AAD Distribution & Dry Cleaning, Inc.	2306 E 38 <sup>th</sup> Street	Refer: Site Mitigation and Brownfields Reuse Program

Source: Department of Toxic Substance Control. Available online at: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Search>, accessed February 28, 2023.

A search of the GeoTracker database was conducted in February 2023 and identified seven cleanup sites in the Project Area, including one “open” cleanup site. Open sites are categorized as “assessment and interim remedial action,” “remediation,” “site assessment,” verification monitoring,” “reopen case,” “eligible for closure,” or “inactive” for sites where no regulatory oversight activities are being conducted by the lead agency. A completed and closed site indicates that a closure letter or other formal decision document has been issued for the site. There are seven cleanup sites within the Project Area listed as “completed – case closed.” **Table 3.5-3, Geotracker (SWQCB) Identified Cleanup Sites within the Project Area**, lists GeoTracker cleanup sites in the Project Area and **Figure 3.5-2, Geotracker (SWQCB) Identified Cleanup Sites within the Project Area**, presents these sites on a map.

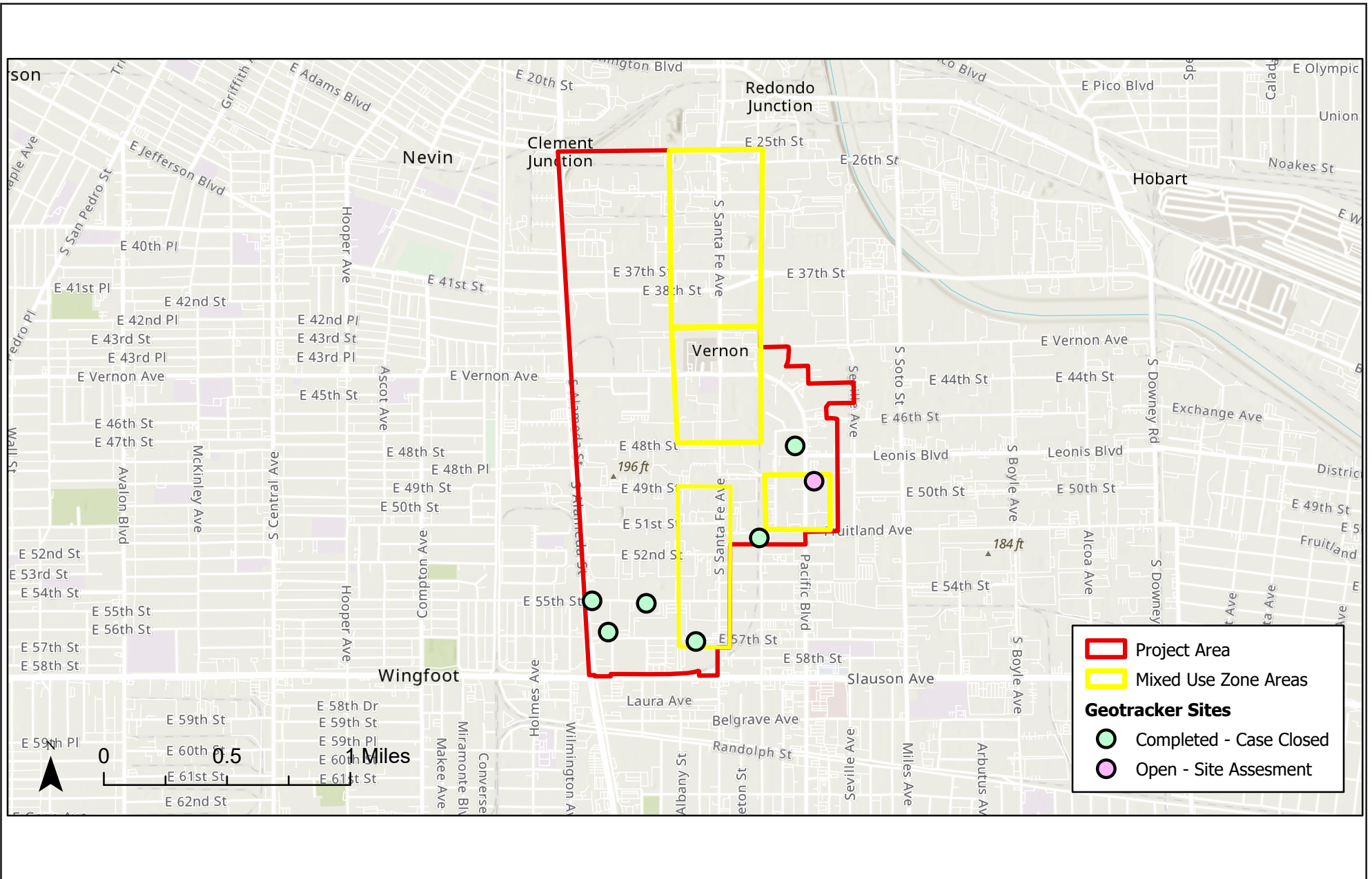


SOURCE: Esri, 2022; Envirostor, 2022

FIGURE 3.5-1

Envirostor Sites in the Project Area





SOURCE: Esri, 2022; Geotracker, 2022

FIGURE 3.5-2

Geotracker Sites in the Project Area

**Table 3.5-3  
Geotracker (SWQCB) Identified Cleanup Sites within the Project Area**

Site Type	Name	Address	Status
Cleanup Program Site	Christensen Plating Works Inc.	2455 E. 52 <sup>nd</sup> Street	Completed - Case Closed
Cleanup Program Site	Domtar Gypsum	2116 E 55 <sup>th</sup> Street	Completed - Case Closed
Cleanup Program Site	Domtar Gypsum	5600 S Alameda	Completed - Case Closed
Cleanup Program Site	Genstar Roofing Products	5500 Alameda S Street	Completed - Case Closed
Cleanup Program Site	Pacific Property	4641 Pacific Blvd	Completed - Case Closed - Land Use Restrictions
Cleanup Program Site	Sysco Continental	2300 E 57 <sup>th</sup> St	Completed - Case Closed
Cleanup Program Site	Whole Foods Refrigerated Distribution Facility (Fmr Angelus Sanitary Can Machine)	5000 Pacific Boulevard	Open – Site Assessment

Source: California State Water Resource Control Board. Geotracker. Available online at <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Search+GeoTracker>, accessed February 2023..

The California Department of Conservation’s Well Finder online application presents California’s oil and gas industry information from the geographic perspective. The Well Finder does not identify any wells or oil fields within the Project Area.<sup>2</sup>

### U.S. EPA Superfund Enterprise Management System (SEMS) Database

A search of the U.S. EPA database of Superfund sites conducted in February 2023 did not reveal any sites currently on the National Priorities List.

Environmental databases are updated as new sites are identified and existing sites are resolved. The intent of the database searches summarized in this document is not to provide a comprehensive listing of contaminated sites, but to provide a general characterization of the types of contamination found in the Project Area.

#### 3.5.1.4 Potential Hazardous Materials in Buildings

Hazardous materials, such as asbestos, lead, and Polychlorinated Biphenyls (PCBs), may also be contained in building materials and components. Procedures for dealing with these materials, and for

<sup>2</sup> California Department of Conservation. Well Finder. Available at: <https://www.conservation.ca.gov/calgem/Pages/Wellfinder.aspx>, accessed February 28, 2023.

safely removing and disposing of them in accordance with applicable regulations, have been developed by oversight agencies and are described below.

### ***Asbestos***

Asbestos is a naturally occurring fibrous material that was used as a fireproofing and insulating agent in building construction before such uses were banned by U.S. EPA in the 1970s, although some nonfriable<sup>3</sup> use of asbestos in roofing materials still exists. The presence of asbestos can be found in materials such as ducting insulation, wallboard, shingles, ceiling tiles, floor tiles, insulation, plaster, floor backing, and many other building materials. Asbestos and asbestos containing materials (ACMs) are considered both a hazardous air pollutant and a human health hazard. The risk to human health is from inhalation of airborne asbestos, which commonly occurs when ACMs are disturbed during such activities as demolition and renovation. Due to the age of the buildings within the Project Area, it is likely that ACMs are present.

### ***Lead***

In 1978, the Consumer Product Safety Commission set the allowable lead levels in paint at 0.06 percent by weight in a dry film of newly applied paint. In the 1970s, the chief concern for lead-based paint was its cumulative effect on body systems, primarily when paint chips containing lead were ingested by children. Research in the early 1980s showed that lead dust is of special concern because the smaller particles are more easily absorbed by the body. Common methods of paint removal, such as sanding, scraping, and burning, create excessive amounts of dust. Lead dust is especially hazardous to young children because they play on the floor and engage in a great deal of hand-to-mouth activity, increasing their potential for exposure. Lead-based paints were commonly used in buildings built prior to 1970s. Since many of the structures located within the Project Area were built prior to the federal regulations banning its use, lead-based paints are likely to exist in the existing structures.

### ***Polychlorinated Biphenyls***

PCBs are organic oils that were formerly placed in many types of electrical equipment, including transformers and capacitors, primarily as electrical insulators. They may also be contained in hydraulic fluid used for hoists, elevators, etc. Years after widespread and commonplace installation, it was discovered that exposure to PCBs may cause various deleterious health effects and that PCBs are highly persistent in the environment. These substances have been listed as carcinogens by U.S. EPA. PCBs were

---

<sup>3</sup> Nonfriable asbestos refers to ACMs that contain asbestos fibers in a solid matrix that does not allow for them to be easily released.

banned from use in electrical capacitors, electrical transformers, vacuum pumps, and gas turbines in 1979. Because of the age of many of the properties, there is a potential for PCBs within the Project Area.

## **3.5.2 REGULATORY FRAMEWORK**

### **3.5.2.1 Federal Regulations**

The U.S. Environmental Protection Agency (U.S. EPA) is the main federal agency responsible for enforcing regulations relating to hazardous materials and wastes, including evaluation and remediation of contamination and hazardous wastes. The U.S. EPA works collaboratively with other agencies to enforce materials handling and storage regulations and site cleanup requirements. The Occupational Safety and Health Administration (OSHA) and the U.S. Department of Transportation (DOT) are authorized to regulate safe transport of hazardous materials.

#### ***Resource Conservation and Recovery Act***

The Resource Conservation and Recovery Act (RCRA) is the public law that creates the framework for the proper management of hazardous and non-hazardous solid waste. The law describes the waste management program mandated by Congress that gave the U.S. EPA authority to develop the RCRA program. The term RCRA is often used interchangeably to refer to the law, regulations, and the U.S. EPA policy and guidance.

#### ***U.S. Department of Transportation. Hazardous Materials Transport Act (49 USC 5101)***

The DOT, in conjunction with the U.S. EPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to transportation of hazardous materials. The Hazardous Materials Transportation Act of 1974 directs the DOT to establish criteria and regulations regarding the safe storage and transportation of hazardous materials. Code of Federal Regulations (CFR) 49, 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials.

#### ***Toxic Substances Control Act***

Congress enacted the Toxic Substances Control Act (TSCA) of 1976 to give U.S. EPA the ability to track the approximately 75,000 industrial chemicals currently produced or imported into the United States. The U.S. EPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard. The U.S. EPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

### ***Comprehensive Environmental Response, Compensation, and Liability Act***

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides a Federal “Superfund” to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the U.S. EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup.

### ***Emergency and Community Right to Know Act***

The Emergency and Community Right to Know Act (EPCRA) was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. EPCRA was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for federal, state, and local governments, tribes and industry regarding emergency planning and “Community Right-to-Know” reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public’s knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. States and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment. To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission (SERC). The SERCs were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district.

#### **3.5.2.2 State Regulations**

##### ***Department of Toxic Substances Control***

The State Department of Toxic Substances Control (DTSC) is authorized by CAL EPA to administer the hazardous waste laws and oversee remediation of hazardous wastes sites. Regulations require that DTSC “shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following: (1) [a]ll hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (HSC).”<sup>4</sup>

The hazardous waste facilities identified in HSC Section 25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for

---

<sup>4</sup> State of California Government Code, Title 22, Section 65962.5.

taking corrective action in an order issued under the HSC, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.<sup>5</sup>

### ***Hazardous Waste Control Law of 1972***

The Hazardous Waste Control Act (Health and Safety Code Sections 25100 et seq.) created the state hazardous waste management program, which is similar to but more stringent than the federal RCRA program. The Act is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR), which describes the following required aspects for the proper management of hazardous waste: identification and classification; generation and transportation; design and permitting of recycling, treatment, storage, and disposal facilities; treatment standards; operation of facilities and staff training; and closure of facilities and liability requirements. These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with DTSC.

### ***Hazardous Materials Release Response Plans and Inventory Law of 1985***

The Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act; HSC Division 20 Chapter 6.95 [25500–25547.8]) governs hazardous materials handling, reporting requirements, and local agency surveillance programs.

### ***California Disaster Assistance Act***

The California Disaster Assistance Act (CDAA; CCR Title 19, Chapter 6) authorizes the Director of the California Governor’s Office of Emergency Services (Cal OES) to administer a disaster assistance program that provides financial assistance from the state for costs incurred by local governments as a result of a disaster event. Funding for the repair, restoration, or replacement of public real property damaged or destroyed by a disaster is made available when the Director concurs with a local emergency proclamation requesting state disaster assistance.<sup>6</sup>

---

<sup>5</sup> State of California Health and Safety Code, Section 25187.5.

<sup>6</sup> California Office of Emergency Services. 2019. *California Disaster Assistance Act (CDAA)*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/recovery/public-assistance/california-disaster-assistance-act>, accessed February 28, 2023.

### ***Hazardous Substances Account Act (State Superfund) (HSC Sections 25300–25301)***

Chapter 6.8 of the California Health and Safety Code requires the DTSC to include “the largest manageable number” of potentially responsible parties (PRPs) in any cleanup order that applies to a multiple PRP site after considering certain factors, including the adequacy of the evidence of each PRP’s liability, the financial viability of each PRP, and the degree to which each PRP contributed to the release of hazardous substances at the site.<sup>7</sup>

### ***Hazardous Materials Release Cleanup (Assembly Bill 440 Chapter 588)***

Assembly Bill 440 (AB 440) Chapter 588, passed into law in 2013, authorizes a local agency to take clean up action similar to that under the Polanco Redevelopment Act that the local agency determines is necessary, consistent with other state and federal laws, to remedy or remove a release of hazardous substances within the boundaries of the local agency. AB 440 allows the local agency to designate another agency, in lieu of the department or the regional board, to review and approve a cleanup plan and to oversee the cleanup of hazardous material from a hazardous material release site, under certain conditions. It also provides immunity to the local agency as long as the action is in accordance with a cleanup plan prepared by a qualified independent contractor, and approved by the department, a regional board, or the designated agency, and the cleanup is undertaken and properly completed. Finally, AB 440 authorizes the local agency to recover cleanup costs from the responsible party.<sup>8</sup>

### ***Asbestos Regulations***

In 1990, the California Air Resources Board (CARB) issued an Airborne Toxic Control Measure (ATCM), which prohibited the use of serpentine aggregate for surfacing if the asbestos content was 5 percent or more.<sup>9</sup> In July 2000, CARB adopted amendments to the existing ATCM prohibiting the use or application of serpentine, serpentine-bearing materials and asbestos-containing ultramafic rock for covering unpaved surfaces unless it has been tested using an approved asbestos bulk test method and determined to have an asbestos content that is less than 0.25 percent.<sup>10</sup> In July 2001, CARB adopted a new ATCM for construction, grading, quarrying, and surface mining operations in areas with serpentine or ultramafic

---

<sup>7</sup> California Legislative Information. 1999. *ARTICLE 1. Short Title and Legislative Intent [25300-25301]*.

<sup>8</sup> California Legislative Information. 2013. *Assembly Bill No. 440*.

<sup>9</sup> California Air Resources Board. *Asbestos ATCM for Surfacing Applications*. Available online at: <https://ww3.arb.ca.gov/toxics/atcm/asbeatcm.htm>, accessed February 28, 2023.

<sup>10</sup> California Air Resources Board. 2001. *Amendments to the Asbestos Regulation for Surfacing Applications*. Available online at: <https://ww3.arb.ca.gov/toxics/asbestos/atcm/regadv1101.pdf>, accessed February 28, 2023.

rocks.<sup>11</sup> These regulations are codified in Title 17, Section 93105 of the CCR. The regulations require preparation and implementation of an Asbestos Dust Mitigation Plan for construction or grading activities on sites greater than 1 acre in size with known Naturally Occurring Asbestos (NOA) soils. The air districts enforce this regulation.<sup>12</sup>

In October 2000, the Governor's Office of Planning and Research (OPR) issued a memorandum providing guidance to lead agencies in analyzing the impacts of NOA on the environment through the California Environmental Quality Act (CEQA) review process.<sup>13</sup> In 2004, as part of its school-site review program, the DTSC's School Property Evaluation and Cleanup Division released interim guidance on evaluating NOA at school sites.<sup>14</sup>

In addition, HSC Section 19827.5 prohibits the issuance of demolition permits by local and State agencies for any building or structure that has not submitted all required asbestos notifications to the U.S. EPA, pursuant to Part 61 of Title 40 of the Code of Federal Regulations.<sup>15</sup>

**California Occupational Safety and Health Administration (Cal/OSHA) Regulations.** Cal/OSHA sets forth regulations for the disturbance of Asbestos Containing Construction Materials (ACCMs) including removal operations for all types of ACCMs. Cal/OSHA requires contractors and employers that remove ACCMs to be registered and consultants and technicians who conduct sampling and/or removal to be certified. In addition, the agency has developed standards for general industry and the construction industry hazardous waste operations and emergency response. Cal/OSHA ensures that employers must have controls to reduce and monitor exposure levels of hazardous materials, an informational program describing any exposure during operations and the inspection of drums and containers prior to removal

---

<sup>11</sup> California Air Resources Board. 2001. *Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*. Available online at: <https://ww3.arb.ca.gov/toxics/asbestos/atcm/regadv0702.pdf>, accessed February 28, 2023.

<sup>12</sup> California Code of Regulations. *Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*. Available online at: [http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Asbestos/final\\_reg\\_order.ashx](http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Asbestos/final_reg_order.ashx), accessed February 28, 2023.

<sup>13</sup> Governor's Office of Planning and Research. 2000. *Addressing Naturally Occurring Asbestos in CEQA Documents*. Available online at: [http://www.co.mendocino.ca.us/aqmd/pdf\\_files/NOA\\_OPR.pdf](http://www.co.mendocino.ca.us/aqmd/pdf_files/NOA_OPR.pdf), accessed February 28, 2023.

<sup>14</sup> Department of Toxic Substances Control. 2004. *Interim Guidance Naturally Occurring Asbestos (NOA) at School Sites*. Available online at: [https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMBRP\\_POL\\_Guidance\\_Schools\\_NOA.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMBRP_POL_Guidance_Schools_NOA.pdf), accessed February 28, 2023.

<sup>15</sup> California Legislative Information. 1979. *ARTICLE 1. Contents [19825-19829]*.



or opening. Decontamination procedures and emergency response plans must be in place before employees begin working in hazardous waste operations.<sup>16</sup>

**California Code of Regulations (CCR) Title 8 Section 1529.** This section of the CCR regulates asbestos exposure for work identified in Section 1502, including demolition or salvage of structures where asbestos is present; removal or encapsulation of materials containing asbestos; construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof, that contain asbestos, installation of products containing asbestos; asbestos spill/emergency cleanup; transportation, disposal, storage, containment of and housekeeping activities involving asbestos or products containing asbestos, on the site or location at which construction activities are performed; and excavation that may involve exposure to asbestos as a natural constituent which is not related to asbestos mining and milling activities.<sup>17</sup>

**SCAQMD Rule 1403.** The Clean Air Act regulates asbestos as a hazardous air pollutant, which subjects it to regulation by South Coast Air Quality Management District (SCAQMD) under its Rule 1403. OSHA also regulates asbestos as a potential worker safety hazard. These rules and regulations prohibit emissions of asbestos from demolition or construction activities, require medical examinations and monitoring of employees engaged in activities that could disturb asbestos fibers, and require notice to federal and local government agencies prior to renovation or demolition activities that could disturb asbestos.<sup>18</sup>

### ***Lead Regulations***

Because of its toxic properties, lead is regulated as a hazardous material. Lead is also regulated as a toxic air contaminant. State-certified contractors must perform inspection, testing, and removal (abatement) of lead-containing building materials in compliance with applicable health and safety and hazardous materials regulations, including those outlined in Title 17 of the CCR.

**CCR Title 8 Section 1532.1.** This section of the CCR applies to all construction work where employees could be occupationally exposed to lead, including demolition or salvage of structures where lead or materials containing lead are present; removal or encapsulation of materials containing lead; new

---

<sup>16</sup> California Department of Industrial Relations. *Cal/OSHA*. 2019. Available online at: <https://www.dir.ca.gov/DOSH/>, accessed February 28, 2023.

<sup>17</sup> California Code of Regulations. §1529. Asbestos. Available online at: <https://www.dir.ca.gov/title8/1529.html>, accessed February 28, 2023.

<sup>18</sup> South Coast Air Quality Management District. Rule 1403. Asbestos Emissions from Demolition/Renovation Activities. 2007. Available online at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1403.pdf>, accessed February 28, 2023.

construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead or materials containing lead; installation of products containing lead; lead contamination/emergency clean-up; transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed; and maintenance operations associated with construction activities. This section sets a maximum exposure limit; requires an assessment to determine whether employees may be exposed to lead; requires employees to create a compliance program to ensure that employee exposure to lead are at or below the permissible exposure limit to the extent feasible; and requires that employees with exposure to lead are provided with respiratory protection, protective work clothing and equipment.<sup>19</sup>

Other state laws that address lead include:

- Hazardous Waste Control Law
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)
- Carpenter-Presley-Tanner Hazardous Substances Account Act
- Hazardous Waste Management Planning and Facility Siting (Tanner Act)
- Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act)

### ***California Accidental Release Prevention Program***

The California Accidental Release Prevention Program (CalARP; CCR Title 19, Division 2, Chapter 4.5) was implemented on January 1, 1997, and replaced the California Risk Management and Prevention Program (RMPP). The CalARP program encompasses both the federal “Risk Management Program,” established in the Code of Federal Regulations, Title 40, Part 68, and the State of California program, in accordance with the Title 19 of the California Code of Regulations, Division 2, Chapter 4.5.

The main objective of the CalARP program is to prevent accidental releases of those substances determined to potentially pose the greatest risk of immediate harm to the public and the environment, and to minimize the consequences if releases do occur. These substances are called regulated substances and include both flammable and toxic hazardous materials listed on the Federal Regulated Substances for Accidental Release Prevention and on the State of California Regulated Substances lists. Businesses that

---

<sup>19</sup> California Code of Regulations. §1532.1. Lead. Available online at: [https://www.dir.ca.gov/title8/1532\\_1.html](https://www.dir.ca.gov/title8/1532_1.html), accessed February 28, 2023.

handle regulated substances in industrial processes above threshold quantity levels are subject to CalARP program requirements.

The CalARP program requires businesses to have planning activities that are intended to minimize the possibility of an accidental release by encouraging engineering and administrative controls. It is further intended to mitigate the consequences of an accidental release, by requiring owners or operators of facilities to develop and implement an accident prevention program.

### ***California Human Health Screening Levels***

The California Human Health Screening Levels (CHHSLs) were developed as a tool to assist in the evaluation of contaminated sites for potential adverse threats to human health. Preparation of the CHHSLs was required by the California Land Environmental Restoration and Reuse Act of 2001. The CHHSLs were developed by OEHHA, an agency under the umbrella of Cal/EPA, and are contained in its report entitled “Human-Exposure- Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil.”<sup>20</sup> The thresholds of concern used to develop the CHHSLs are an excess lifetime cancer risk of one in 1 million and a hazard quotient of 1.0 for non-cancer health effects. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the U.S. EPA and Cal/EPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSLs can be assumed to not pose a significant health risk to people who may live (residential CHHSLs) or work (commercial/ industrial CHHSLs) at the site.

### ***California Fire Code (CFC)***

The CFC is Chapter 9 of CCR Title 24. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure

---

<sup>20</sup> Office of Environmental Health Hazard Assessment. Human. Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil. 2005. Available online at: <https://oehha.ca.gov/risk-assessment/cnr/human-exposure-based-screening-numbers-developed-aid-estimation-cleanup-costs>, accessed November 9, 2022.

that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every three years.

### ***2017 State of California Emergency Plan***

The 2017 State of California Emergency Plan, also referred to as the State Emergency Plan (SEP), addresses the state's response to extraordinary emergency situations associated with natural disasters or human-caused emergencies. The California Emergency Services Act provides the basic authorities for conducting emergency operations following the proclamation of emergencies by appropriate local officials and/or the Governor. The provisions of this act are further reflected and expanded upon by local emergency ordinances. In accordance with this act, the SEP describes the methods for carrying out emergency operations, the process for rendering mutual aid, the emergency services of governmental agencies, how resources are mobilized, how the public will be informed and the process to ensure continuity of government during an emergency or disaster. The SEP emphasizes mitigation programs to reduce the vulnerabilities to disaster and preparedness activities to ensure the capabilities and resources are available for an effective response. To assist communities and governments to recover from the disaster, the SEP outlines programs that establish a consistent, statewide framework to enable state, local, tribal governments, federal government and the private sector to work together to mitigate, prepare for, respond to and recover from the effects of emergencies regardless of cause, size, location, or complexity.

### ***2018 State Hazard Mitigation Plan***

Approved by FEMA in September 2018, as an Enhanced State Mitigation Plan, the 2018 State Hazard Mitigation Plan (SHMP) update continues to build upon California's commitment to reduce or eliminate the impacts of disasters caused by natural, technological, accidental, and adversarial/human-caused hazards, and further identifies and documents progress made in hazard mitigation efforts, new or revised state and federal statutes and regulations, and emerging hazard conditions and risks that affect the State of California. Resilience depends on the whole community and is a shared responsibility for all levels of government, private and nonprofit sectors, and individuals.

#### **3.5.2.3 Local Regulations**

##### ***South Coast Air Quality Management District***

The South Coast Air Quality Management District (SCAQMD) works with CARB and is responsible for developing and implementing rules and regulations regarding air toxics on a local level. The SCAQMD establishes permitting requirements, inspects emission sources, and enforces measures through

educational programs and/or fines. The SCAQMD and regulations related to air quality are discussed in detail in **Section 3.2, Air Quality**.

***Los Angeles County Hazardous Waste Management Plan***

The Los Angeles County Hazardous Waste Management Plan adopted in November of 1989, contains policies and objectives as well as recommendations for hazardous waste minimizations, recycling and reclaiming, treatment, and disposal. The plan identifies future hazardous waste treatment and disposal needs and establishes County wide policy for waste treatment, transportation, and disposal. The plan also outlines criteria for choosing appropriate treatment and disposal sites.

***City of Vernon General Plan***

The following goals and policies of the *City of Vernon General Plan* are applicable to the Project.

**Goal S-2** Provide a high degree of protection for all residents and workers from hazardous materials and the hazards associated with transport of such materials.

**Policy S-2.1** Continue to support and encourage State efforts to identify existing or previously existing hazardous waste generators or disposal sites in the City of Vernon.

**Policy S-2.2** Continue to require every business to maintain a list of the chemicals and other hazardous materials used or stored on site in accordance with appropriate material safety data sheets and otherwise in accordance with law, and to provide that list to the Fire Department and Environmental Health Department. Require that the Fire Department and Environmental Health Department to maintain a list of such materials and the location where they are stored or used to permit emergency personnel to respond appropriately, if required.

**Goal S-3** Maintain high standards for the provision of City emergency services.

**Policy S-3.2** Require businesses handling, transporting, or producing materials considered acutely hazardous to prepare contingency plans for accidents involving these chemicals.

### 3.5.3 IMPACTS AND MITIGATION MEASURES

#### 3.5.3.1 Thresholds of Significance

The following thresholds for determining the significance of impacts related to hazards and hazardous materials are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts due to the use and/or transportation of hazards and hazardous materials, if any of the following would occur:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- 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;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- 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;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

#### 3.5.3.2 Methodology

The analysis in this section includes a focus on the use, disposal, transport, and management of hazardous or potentially hazardous materials resulting from potential development or redevelopment resulting from the implementation of the Project. Disposal options, the probability for risk of upset, and the severity of consequences to people or property associated with the increased use, handling, transport,

and/or disposal of hazardous materials associated with the implementation of the Project is also analyzed. This section addresses potential short-term construction impacts resulting from demolition of existing (usually older) structures, as well as from disturbance of contaminated soils, and impacts related to the operation of development in the Project Area over time. Operational impacts would generally be associated with the type of uses proposed and the materials that operation of these uses would entail. In determining the level of significance, the analysis assumes that any development under the Project would comply with relevant federal and state laws and regulations.

In 2015, the California Supreme Court in *CBIA v. BAAQMD*, held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project. However, if a project exacerbates a condition in the existing environment, the lead agency is required to analyze the impact of that exacerbated condition on future residents and users of a project, as well as other impacted individuals. Therefore, the analysis focused on the potential for the Project to exacerbate an existing condition.

### 3.5.4 ENVIRONMENTAL IMPACTS

**Impact HAZ-1                    Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**

Due to the Project Area’s existing industrial uses, development, including new residential uses, could occur in areas where hazardous materials could be stored or used, or where a previous use has resulted in contamination of the site. Additionally, the development of residential uses near industrial facilities that use or store hazardous materials could increase the risk of exposure to harmful health effects. Industrial uses will continue to be permitted in the Project Area under the Project; however, it is not anticipated or assumed that new industrial uses would occur in the Project Area as most of the parcels available are smaller and would not be suitable for large industrial uses. Rather, the future buildout of the Project Area would result in significantly reduced number of industrial uses. . As a result, the Project would not exacerbate any existing hazardous materials risk. Further, while residential uses would be permitted adjacent to existing industrial uses, Project implementation includes development standards and regulations such as buffering and building orientation requirements to reduce potential impacts on new uses from existing industrial developments. For example, visual and acoustic buffers would be used to separate residential uses from any adjacent heavy industrial uses outside a mixed-use zone. Additionally, windows and open spaces should be oriented away from adjacent industrial uses to the extent possible. Impacts related to hazardous materials relate to construction activity and the operation of residential and commercial uses. Each of these issues are described below.

### *Construction*

The Project includes zone changes and *General Plan* amendments to four specific areas within the western portion of the City. During construction of future site-specific development projects within the new zones, hazardous materials in the form of paints, solvents, glues, roofing materials, and other common construction materials containing toxic substances would be transported to individual construction sites. In addition, asbestos, lead, PCBs, or other hazardous materials could exist within buildings that would be demolished or remodeled within the Project Area. Therefore, hazardous material surveys and abatement activities for buildings constructed prior to the 1980s would be required pursuant to the existing U.S. DOT, DTSC, Title 27 of the California Code of Regulations, CalEPA, Cal/OSHA regulations, and Section 19827.5 of the California Health and Safety Code, which are described above. In addition, all PCBs, asbestos-containing materials, and lead based paints are required to be abated in accordance with SCAQMD, Cal/OSHA, and California Health and Safety Code requirements prior to demolition or renovation activities commence.

The asbestos, lead, PCBs, or other hazardous materials that may be encountered during demolition or construction activities would be transported and disposed of in compliance with all applicable regulations for the handling of such waste, including SCAQMD Rule 1403 (asbestos) and the California Code of Regulations. Additionally, appropriate documentation for hazardous waste that is transported in connection with activities at development sites (such as disposal of asbestos or building materials containing lead-based paint or PCBs) would be required by the City's Public Works Department prior to issuance of any demolition or construction permits (as required by federal, state, and city regulations) to ensure compliance with the existing hazardous materials regulations described above. These requirements were developed to protect human health and the environment and compliance with these existing regulations would reduce impacts related to demolition, transport, and disposal of hazardous materials to a less than significant level. Given the high level of contamination in the Project Area, implementation of **Mitigation Measure HAZ-1** would be required.

### *Operation*

Hazardous materials are routinely transported by trucks along the major state routes and roadways and railways. The Project Area includes the Alameda Corridor, Santa Fe Avenue, Vernon Avenue, Slauson Avenue, and Pacific Boulevard. However, transportation of such materials is highly regulated to ensure the safety of the public. The proposed uses within the mixed-use zones may involve the use, storage, disposal, or transportation of hazardous materials, but the potential residential and most of the potential commercial uses do not generally involve the use, storage, disposal, or transportation of significant quantities of hazardous materials. Such materials would likely be limited to solvents, paints, chemicals



used for cleaning and building maintenance, and landscaping supplies. These materials would not be substantially different from chemicals used for cleaning and solvents already widely used throughout the Project Area.

Future development under the Project would significantly reduce the amount of industrial uses within the Project Area. Future operation of any existing industrial uses, as well as production retail uses, would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Onsite activity involving hazardous substances (e.g., diesel fuel, oil, lubricants), and the transport, storage, handling, and retail sale of these substances must adhere to applicable local, State, and federal safety standards, ordinances, or regulations. Businesses engaged in the use, sale, storage, or transport of hazardous substances is monitored by various local (i.e., the County of Los Angeles and the Los Angeles County Fire Department) and State (i.e., DTSC) entities. Potentially hazardous waste produced during operation would also be collected, stored, and disposed of in accordance with applicable laws and regulations. Therefore, potential impacts associated with operation would be less than significant.

### ***Significance Before Mitigation***

Potentially significant impact.

### ***Mitigation Measures***

**HAZ-1** Prior to construction activities onsite, a Phase I investigation shall be conducted to assess if there are any reasons to suspect that hazardous materials could be present. If current or past use of contaminants of potential concern are discovered through the Phase I investigation, or if the property has ever contained a gas station, dry cleaners or hazardous chemical storage tanks, a Phase II would be required. The Phase II investigation shall be conducted in accordance with guidelines developed by the Department of Toxic Substances Control (DTSC) and Environmental Protection Agency (EPA) for site assessments. The Phase II investigation shall estimate the potential threat to public health and the environment if concentrations of pesticides are encountered using methods outlined in DTSC's Preliminary Endangerment Assessment Guidance Manual and DTSC's Screening Level Human Health Risk Assessment guidance for implementing screening level risk analysis. The Phase II investigation shall be submitted to the City of Vernon for review and approval by an independent third-party reviewer. If the Phase II testing reveals concentrations of contaminants above health-based screening

levels for residential exposure, remediation of the site shall be required to address residual contamination above health-based level of concern. Remediation may include excavation and disposal of impacted soil or capping elevated areas beneath paved areas. The Construction Contractor shall implement the recommendations outlined in the Phase II.

### *Significance After Mitigation*

**Mitigation Measure HAZ-1** would reduce potential for the release of contamination to less than significant levels.

---

**Impact HAZ-2** 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.

### *Construction*

Implementation of the Project would include future construction of residential, retail, production retail, and research and development use. The Project does not propose any additional industrial uses beyond what currently exists. In fact, it would result in a reduction of 575,549 square feet of industrial uses. The Project would introduce new mixed-use zones to four specific locations that predominantly consist of warehouse, distribution and storage facilities, as well as government owned property and light manufacturing. While not as noxious as heavy manufacturing uses, these properties could contain contamination from former uses.

Project implementation could facilitate demolition or redevelopment of existing buildings within the Project Area. Structures built before the 1970s typically contained ACM. Demolition or redevelopment of these structures could result in health hazard impacts to workers if not remediated prior to construction activities. Therefore, demolition and construction activities would be required to adhere to SCAQMD Rule 1403, which establishes Survey Requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities and California Occupational Safety and Health Administration (CalOSHA) regulations regarding lead-based materials. The California Code of Regulations, Section 1532.1, requires testing, monitoring, containment, and disposal of lead-based materials, such that exposure levels do not exceed CalOSHA standards.

The use of Best Management Practices during construction implemented as part of a Stormwater Pollution Prevention Plan (SWPPP) as required by the National Pollution Discharge Elimination System General Construction Permit would minimize potential adverse effects to the general public and the environment. Construction contract specifications would include strict on-site handling rules to keep construction and maintenance materials out of groundwater and soils. BMPs include, but are not limited to:

- Establishing a dedicated area for fuel storage and refueling activities that includes secondary containment protection measures and spill control supplies;
- Following manufacturers' recommendations on the use, storage, and disposal of chemical products used in construction;
- Avoiding overtopping construction equipment fuel tanks;
- Properly containing and removing grease and oils during routine maintenance of equipment; and
- Properly disposing of discarded containers of fuels and other chemicals.

In addition, grading and excavation of sites during construction of projects under the Project may expose construction workers and the public to potentially unknown hazardous substances present in the soil. If any unidentified sources of contamination are encountered during grading or excavation, the handling and removal activities required could pose health and safety risks to workers and the public. Soil, water, or air contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances.

Due to the long history of industrial uses within the Project Area, it is also possible that old underground storage tanks (USTs) that were in use prior to permitting and record keeping requirements may be present within the Project Area. If an unidentified UST were to be uncovered or disturbed during construction activities, it could pose both health and safety risks, such as the exposure of workers, tank handling personnel, and the public to tank contents or vapors. Potential risks, if any, posed by USTs would be minimized by managing any uncovered tank pursuant to existing Los Angeles County standards as enforced and monitored by the County Department of Public Health/Environmental Health Division and DTSC, which would reduce potential hazards impacts related to unknown contamination or USTs to a less-than-significant level.

**Mitigation Measure HAZ-1** requires a Phase I, and if necessary, a Phase II prior to construction activities to determine any potential contaminations due to previous uses. If necessary, specific remediation and

cleanup activities would be required by the existing federal and state regulations, under the supervision of the DTSC before construction activities could begin. Construction activities of developments under the Project would be done in compliance with existing agency regulations related to hazardous materials. As a result, potential impacts related to the reasonably foreseeable upset or accident conditions involving release of hazardous materials into the environment would be less than significant.

### *Operation*

As described above, land use changes pursuant to the Project are anticipated to significantly reduce the amount of industrial land by 575,549 square feet and result in construction of new residential, retail, production retail, and research and development uses in places where the current use is industrial. The replacement of industrial uses by non-industrial uses is anticipated to predominately take the form of adaptive reuse of existing buildings. This redevelopment would facilitate the removal of existing hazardous building materials that may be present and would also cleanup potentially contaminated sites. The reduction in industrial uses within the Project Area would reduce the potential for the operation of new development to result in risk of upset or accidents that could release existing hazardous materials that are located on the project site into the environment.

In general, risks from hazards and hazardous materials would be adequately addressed through compliance with existing federal, state, and local regulations. Development under the Project would involve a variety of land uses and would include the use of and storage of common hazardous materials such as paints, solvents, and cleaning products. Additionally, building mechanical systems and grounds and landscape maintenance could also use a variety of products formulated with hazardous materials, including fuels, cleaners, lubricants, adhesives, sealers, and pesticides/herbicides. The environmental and health effects of different chemicals are unique to each chemical and depend on the extent to which an individual is exposed. The exposure of individuals to hazardous materials would be limited by the relatively small quantities of these materials that would be stored and used on individual project sites throughout the Project Area. Any business or facility which uses, generates, processes, produces, packages, treats, stores, emits, discharges, or disposes a hazardous material (or waste) is a handler and would require a hazardous materials handler permit and would be required to provide regular reporting to the California Environmental Reporting System (CERS).

Future development under the Project could result in the storage of hazardous materials within the Project Area; however, the materials would generally be in the form of routinely used common chemicals. All hazardous materials would be used and stored in accordance with applicable regulations and such uses would be required to comply with federal and state laws to reduce the potential consequences of hazardous materials accidents. As a result, implementation of the Project would not result in 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, and impacts would be less than significant.

***Significance Before Mitigation***

Less than Significant Impact.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

Less than Significant Impact.

---

**Impact HAZ-3                      Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.**

The Project would facilitate the development and redevelopment of various land uses in the Project Area, concentrated within four mixed-use zone areas. The Project provides for mixed urban land uses such as residential, retail commercial, institutional, public, and office uses. As shown in **Table 3.5-1, Schools within the Project Area or ¼ mile Radius**, the closest schools within and near the Project Area include:

- Vernon City Elementary School
- Pacific Boulevard Elementary School
- Holmes Avenue Elementary School
- Dr. Julian Nava Learning Academy

Additionally, routine use, transport, and disposal of hazardous materials would occur as part of future development associated with the Project. Common hazardous materials would be used in the construction and operation of new development in the Project Area, including use of standard construction materials (e.g., paints, solvents, and adhesives), cleaning and other maintenance products, diesel and other fuels (used in construction and maintenance equipment and vehicles), and pesticides associated with landscaping around new developments. However, the types of uses that would emit or

release hazardous or acutely hazardous materials into the environment are typically industrial manufacturing facilities, which are uses that are already occurring within the Project Area but would be reduced and in some cases replaced by mixed-uses within the four identified zone change areas. Residential, office, civic, most retail uses, artisan industrial, and light industrial would be permitted in each of the four new mixed-use zones. Heavy industrial and warehousing and medium industrial uses would continue to be permitted under the proposed zone changes. However, it is not anticipated or assumed that new industrial uses would occur in the Project Area. This is in part due to the size of available sites, many of the sites currently in use as non-industrial are either too small or not appropriately configured to accommodate industrial uses. Rather, the Project would result in a significant reduction of 575,549 square feet of industrial uses.

In addition, all businesses that handle or transport hazardous materials (such as dry cleaners or automotive repair shops) would be required to comply with the provisions of the state and federal regulations for hazardous wastes, as described previously. The laws and regulations related to the generation of hazardous emissions and handling hazardous materials are intended to minimize potential health risks associated with their use or the accidental release of such substances.

Vernon City Elementary School is currently located in the area that would become a MU-CC Zone. The MU-CC Zone is intended to provide development standards to guide development in downtown Vernon. The MU-CC Zone would allow for retail, food, business, and personal services; and include public spaces that would serve the entire Vernon community. New residential uses would also be permitted in this area to support the new service uses. Compared to existing conditions, this would reduce the amount of heavy industrial uses that would have potential to emit hazardous emissions or handle hazardous materials near Vernon City Elementary School.

Compliance with existing regulations would minimize the risks associated with the exposure of sensitive receptors, including schools, to hazardous materials to a less than significant level. Therefore, future development under the Project would result in a less than significant impact related to the emissions or handling of hazardous materials within the vicinity of schools.

***Significance Before Mitigation***

Less than Significant Impact.

***Mitigation Measures***

No mitigation measures are required.

### *Significance After Mitigation*

Less than Significant Impact.

---

**Impact HAZ-4**            **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.**

Government Code section 65962.5 requires Cal EPA to develop an updated Cortese List. The DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. The following resources were reviewed to provide hazardous material release information:

- California Department of Toxic Substances Control (DTSC) EnviroStor Database
- State Water Resources Control Board Geo Tracker Database
- U.S. EPA Superfund Enterprise Management Systems (SEMS) Database

As previously discussed, and as shown in **Table 3.5-2, Department of Toxic Substances Control Cleanup Sites within the Project Area**, and **Table 3.5-3, Geotracker (SWQCB) Identified Cleanup Sites within the Project Area**, the Project Area contains sites that have been identified on various regulatory databases as being contaminated from the release of hazardous substances in the soil or groundwater. None of the identified contaminated sites are proposed for rezoning under the Project. While none of the identified contaminated sites are proposed for development, unknown contamination may exist and construction activity that disturbs soil or groundwater could have the potential to result in the release of hazardous materials, which could adversely affect construction workers and/or neighboring properties and occupants. To address such possible concerns, it is common for a Phase I ESA to be conducted prior to excavation and construction activity. The purpose of the Phase I ESA is to identify Recognized Environmental Conditions (RECs) associated with soil and groundwater contamination. As discussed under **Impact HAZ-2**, if contaminated sites are identified through a Phase I or Phase II assessment, specific remediation and cleanup activities, would be required, if necessary, by the existing federal and state regulations, under the supervision of the DTSC before construction activities could begin. For any site that is determined to need remediation, DTSC requires a Remedial Action Work Plan (RAW) or CLRRRA Response Plan pursuant to Health and Safety Code Section 25356.1 and 25395.96.

The process described above would normally identify and, as necessary, remediate soil or groundwater contamination. Remediation of contamination exceeding regulatory action levels would address potential impacts during ground disturbance and improve conditions in the long term. Implementation of construction activities of developments pursuant to the Project would be done in compliance with existing agency regulations related to hazardous materials. As a result, potential impacts related to a project being located on a list of hazardous materials sites pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment would be less than significant.

***Significance Before Mitigation***

Less than Significant Impact.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

Less than Significant Impact.

---

**Impact HAZ-5** For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The Project Area is not in the vicinity of a private airstrip or airport land use plan.<sup>21</sup> The nearest boundary of the Project Area is approximately 8.8 miles northeast of the Los Angeles International Airport. The Project would provide zone changes and *General Plan* amendments to four specific areas along Santa Fe Avenue and Hampton Street. Development of these areas would not create a safety hazard associated with any airport.

---

<sup>21</sup> Los Angeles County Airport Land Use Commission. *Airports, Plans and Maps*. Available online at: <https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=acf2e87194a54af9b266bf07547f240a>, accessed February 28, 2023.



In addition, as discussed in **Section 3.11, Noise and Vibration**, the Project Area would not be located within an airport's noise contours.<sup>22</sup> As such, the Project would not expose people residing or working in the Project Area to excessive airport-related noise levels. As such, there would be no impacts.

***Significance Before Mitigation***

No Impact.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

No Impact.

---

**Impact HAZ-6                      Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**

***Construction***

Construction associated with implementation of the Project would occur over a period of 20 years on specific sites in various locations within the Project Area. Although temporary lane and sidewalk closures immediately adjacent to site-specific development projects may be necessary for short durations, adequate emergency vehicle access throughout the Project Area would be maintained at all times as required.

As part of the review and approval of site-specific development projects within the Project Area, development plans will be reviewed by the City's police and fire agencies prior to construction to ensure that alternative route planning to facilitate the passage of people and vehicles through/around any temporary required road closures occurs and is implemented, if needed. Included in such plans would be provisions for any needed signage for detours, training of flagmen, and provision for staging areas for emergency vehicles responding to a call, as required by the City's police and fire agencies. Thus,

---

<sup>22</sup> Los Angeles County Airport Land Use Commission. Airports, Plans and Maps. Available online at: <https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=acf2e87194a54af9b266bf07547f240a>, accessed February 28, 2023.

emergency access in and out of construction sites, including evacuation routes for construction workers, would remain during the construction process.

### ***Operation***

The Project includes zone changes and *General Plan* amendments to four specific areas located in the Project Area. The Project does not propose any revisions or changes to the existing street network. Although future development construction activities associated with implementation of the Project may result in temporary road closures, the Project would not include the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Primary evacuation routes within the Project Area, as identified in by Los Angeles County Department of Public Works, include the Alameda Corridor, Santa Fe Avenue north of the intersection with Vernon Avenue / Pacific Boulevard, and Pacific Boulevard.<sup>23</sup> During construction, temporary road closures may be necessary; however, alternative evacuation routes along Alameda Street would be available. Once operational, these primary evacuation routes would still be utilized in the event of an emergency and overall, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be less than significant.

### ***Significance Before Mitigation***

Less than Significant Impact.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

Less than Significant Impact.

---

---

<sup>23</sup> County of Los Angeles Department of Public Works, *Disaster Route Maps - Vernon*, <http://dpw.lacounty.gov/dsg/disasterroutes/map/Vernon.pdf>, accessed February 28, 2023.

**Impact HAZ-7            Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.**

Wildfire hazard areas are commonly identified in regions of the wildland/urban interface. However, the Project Area is an entirely built-out urban community that is characterized (and surrounded) by a mix of residential, commercial, and industrial areas, and does not interface with any wildlands or an area classified as a Fire Hazard zone as identified by the California Department of Forestry and Fire Protection (CAL FIRE).<sup>24</sup> Therefore, impacts related to exposure of people to wildland fires would not occur. As such, the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. No impact would occur.

***Significance Before Mitigation***

No Impact.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

No Impact.

**3.5.5            CUMULATIVE ANALYSIS**

The geographical area of the cumulative evaluation of hazardous materials is the Project Area as well as one-quarter mile from the Project Area. Cumulative growth in the vicinity of the Project Area could include projects on parcels adjacent to or near the Project Area within the City of Vernon or adjacent jurisdictions.

Continued urban development in the Project Area would cumulatively increase the potential for exposure to existing hazards associated with hazardous materials. Therefore, an overall increase in the potential for human health hazards would occur as intensification of development occurs. The magnitude of hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Compliance with appropriate federal, State, and local hazardous waste remediation and disposal requirements, including remedial action on

---

<sup>24</sup> California Department of Forestry and Fire Prevention (CAL FIRE), Fire Hazard Severity Zone Viewer. Available at: <https://egis.fire.ca.gov/FHSZ/>, accessed February 28, 2023.

contaminated sites, would avoid potential hazard impacts associated with cumulative development in the City. Project Implementation would result in a reduction of 575,549 square feet of industrial uses within the Project Area. Although future development projects under the Project could generate hazardous materials, the existing regulations would minimize potential impacts of the sites that generate the hazardous materials. Because the Project would result in less than significant impacts related to hazardous materials, the Project's contribution to cumulative hazardous materials impacts would be less than significant and would not be cumulatively considerable.

### 3.5.6 REFERENCES

- California Air Resources Board. *Amendments to the Asbestos Regulation for Surfacing Applications*. 2001. Available online at: <https://ww3.arb.ca.gov/toxics/asbestos/atcm/regadv1101.pdf>, accessed February 28, 2023.
- California Air Resources Board. *Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*. 2001. Available online at: <https://ww3.arb.ca.gov/toxics/asbestos/atcm/regadv0702.pdf>, accessed February 28, 2023.
- California Air Resources Board. *Asbestos ATCM for Surfacing Applications*. Available online at: <https://ww3.arb.ca.gov/toxics/atcm/asbeatcm.htm>, accessed February 28, 2023.
- California Code of Regulations. §1529. Asbestos. Available online at: <https://www.dir.ca.gov/title8/1529.html>, accessed February 28, 2023.
- California Code of Regulations. §1532.1. Lead. Available online at: [https://www.dir.ca.gov/title8/1532\\_1.html](https://www.dir.ca.gov/title8/1532_1.html), accessed February 28, 2023.
- California Code of Regulations. *Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*. Available online at: [http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Asbestos/final\\_reg\\_order.ashx](http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Asbestos/final_reg_order.ashx), accessed February 28, 2023.
- California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, Construction Site Plan Review Program. Available online at: [https://www.conservation.ca.gov/calgem/for\\_operators/Pages/construction\\_site\\_review.aspx](https://www.conservation.ca.gov/calgem/for_operators/Pages/construction_site_review.aspx), accessed February 28, 2023.
- California Department of Conservation. Well Finder. Available at: <https://www.conservation.ca.gov/calgem/Pages/Wellfinder.aspx>, accessed February 28, 2023.
- California Department of Forestry and Fire Prevention (CAL FIRE). Fire Hazard Severity Zone Viewer. Available at: <https://egis.fire.ca.gov/FHSZ/>, accessed February 28, 2023.
- California Department of Industrial Relations. 2019. Cal/OSHA. Available online at: <https://www.dir.ca.gov/DOSH/>, accessed February 28, 2023.

California Health and Safety Code, Section 25187.5.

California Legislative Information. 1979. *ARTICLE 1. Contents* [19825-19829].

California Legislative Information. 1999. *ARTICLE 1. Short Title and Legislative Intent* [25300-25301].

California Legislative Information. 2013. Assembly Bill No. 440.

California Office of Emergency Services. California Disaster Assistance Act (CDAA). 2019. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/recovery/public-assistance/california-disaster-assistance-act>, accessed February 28, 2023.

California State Water Resource Control Board. Geotracker. Available online at <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Search+GeoTracker>, accessed February 28, 2023.

County of Los Angeles Department of Public Works, Disaster Route Maps – Vernon. Available online at: <http://dpw.lacounty.gov/dsg/disasterroutes/map/Vernon.pdf>, accessed February 28, 2023.

Department of Toxic Substance Control. EnviroStore. Available online at: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Search>, accessed February 28, 2023.

Department of Toxic Substances Control. 2004. *Interim Guidance Naturally Occurring Asbestos (NOA) at School Sites*. Available online at: [https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMBRP\\_POL\\_Guidance\\_Schools\\_NOA.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMBRP_POL_Guidance_Schools_NOA.pdf), accessed February 28, 2023.

Governor's Office of Planning and Research. *Addressing Naturally Occurring Asbestos in CEQA Documents*. 2000. Available online at: [http://www.co.mendocino.ca.us/aqmd/pdf\\_files/NOA\\_OPR.pdf](http://www.co.mendocino.ca.us/aqmd/pdf_files/NOA_OPR.pdf), accessed February 28, 2023.

Los Angeles County Airport Land Use Commission. Airports, Plans and Maps. Available online at: <https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=acf2e87194a54af9b266bf07547f240a>, accessed February 28, 2023.

Los Angeles County Airport Land Use Commission. Airports, Plans and Maps. Available online at: <https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=acf2e87194a54af9b266bf07547f240a>, accessed February 28, 2023.

South Coast Air Quality Management District. *Rule 1403. Asbestos Emissions from Demolition/Renovation Activities*. 2007. Available online at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1403.pdf>, accessed February 28, 2023.

## 3.6 HYDROLOGY AND WATER QUALITY

---

### INTRODUCTION

*This section addresses impacts to the City's water quality and hydrological resources from implementation of the Project, identifies the regulatory framework with respect to regulations that address hydrology and water quality, and evaluates the significance of the potential changes to hydrologic features and water quality that could result from implementation of the Project.*

### 3.6.1 ENVIRONMENTAL SETTING

#### 3.6.1.1 Watershed

##### *Regional Hydrology*

The City of Vernon is located in the South Coast Hydrologic Region. This region covers approximately 10,600 square miles (6.78 million acres) and includes all of Orange County, the majority of Ventura, Los Angeles and San Diego counties, portions of San Bernardino and Riverside counties, and small amounts of Santa Barbara and Kern counties. The South Coast Hydrologic Region receives inflows via precipitation and surface runoff from the South Lahontan and Colorado River Regions. All surface waters in the South Coast Hydrologic Region flow into the Pacific Ocean.<sup>1</sup>

##### *Watersheds*

There are 19 major watersheds in the South Coast Region. Many of these have densely urbanized lowlands with concrete-lined channels and dams controlling flood flows. The headwaters for many rivers, however, are in coastal mountain ranges and have remained largely undeveloped. The Project Area is in the Los Angeles River Watershed, which covers a land area of 834 square miles. The western portion spans from the Santa Monica Mountains to the Simi Hills and the eastern portion spans from the Santa Susana Mountains to the San Gabriel Mountains. The watershed encompasses and is shaped by the path of the Los Angeles River, which flows 48 miles from its headwaters in the mountains eastward to the northern corner of Griffith Park. The channel turns southward through the Glendale Narrows before it flows across the coastal plain and into the San Pedro Bay near Long Beach.<sup>2</sup>

---

<sup>1</sup> Department of Water Resources. *California's Groundwater Update 2020 (Bulletin 118)*. 2020. Available at: [https://data.cnra.ca.gov/dataset/calgw\\_update2020](https://data.cnra.ca.gov/dataset/calgw_update2020), accessed February 28, 2023.

<sup>2</sup> Los Angeles County Department of Public Works. "Los Angeles River Watershed." Available at: <https://dpw.lacounty.gov/wmd/watershed/la/>, accessed February 28, 2023.

The channelized Los Angeles River is located outside the Project Area boundary, approximately one-half mile east from the northeastern tip of the Project Area, and three miles away at the southern tip as the river flows southeast. The land uses within the watershed include 37 percent residential, eight percent commercial, 11 percent industrial, and 44 percent open space.<sup>3</sup>

### *Surface Water*

The Los Angeles River Watershed is one of the largest in the region. Major tributaries to the river in the San Fernando Valley are the Pacoima Wash, Tujunga Wash (both drain portions of the Angeles National Forest in the San Gabriel Mountains), Burbank Western Channel and Verdugo Wash (both drain the Verdugo Mountains).<sup>4</sup> The Los Angeles River is a federally listed impaired waterway; trash, nutrients, ammonia, indicator bacteria, oil, copper, and lead are the primary pollutants of concern. **Figure 3.6-1, Surface Waters**, shows the surface waters in the vicinity of the Project Area.

### *Groundwater*

The Project Area is in the Central Subbasin of the Coastal Plain of the Los Angeles Groundwater Basin. This subbasin is commonly referred to as the “Central Basin.” This area is bounded on the north by a surface divide called the La Brea high, and on the northeast and east by the Elysian, Repetto, Merced, and Puente Hills. The southeast boundary between Central Basin and the nearby Orange County Groundwater Basin roughly follows Coyote Creek, a regional drainage province boundary.

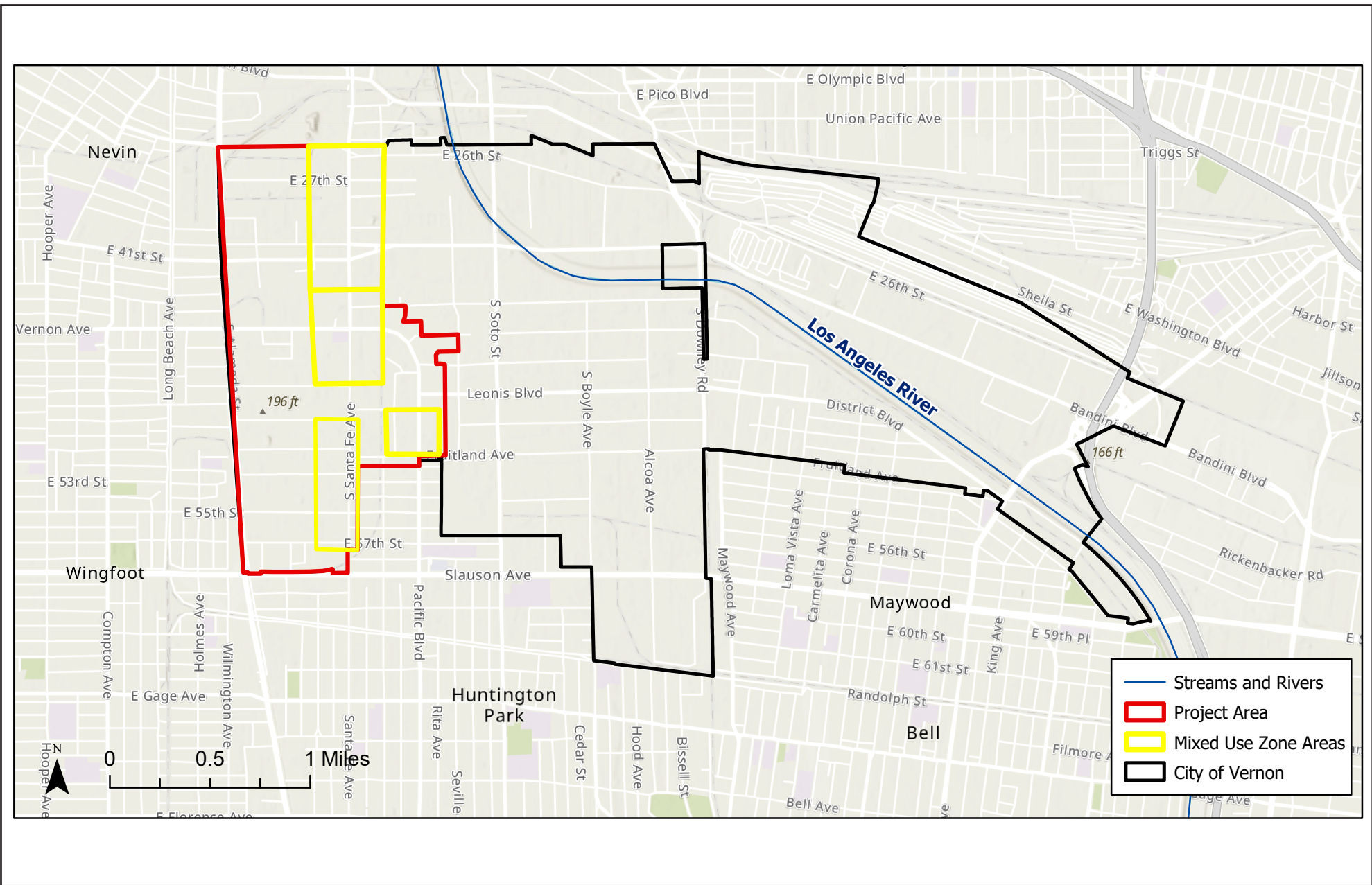
The Newport Inglewood fault system forms the southwestern boundary. The Los Angeles and San Gabriel Rivers drain inland basins and pass across the surface of the Central Basin on their way to the Pacific Ocean. Average annual precipitation throughout the Central Basin ranges from 11 to 13 inches with an average of around 12 inches.<sup>5</sup> There are eight principal aquifers in the Central Basin. **Figure 3.6-2, Central Subbasin of the Los Angeles Groundwater Basin**, shows the boundaries of the Central Subbasin of the Coastal Plain of the Los Angeles Groundwater Basin in relation to the Project Area.

---

<sup>3</sup> Los Angeles County Department of Public Works. “Los Angeles River Watershed.” Available at: <https://dpw.lacounty.gov/wmd/watershed/la/>, accessed February 28, 2023.

<sup>4</sup> California Waterboard. *Los Angeles River Watershed*. Available online at: [California Waterboard. Los Angeles River Watershed. Available.](https://www.waterboards.ca.gov/losangeles/watersheds/los_angeles_river_watershed/), accessed February 28, 2023.

<sup>5</sup> Department of Water Resources. 2004. *South Coast Hydrologic Region Coastal Plain of Los Angeles Groundwater Basin*. Available at: [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4\\_011\\_04\\_CentralSubbasin.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4_011_04_CentralSubbasin.pdf), accessed February 28, 2023.



SOURCE: Los Angeles County, 2022

FIGURE 3.6-1

Surface Waters



### **Southeast Water Coalition**

The City of Vernon is a member of the Southeast Water Coalition Joint Powers (SEWC). SEWC mission is to prevent the contamination of the Central Groundwater Basin from migrating contaminated groundwater and to encourage good governance of water policies to ensure the availability of reliable, quality, and affordable water.<sup>6</sup> The coalition was created in July 1991 and is comprised of eleven cities. Vernon is currently the Lead Agency until 2024. These agencies formed a joint power authority to improve and protect the quantity and quality of the regional water supply. SEWC's water purveyors service a population of 670,000 in a service area of 93+ square miles. The SEWC Board of Directors consists of one representative (normally a Councilmember) from each member city. The Administrative Entity acts as a steering committee consisting of one Public Works type staff member from each member city plus three non-voting (advisory) members from the Central Basin Watermaster, Golden State Water Company, and California Water Service (two private utilities serving several member cities).

#### **3.6.1.2 Floodplain Mapping and Hydraulic Modeling**

##### ***Flooding***

##### **Flood Hazards**

The main sources of potential flooding in the City are the Los Angeles River, and unusual rainfall amounts resulting in a high volume of runoff. The Los Angeles River is contained within a concrete-lined flood control channel, which significantly reduces the potential for overflowing of the riverbanks. Localized flooding has occurred as a result of heavy rain, but storm drain improvements have substantially reduced flooding events. Flood control is discussed in Vernon's Safety Element of its 2007 General Plan. Flooding in the event of a major 100-year storm, a major storm event that has a one percent chance of occurring any year in a 100-year period, is not a concern in the City. FEMA maps do not identify any 100-year flood hazard areas within the City.<sup>7</sup> FEMA does identify an area of moderate flood risk in the eastern corner of the City, outside the Project Area. This area is designated as an Area with Reduced Risk Due to Levee, which means that the risk of flooding is reduced, but not completely

---

<sup>6</sup> City of Vernon. Southeast Water Coalition. Available online at: <https://www.cityofvernon.org/government/public-utilities/water-services/southeast-water-coalition-sewc>, accessed February 28, 2023.

<sup>7</sup> FEMA. National Flood Hazard Layer (NFHL) Viewer. Available online at: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>, accessed February 28, 2023.

removed.<sup>8</sup> According to the *General Plan*, the flood control system of the Los Angeles River is sufficient in controlling flooding in the City.

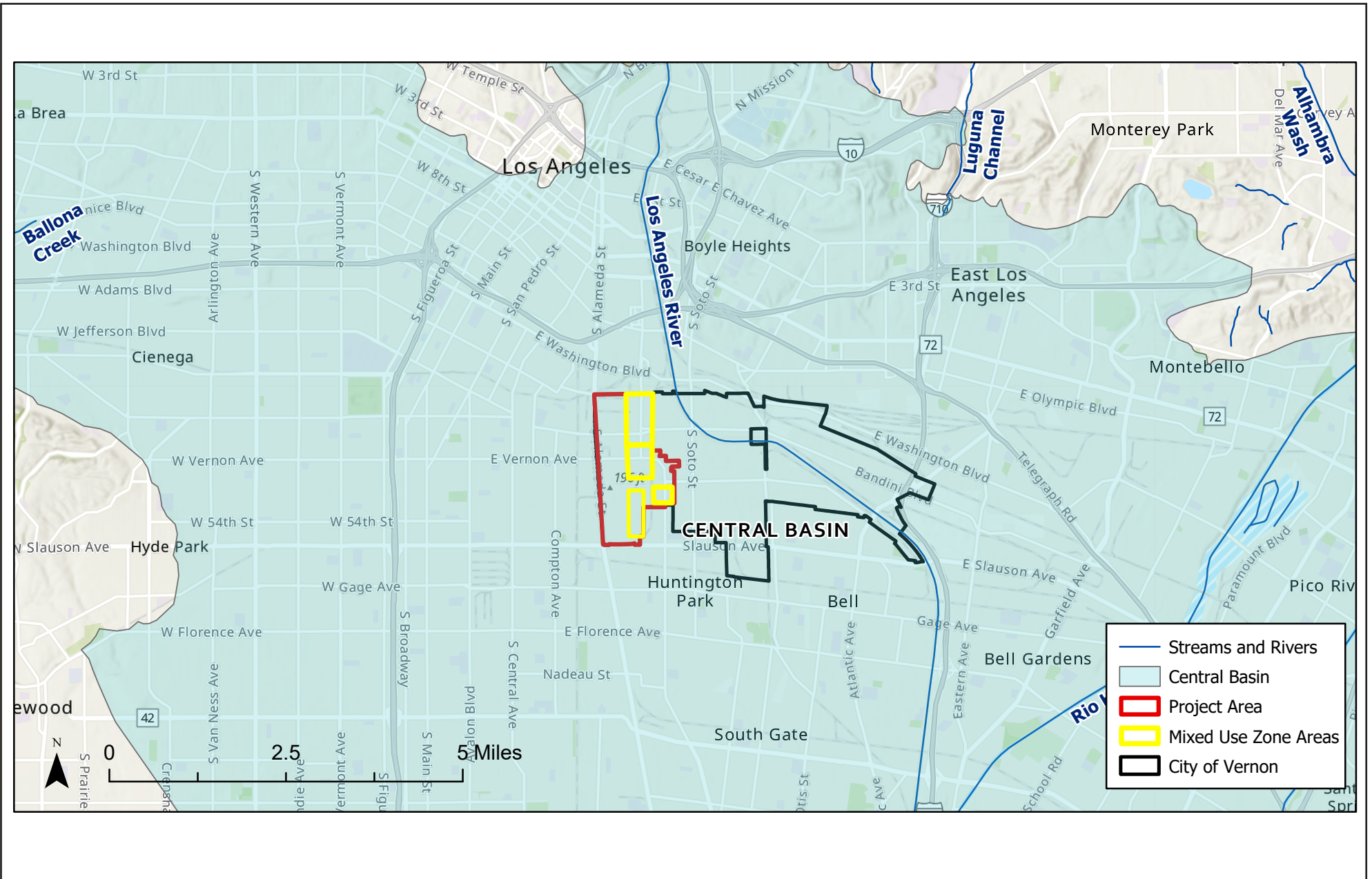
### **Flood Hazard Zones**

The Los Angeles County Department of Public Works (LADPW) has incorporated data from the Federal Emergency Management Agency (FEMA) into an online map for El Niño Storm Hazard Areas. Based on this map, the eastern corner of the City is in a Moderate Flood Risk Area near the Los Angeles River. The Project Area is not within a Flood Risk Area.<sup>9</sup>

---

<sup>8</sup> FEMA. National Flood Hazard Layer (NFHL) Viewer. Available online at: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>, accessed February 28, 2023.

<sup>9</sup> Los Angeles County Department of Public Works. "El Niño Storm Hazard Areas." Available at: <https://dpw.lacounty.gov/disaster/elninostormhazardareas/>, accessed February 28, 2023.



SOURCE: Los Angeles County, 2022

FIGURE 3.6-2

Central Subbasin of the Los Angeles Groundwater Basin

## Tsunami and Seiche

A tsunami is a series of waves generated by an impulsive disturbance in the ocean or in a small, connected body of water. Tsunamis are produced when movement occurs on faults in the ocean floor, usually during very large earthquakes. Sudden vertical movement of the ocean floor by fault movement displaces the overlying water column, creating a wave that travels outward from the earthquake source. An earthquake anywhere in the Pacific Ocean can cause tsunamis around the entire Pacific basin. The areas susceptible to tsunamis are those near to the ocean shore and along low-lying river channels. The Project Area is located approximately 12.3 miles east of the Pacific Ocean. The Project Area is not in a Tsunami Emergency Response Planning Zone.<sup>10</sup>

Seiches are waves generated in an enclosed body of water, such as a lake or bay, by seismic activity. Seiches are like tsunamis for enclosed bays, inlets, and lakes, and their waves can be generated by earthquakes, subsidence or uplift of large blocks of land, submarine and onshore landslides, sediment failures and volcanic eruptions. The strong currents associated with these events may be more damaging than inundation by waves. The Project Area does not lie in an area near any large bodies of water or bays that could be affected by a seiche.

## Drainage

Storm water runoff that does not infiltrate into the subsurface is directed into the City's storm drain system. Storm drainage facilities are provided by the City and the Los Angeles County Flood Control District. The City is a member of the Los Angeles County Flood Control Assessment District, which is responsible for the maintenance of County flood control facilities.

### 3.6.1.3 Water Quality

#### *Storm Water Quality Regulations*

**National Pollutant Discharge Elimination Systems Permits.** The National Pollutant Discharge Elimination System (NPDES) permit system was established as part of implementation of the Clean Water Act to regulate municipal and industrial discharges to surface waters of the United States. The Clean Water Act prohibits the discharge of any pollutant into navigable waters from a point source unless the discharge is in compliance with a NPDES Program permit. The purpose of the NPDES program is to manage urban storm water, thus minimizing pollution of the environment to the maximum extent

---

<sup>10</sup> California Office of Emergency Services. "MyHazards." Available at: <https://myhazards.caloes.ca.gov/>, accessed February 28, 2023.

practicable. The NPDES program consists of characterizing receiving water quality, identifying harmful constituents, targeting potential sources of pollutants, and implementing a comprehensive storm water management program.

The NPDES Program requires local agencies and project applicants to obtain permits to discharge storm water into “waters of the State.” The regulations provide that discharges of storm water to waters of the United States from construction activities are effectively prohibited unless the discharge is conducted in compliance with an NPDES permit. Construction activities subject to this General Permit include clearing, grading, disturbances to the ground such as stockpiling, and excavation. Disturbance refers to exposed soil resulting from activities such as clearing, grading, and excavating. Construction activities can include road building, construction of buildings, and demolition.

In 1990, the United States Environmental Protection Agency (U.S. EPA) promulgated rules establishing Phase I of the NPDES storm water program. Phase I addresses—among other discharges—discharges from large construction activities disturbing 5 acres or more of land. The U.S. EPA finalized the Phase II Storm Water Program in December 1999. The Phase II Storm Water Program generally provides that regulated operators of small “municipally owned storm water systems (MS4s)” located in urban areas, which are defined to include universities, shall implement programs and policies to control polluted storm water runoff through the use of NPDES permits. Phase II also covers small construction activities that result in land disturbance of equal to or greater than 1 acre and less than 5 acres.

Each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the Clean Water Act contain general requirements regarding NPDES permits. Section 402(p) of the Clean Water Act (an amendment to Section 404) established a framework for regulating construction storm water discharges under the NPDES Program. Section 307 describes the factors that the U.S. EPA must consider in setting effluent limits for priority pollutants.

**State Water Quality Regulations.** In California, the NPDES Program is administered by the nine California Regional Water Quality Control Boards (RWQCBs). Each RWQCB is required to adopt a water quality control plan, or basin plan, as required by Section 303 of the CWA and the Porter-Cologne Water Quality Control Act. The plans establish water quality standards and objectives for California rivers and their tributaries. The Porter-Cologne Water Quality Control Act requires that basin plans recognize and reflect regional differences in existing water quality, the beneficial uses of the region’s ground and surface waters, local water quality conditions and problems, and that they implement a program for achieving water quality objectives (California Water Code, Section 13050[j]).

**Regional Water Quality Regulations.** General Construction Activity Storm Water NPDES permits (General Permit) are issued for storm water discharges by the RWQCB. The Project Area is within the Los Angeles Regional Water Quality Control Board.

The Los Angeles Regional Water Quality Control Board's (LARWCB) has established numeric sizing criteria for post-construction best management practices (BMPs) for new development within Ventura County and the incorporated cities under Order No. R4-2010-0108. The proposed numeric sizing criteria is intended to reduce adverse impacts to Los Angeles regional waters caused by new sources of urban pollution and increased volumes of storm water and non-storm water flows resulting from new development. The proposed water quality facilities will comply with the LARWCB water quality permit/order as follows.

1. Site Design Principles and Techniques are a stormwater management strategy that emphasizes conservation and use of existing site features to reduce the amount of runoff and pollutant loading that is generated from a project site.
2. Source Control Measures limit the exposure of materials and activities so that potential sources of pollutants are prevented from making contact with stormwater runoff.
3. Retention BMPs are stormwater BMPs that are designed to retain water onsite and achieve a greater reduction in surface runoff from a project site than traditional stormwater Treatment Control Measures. The term "Retention BMPs" encompasses infiltration, rainwater harvesting<sup>1</sup>, and evapotranspiration BMPs. Retention BMPs are preferred and shall be selected over biofiltration BMPs and Treatment Control Measures where technically feasible to do so.
4. Biofiltration BMPs are vegetated stormwater BMPs that remove pollutants by filtering stormwater through vegetation and soils.
5. Treatment Control Measures are engineered BMPs that provide a reduction of pollutant loads and concentrations in stormwater runoff.

Applicable projects must reduce Effective Impervious Area (EIA) to less than or equal to five percent ( $\leq 5\%$ ) of the total project area, unless infeasible. Impervious surfaces are rendered "ineffective" if the design storm volume is fully retained onsite using Retention BMPs. Biofiltration BMPs may be used to achieve the 5% EIA standard if Retention BMPs are technically infeasible.

### ***Storm Water Non-Point Source Pollutants***

The effects of urbanization, agriculture, and ranching can cause increased levels of non-point source pollutants in storm water runoff. This runoff can have a negative impact on adjacent streams and other receiving waters. Receiving waters can assimilate naturally a limited quantity of various constituent pollutants, but there are thresholds beyond which the measured amount results in an undesirable impact. The evaluation of whether a project includes whether it will impair the beneficial use to the receiving waters. Beneficial uses, as set forth in the Water Quality Control Plan, Los Angeles Region, Basin Plan for Coastal Watersheds of Los Angeles and Ventura Counties), include municipal and domestic water supply, industrial water supply, groundwater recharge, freshwater replenishment, contact and non-contact recreation, warm freshwater ecosystem, and wildlife habitat. Non-point source pollutants are characterized by major categories—sediment, nutrients, trace metals, oxygen-demanding substances, bacteria, oil and grease, and other toxic chemicals—in order to assist in determining the pertinent data and its use. Receiving waters can assimilate a limited quantity of various constituent elements. However, there are thresholds beyond which the measured amount becomes a pollutant and results in an undesirable effect.

Typical non-point source pollutants include the following:

**Sediment.** Sediment is comprised of tiny soil particles that are washed or blown into surface waters; it is the major pollutant by volume in storm water runoff. Suspended soil particles can cause the water to look cloudy or turbid and also act as a vehicle to transport other pollutants including nutrients, trace metals, and hydrocarbons. Construction sites are the largest source of sediment for urban areas under development.

Another major source of sediment is stream bank erosion, which an increase in peak rates and volumes of runoff from urbanization can accelerate. Detention and retention basins, depending on location, often have the effect of adding perennial water to drainage courses that previously had runoff only during the rainy season. Shallow aquifers throughout the area fill due to this constant flow. Perennial flow can be present in locations that did not previously exist. A constant wet bottom in a channel or drainage course causes faster and higher peak flows plus additional erosion in the soft bottom channels, which is considered problematic.

**Nutrients.** Nutrients are a major concern for surface water quality, especially phosphorous and nitrogen, which can cause algae and excessive vegetative growth. When nitrogen fertilizer is applied to lawns or other areas in excess of plant needs, nitrates can leach below the root zone, eventually reaching groundwater. Orthophosphate from auto emissions also contributes phosphorus in areas with heavy

automobile traffic. Nutrient export is typically greatest from development sites with the most impervious areas. Other problems resulting from excess nutrients are surface algae, water discolorations, odors, toxic releases, and overgrowth of plants.

**Trace Metals.** Trace metals are primarily a concern because of their potential toxic effects on aquatic life and their potential to contaminate drinking water supplies. The most common trace metals found in urban runoff are lead, zinc, and copper. Fallout from automobile emissions is also a major source of lead in urban areas. A large fraction of trace metals in urban runoff is attached to sediment, and this effectively reduces the level that is immediately available for biological uptake and subsequent bioaccumulation. Metals associated with the sediment settle out and accumulate in soils. The toxicity of trace metals in runoff varies with the hardness of the receiving water. As total hardness of the water increases, the threshold concentration levels for adverse effects increases.

**Oxygen-Demanding Substances.** Aquatic life is dependent on the dissolved oxygen in the water. When organic matter is consumed by microorganisms, dissolved oxygen is consumed in the process. A rainfall event can deposit large quantities of oxygen-demanding substances in receiving waters. The biochemical oxygen demand of typical urban runoff is comparable to effluent from an effective secondary wastewater treatment plant. A water quality problem can occur when the rate of oxygen-demanding material exceeds the rate of oxygen replenishment. Oxygen demand is estimated by direct measure of dissolved oxygen and indirect measures such as levels of biochemical oxygen demand, chemical oxygen demand, oils and greases, and total organic carbon.

**Bacteria.** Bacteria levels in undiluted urban runoff typically exceed public health standards for water-contact recreation. Total coliform counts typically exceed U.S. EPA water quality criteria at most sites in most rain events. Although the coliform bacteria that are detected may not be a direct health risk, they are often associated with human pathogens.

**Oil and Grease.** Runoff containing oil and grease typically contains a wide variety of hydrocarbons, some of which can be toxic to aquatic life in low concentrations. These materials initially float on water and create a rainbow-colored film. Hydrocarbons are quickly absorbed in sediment. The major source of hydrocarbons in urban runoff is leakage of crankcase oil and other lubricating agents from automobiles. Hydrocarbon levels are highest in the runoff from parking lots, roads, and service stations. Residential land uses generate less hydrocarbons; however, illegal disposal of waste oil into storm drains can be a local problem.

**Other Toxic Chemicals.** Pollutants generally related to hazardous wastes or toxic chemicals can be detected in storm water. Pollutant scans have been conducted in previous national studies of urban



runoff, which evaluated the presence of over 120 toxic chemicals and compounds. Scans rarely revealed toxins that exceeded the current safety criteria. The urban runoff scans were primarily conducted in suburban areas not expected to have many sources of toxic pollutants (with the possible exception of illegally disposed or applied household hazardous waste). Measures of toxic pollutants in storm water include (1) phthalate (plasticizer compound), (2) phenols and creosols (wood preservatives), (3) pesticides/herbicides, (4) oils and greases, and (5) metals.

### **3.6.2 REGULATORY FRAMEWORK**

#### **3.6.2.1 Federal Regulations**

##### ***Rivers and Harbors Appropriation Act of 1899, Section 10***

Authorization from the United States Army Corps of Engineers (USACE) must be obtained for construction of a structure in or over any navigable water of the U.S., pursuant to Section 10 of the Rivers and Harbors Appropriation Act of 1899 (33 U.S. Code [USC] 403). Authorization is also needed for structures built near navigable water if they would affect the course, location, condition, or capacity of the water body, as through re-channelization, disposal of fill, and so forth.

##### ***Wild and Scenic Rivers Act of 1968***

The objective of the Wild and Scenic Rivers Act of 1968 (WSRA; Public Law 90-542), dated October 2, 1968, is the preservation of certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition. The WSRA provides permanent protection for some of the country's most outstanding free flowing rivers and prohibits federal support for actions such as the construction of dams or other harmful instream activities.

##### ***Clean Water Act of 1972, as amended (CWA)***

The law was originally enacted as the Federal Water Pollution Control Act (FWPCA; Public Law 92-500) in 1948 but took on its modern form when completely rewritten in 1972 in an act entitled the Federal Water Pollution Control Act Amendments of 1972, now commonly known as the Clean Water Act. Major changes have subsequently been introduced via amendatory legislation including the Clean Water Act of 1977 and the Water Quality Act of 1987.

The Clean Water Act (CWA) is the primary federal law in the United States governing water pollution. Its objective is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands. It is one

of the United States' first and most influential modern environmental laws. As with many other major U.S. federal environmental statutes, it is administered by the U.S. EPA, in coordination with state governments. Its implementing regulations are codified at 40 C.F.R. Subchapters D, N, and O (Parts 100-140, 401-471, and 501-503).

#### **Section 303(d)**

Section 303(d) of the federal CWA requires the California State Water Resources Control Board (SWRCB) to list impaired water bodies and determine TMDLs of pollutants or other stressors that are contributing excessively to these impaired waters.

#### **Section 401 – Water Quality Certification**

Section 401 establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. and regulating quality standards for surface waters. Under the CWA, the U.S. EPA has implemented pollution control programs such as setting wastewater standards for industries and surface waters.

#### **Section 402**

Section 402 establishes the NPDES permit process. In California, NPDES permitting authority is delegated to, and administered by the nine RWQCBs. Pursuant to Section 402, a discharge of any pollutant from a point source into navigable waters, are prohibited unless an NPDES permit is obtained. Point sources are discrete conveyances such as pipes or manmade ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

Section 402(p) establishes that storm water permits are required for discharges from a municipal separate storm sewer system (MS4) serving a population of 100,000 or more. U.S. EPA defines an MS4 as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned or operated by a State (40 CFR 122.26(b)(8)).

The California Department of Transportation (Caltrans) is responsible for the design, construction, management, and maintenance of the state highway system, including freeways, bridges, tunnels, Caltrans' facilities, and related properties, and is subject to the permitting requirements of CWA Section 402(p). Caltrans' discharges consist of storm water and non-storm water discharges from state-owned rights-of-way.

Before July 1999, discharges from Caltrans' MS4 were regulated by individual NPDES permits issued by the RWQCBs. On July 15, 1999, the SWRCB issued a statewide permit (Order No. 99-06-DWQ) that regulated all discharges from Caltrans MS4s, maintenance facilities, and construction activities. On September 19, 2012, Caltrans' permit was reissued (Order No. 2012-0011-DWQ), and it became effective on July 1, 2013.

Caltrans' Storm Water Management Plan (SWMP) describes the procedures and practices used to reduce or eliminate the discharge of pollutants to storm drainage systems and receiving waters. The SWMP was most recently updated in July of 2016.

#### **Section 404 – Discharge of Dredge or Fill Material**

Section 404 of the federal CWA is administered and enforced by the USACE. Section 404 of the CWA establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. USACE administers the day-to-day program, including the determination of eligibility of project for use of Categorical Exclusions and Nationwide Permits, and review and consideration of individual permit decisions and jurisdictional determinations. USACE also develops policy and guidance and enforces Section 404 provisions.

#### ***Executive Order 11990 - Protection of Wetlands***

This executive order is an overall wetlands policy for all agencies managing federal lands, sponsoring federal projects, or providing federal funds to state or local projects. This executive order requires that when a construction project involves wetlands, a finding must be made by the federal agency that there is no practicable alternative to such construction, and that the proposed action includes all practicable measures to minimize impacts to wetlands resulting from such use.

#### ***Pollution Prevention Act of 1990***

The Pollution Prevention Act (42 USC §13101 et seq.) focused on reducing the amount of pollution through cost-effective changes in production, operation, and raw materials. The Act focuses on source reduction which reduces the release of hazardous substances through practices that increase efficiency in energy, water, or other natural resources.

#### ***Antidegradation Policy***

The Antidegradation Policy under the U.S. EPA's Water Quality Standards Regulations (48 F.R. 51400, 40 CFR 131.12, November 8, 1983), requires states and tribes to establish a three-tiered antidegradation program to prevent a decrease in water quality standards.

- Tier 1—Maintains and protects existing uses and water quality conditions that support such uses. Tier 1 is applicable to all surface waters.
- Tier 2—Maintains and protects “high quality” waters where existing conditions are better than necessary to support “fishable/swimmable” waters. Water quality can be lowered in such waters but not to the point at which it would interfere with existing or designed uses.
- Tier 3—Maintains and protects water quality in outstanding national resource waters (ONRWs). Water quality cannot be lowered in such waters except for certain temporary changes.

Antidegradation was explicitly incorporated into the federal CWA through 1987 amendments, codified in section 303(d)(4)(B), requiring satisfaction of antidegradation requirements before making certain changes in NPDES permits.

***Clean Water Rule: Definition of Waters of the United States (WOTUS Rule)***

On June 29, 2015, the U.S. EPA and USACE jointly published the final WOTUS Rule (40 CFR Parts 110, 112, 116, et al. and 33 CFR Part 328) for determining the extent to which wetlands and other water features are protected under the CWA. The original final rule:

- **Clearly defines and protects tributaries that impact the health of downstream waters.** The CWA protects navigable waterways and their tributaries. The rule says that a tributary must show physical features of flowing water—a bed, bank, and ordinary high-water mark—to warrant protection. The rule provides protection for headwaters that have these features and science shows can have a significant connection to downstream waters.
- **Provides certainty in how far safeguards extend to nearby waters.** The rule protects waters that are next to rivers and lakes and their tributaries because science shows that they impact downstream waters. The rule sets boundaries on covering nearby waters for the first time that are physical and measurable.
- **Protects the nation’s regional water treasures.** Science shows that specific water features can function as part of a system and impact the health of downstream waters. The rule protects prairie potholes, Carolina and Delmarva bays, pocosins, western vernal pools in California, and Texas coastal prairie wetlands when they impact downstream waters.
- **Focuses on streams, not ditches.** The rule limits protection to ditches that are constructed out of streams or function like streams and can carry pollution downstream. So, ditches that are not constructed in streams and that flow only when it rains are not covered.

- **Maintains the status of waters within Municipal Separate Storm Sewer Systems.** The rule does not change how those waters are treated and encourages the use of green infrastructure.
- **Reduces the use of case-specific analysis of waters.** Previously, almost any water could be put through a lengthy case-specific analysis, even if it would not be subject to the Clean Water Act. The rule significantly limits the use of case-specific analysis by creating clarity and certainty on protected waters and limiting the number of similarly situated water features.

A CWA permit is only needed if a “water of the United States” is going to be polluted or destroyed. The Clean Water Rule only protects the types of waters that have historically been covered under the CWA. It does not regulate most ditches and does not regulate groundwater, shallow subsurface flows, or tile drains. It does not make changes to current policies on irrigation or water transfers or apply to erosion in a field. The Clean Water Rule addresses the pollution and destruction of waterways—not land use or private property rights.

States opposing the far-reaching impacts of the WOTUS rule challenged the validity of the rule in 13 states, and the fight has expanded nationwide. Attorney generals from 18 states filed a motion with the 6th Circuit Court of Appeals in Ohio in early September asking the court to place a stay on WOTUS, barring the U.S. EPA from enforcing it for 50 days. The move came after U.S. District Court-District of North Dakota placed a stay on the WOTUS rule in the 13 states under its jurisdiction but, in a separate ruling, refused to expand the injunction nationwide. In February 2018, the U.S. EPA established an applicability date of February 2020 for the 2015 Rule defining WOTUS. The lack of clarity and timeliness has left many agencies confused and the 2015 Rule remains in effect in only 22 states, the District of Columbia, and the U.S. territories. Information is currently being updated on an ongoing basis.

### ***National Flood Insurance Act***

The U.S. Congress passed the National Flood Insurance Act in 1968 and the Flood Disaster Protection Act in 1973 to restrict certain types of development on floodplains and to provide for a National Flood Insurance Program (NFIP). The purpose of these acts is to reduce the need for large, publicly-funded flood control structures and disaster relief. The NFIP is a federal program administered by the Flood Insurance Administration of FEMA. It enables individuals who have property (a building or its contents) within the 100-year floodplain to purchase insurance against flood losses. FEMA works with the states and local communities to identify flood hazard areas and publishes a flood hazard boundary map of those areas. Floodplain mapping is an ongoing process in the Bay Area and flood maps must be regularly updated for both major rivers and tributaries as land uses and development patterns change.

### ***Executive Order 11988, Flood Plain Management***

The objective of Presidential Executive Order 11988, dated May 24, 1977, is the avoidance of, to the extent possible, long- and short-term adverse impacts associated with the occupancy and modification of the base floodplain (100-year floodplain) and the avoidance of direct and indirect support of development in the base floodplain wherever there is a practicable alternative. Under the Executive Order, the USACE must provide leadership and take action to:

- Avoid development in the base floodplain unless it is the only practicable alternative;
- Reduce the hazard and risk associated with floods;
- Minimize the impact of floods to human safety, health, and welfare; and
- Restore and preserve the natural and beneficial values of the base floodplain.

#### **3.6.2.2 State**

##### ***Porter Cologne Water Quality Control Act***

The Porter Cologne Water Quality Control Act of 1967 (Cal. Water Code Section 13000 et seq.) requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect State waters. These criteria include the identification of beneficial uses, narrative to the applicable and numerical water quality standards, and implementation procedures.

The Porter-Cologne Water Quality Control Act also authorizes the State Boards to adopt, review, and revise policies for all waters of the state (including both surface and ground waters) and directs the regional boards to develop Basin Plans. The act also authorizes State Boards to adopt Water Quality Control Plans. In the event of inconsistencies among state and regional board plans, the more stringent provisions apply.

##### ***Lake or Streambed Alteration***

The California Department of Fish and Wildlife (CDFW) is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, Section 1600 of the California Fish and Game Code requires an entity to notify CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state, or local government agency or public utility that proposes an activity that will:

- Substantially divert or obstruct the natural flow of any river, stream or lake;

- Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. If CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared. In August 2005, the California Fish and Game Commission policy regarding wetlands resources stated that “it is the policy of the Fish and Game Commission to seek to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California” and to “strongly discourage development in or conversion of wetlands.”<sup>11</sup> As a result, although the Commission has no independent statutory permitting authority related to wetlands, the policy underscores that the Commission does not support wetland development proposals unless “project mitigation assures there will be ‘no net loss’ of either wetland habitat values or acreage” and “prefers mitigation which would achieve expansion of wetland acreage and enhancement of wetland habitat values.” The Agreement includes reasonable conditions necessary to protect those resources and must comply with CEQA. The entity may proceed with the activity in accordance with the final Agreement.

### *Antidegradation Policy*

California’s antidegradation policy, formally known as the Statement of Policy with Respect to Maintaining High Quality Waters in California (SWRCB Resolution No. 68-16), restricts degradation of surface and ground waters. It protects waters where existing quality is higher than necessary for the protection of beneficial uses. Any actions with the potential to adversely affect water quality must 1) be consistent with maximum benefit to the people of the State, 2) not unreasonably affect present and anticipated beneficial use of the water, and 3) not result in water quality less than that prescribed in water quality plans and policies. Any actions that can adversely affect surface waters are also subject to the federal antidegradation policy (40 CFR Section 131.12) developed under the CWA.

---

<sup>11</sup> California Fish and Game Commission. “Miscellaneous Policies: Wetlands Resources.” Available online at: <https://fgc.ca.gov/About/Policies/Miscellaneous>, accessed February 28, 2023.

### ***Sustainable Groundwater Management Act***

On September 16, 2014, Governor Edmund G. Brown, Jr., signed a three-bill package known as the Sustainable Groundwater Management Act (SGMA). The legislation allows local agencies to customize groundwater sustainability plans to their regional economic and environmental needs. SGMA creates a framework for sustainable, local groundwater management for the first time in California history.

The three bills that make up SGMA are Assembly Bill (AB) 1739 by Assembly Member Roger Dickinson, Senate Bill (SB) 1319, and SB 1168 by Senator Fran Pavley.

In September 2015, Governor Brown signed SB 13, by Senator Fran Pavley. The Bill makes various technical, clarifying changes to SGMA including requirements for groundwater sustainability agency formation, the process for State Water Board intervention if no responsible agency is specified for a basin, guidelines for high- and medium-priority basins, and participation of mutual water companies in a groundwater sustainability agency.

### ***Construction General Permit***

The California Construction Stormwater Permit (Construction General Permit) 1, adopted by the SWRCB, regulates construction activities that include clearing, grading, and excavation resulting in soil disturbance of at least 1 acre of total land area. The Construction General Permit authorizes the discharge of stormwater to surface waters from construction activities. It prohibits the discharge of materials other than stormwater and authorized non-stormwater discharges and all discharges that contain a hazardous substance in excess of reportable quantities established in Title 40, Sections 117.3 or 302.4 of the CFR, unless a separate NPDES permit has been issued to regulate those discharges. The Construction General Permit requires that all developers of land where construction activities will occur over more than 1 acre do the following:

- Complete a Risk Assessment to determine pollution prevention requirements pursuant to the three Risk Levels established in the General Permit;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the Nation;
- Develop and implement a stormwater pollution prevention plan (SWPPP), which specifies BMPs that will reduce pollution in stormwater discharges to the Best Available Technology Economically Achievable/ Best Conventional Pollutant Control Technology standards; and
- Perform inspections and maintenance of all BMPs.



To obtain coverage under the NPDES Construction General Permit, the Legally Responsible Person must electronically file all permit registration documents with the SWRCB before the start of construction. Permit registration documents must include:

- Notice of Intent,
- Risk Assessment,
- Site Map,
- SWPPP,
- Annual Fee, and
- Signed Certification Statement.

Typical BMPs contained in SWPPPs are designed to minimize erosion during construction, stabilize construction areas, control sediment, control pollutants from construction materials, and address post construction runoff quantity (volume) and quality (treatment). The SWPPP must also include a discussion of the program to inspect and maintain all BMPs.

#### ***California Green Building Standards Code***

Chapters 4 and 5 of the California Green Building Standards Code (CALGreen) include mandatory measures for residential and nonresidential development, respectively. Section 4.106.2 requires residential projects that disturb less than one acre and are not part of a larger common plan of development, manage stormwater drainage during construction through use of on-site retention basins, filtration systems where stormwater is conveyed to a public drainage system, and/or compliance with a stormwater management ordinance. Section 5.106.1 requires newly constructed nonresidential projects and additions of less than one acre to prevent the pollution of stormwater runoff because of construction through compliance with a local ordinance or implementing BMPs that address soil loss and good housekeeping to manage equipment, materials, and wastes.

#### ***California Department of Transportation NPDES Permit***

Caltrans was originally issued a statewide NPDES permit (Order 99-06-DWQ) in 1999, which requires Caltrans to regulate nonpoint source discharge from its properties, facilities, and activities. The Caltrans permit requires development of a program for communication with local agencies, and coordination with other MS4 programs where those programs overlap geographically with Caltrans facilities. As part of the permit, Caltrans is required to create and annually update an SWMP that is used to outline the regulation

of pollutant discharge caused by current and future construction and maintenance activities. SWMP requirements apply to discharges from Caltrans stormwater conveyances, including catch basins and drain inlets, curbs, gutters, ditches, channels, and storm drains. The SWMP applies to discharges consisting of stormwater and non-stormwater resulting from the following:

- maintenance and operation of state-owned highways, freeways, and roads;
- maintenance facilities;
- other facilities with activities that have the potential for discharging pollutants;
- permanent discharges from subsurface dewatering;
- temporary dewatering; and
- construction activities.

The discharges addressed by the SWMP flow through municipal stormwater conveyance systems or flow directly to surface water bodies in the state. These surface water bodies include creeks, rivers, reservoirs, lakes, wetlands, lagoons, estuaries, bays, and the Pacific Ocean and tributaries.

This SWMP applies to the oversight of outside agencies' or non-Caltrans entities' (third parties) activities performed within Caltrans' MS4 to ensure compliance with stormwater regulations. Non-Caltrans activities include highway construction and road improvement projects, as well as residential use and business operations on leased property.

The SWMP must be approved by the SWRCB and, as specified in the permit, it is an enforceable document. Compliance with the permit is measured by implementation of the SWMP. Caltrans' policies, manuals, and other guidance related to stormwater are intended to facilitate implementation of the SWMP. Caltrans also requires all contractors to prepare and implement a program to control water pollution effectively during the construction of all projects.

In lieu of the more recently adopted General Construction Permit as described above, Caltrans continues to modify its current policies and procedures to be consistent with the new permit.

### ***California Stormwater Quality Association Best Management Practices Handbooks***

The California Stormwater Quality Association (CASQA) is a professional member association dedicated to the advancement of stormwater quality management through collaboration, education, implementation guidance, regulatory review, and scientific assessment. CASQA's membership is

comprised of a diverse range of stormwater quality management organizations and individuals, including cities, counties, special districts, industries, and consulting firms throughout the state. CASQA develops and publishes four BMP Handbooks. The New Development and Redevelopment Handbook provides guidance on developing project-specific SWMPs, including selection and implementation of BMPs, for a particular development or redevelopment project.

### ***Cobey-Alquist Floodplain Management Act***

The Cobey-Alquist Floodplain Management Act (California Water Code 8400-8415) and Executive Order B-39-77 support the NFIP. The Act encourages local governments to plan, adopt, and enforce land use regulations for floodplain management, to protect people and property from flooding hazards. The Act also identifies requirements that jurisdictions must meet to receive State financial assistance for flood control. Executive Order B-39-77 requires state agency compliance with good floodplain management practices.

### ***California Fish and Game Code***

The California Department of Fish and Wildlife is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code (Section 1602) requires an entity to notify the Department of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake;  
or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

### ***California Ocean Plan***

The California Ocean Plan establishes water quality objectives for California's ocean waters and provides the basis for regulation of wastes discharged into the state's coastal waters. The plan applies to point and nonpoint source discharges. Both the SWRCB and the six coastal RWQCBs implement and interpret the California Ocean Plan. The California Ocean Plan identifies the applicable beneficial uses of marine waters. These beneficial uses include preservation and enhancement of designated Areas of Special Biological Significance (ASBS), rare and endangered species, marine habitat, fish migration, fish spawning, shellfish harvesting, recreation, commercial and sport fishing, mariculture, industrial water supply, aesthetic enjoyment, and navigation.

The California Ocean Plan establishes a set of narrative and numerical water quality objectives to protect beneficial uses. These objectives are based on bacterial, physical, chemical, and biological characteristics as well as radioactivity. The water quality objectives in Table 1 (formerly Table B) of the California Ocean Plan apply to all receiving waters under the jurisdiction of the plan and are established for the protection of aquatic life and for the protection of human health from both carcinogens and noncarcinogens. Within Table 1 there are 21 objectives for protecting aquatic life, 20 for protecting human health from noncarcinogens, and 42 for protecting human health from exposure to carcinogens. The Ocean Plan also includes an implementation program for achieving water quality objectives. Effluent limitations are established for the protection of marine waters.

#### **3.9.2.3 Regional**

##### ***Water Quality Control Plan for the Los Angeles Region***

The RWQCB has prepared a Water Quality Control Plan for the Los Angeles Region. This basin plan encompasses all coastal drainages flowing to the Pacific Ocean between Rincon Point (on the coast of western Ventura County) and the eastern Los Angeles County line, as well as the drainages of five coastal islands (Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente). In addition, the Los Angeles region includes all coastal waters within three miles of the continental and island coastlines. As the eastern boundary, formed by the Los Angeles County line, departs somewhat from the hydrologic divide, the Los Angeles and Santa Ana regions share jurisdiction over watersheds along their common border.

## *Los Angeles County General Plan*

### **2012 Los Angeles County NPDES Permit**

Effective on December 28, 2012, the LARWQCB adopted Order No. R4-2012-0175, NPDES Permit No. CAS004001, Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County. The permit establishes new performance criteria for new development and redevelopment projects in the coastal watersheds of Los Angeles County (with the exception of the City of Long Beach). Storm water and non-storm water discharges consist of surface runoff generated from various land uses, which are conveyed via the municipal separate storm sewer system and ultimately discharged into surface waters throughout the region (“storm water” discharges are those that originate from precipitation events, while “non-storm water” discharges are all those that are transmitted through an MS4 and do not originate from precipitation events). Discharges of storm water and non-storm water from the MS4s, or storm drain systems, within the Coastal Watersheds of Los Angeles County convey pollutants to surface waters throughout the Los Angeles Region. Non-storm water discharges through an MS4 in the Los Angeles Region are prohibited unless authorized under an individual or general NPDES permit; these discharges are regulated by the Los Angeles County NPDES Permit, issued pursuant to CWA Section 402. Coverage under a general NPDES permit such as the Los Angeles County permit can be achieved through development and implementation of a project-specific SWPPP.

### **County of Los Angeles Flood Control Act**

The California State legislature adopted the County of Los Angeles Flood Control Act in 1915, establishing the Los Angeles County Flood Control District (LACFCD) and empowering it to provide flood protection, water conservation, recreation, and aesthetic enhancement within its boundaries. In August 2000, the Watershed Management Division of the Los Angeles County Department of Public Works became the planning and policy arm of the LACFCD. The District encompasses more than 3,000 square miles, 85 cities, and approximately 2.1 million land parcels. It includes a vast majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including 500 miles of open channels, 2,800 miles of underground storm drains, and an estimated 120,000 catch basins. The LACFCD regulates hydrologic and hydraulic design within its boundaries through its *1982 Hydraulic Design Manual* and its *2006 Hydrology Manual*, and provides criteria and planning procedures for flood plains, waterways, channels, and closed conduits within Los Angeles County.

### 3.6.2.4 Local

#### *City of Vernon Low Impact Development Guidance Manual*

On November 8, 2012, the RWQCB adopted Order No. R4-2012-0175 (Municipal NPDES Permit). The Municipal NPDES Permit requires the Permittees to implement Low Impact Development (LID) under the Planning and Land Development Program provision. LID is a stormwater management strategy designed to retain stormwater runoff on-site by minimizing soil compaction and impervious surfaces, and by disconnecting storm water runoff from conveyances to the storm drain system. The Municipal NPDES Permit establishes criteria for the volume of stormwater to be retained onsite as required to help meet water quality goals. LID comprises a set of site design approaches and Best Management Practices (BMPs) that consist of building and landscape features designed to retain or filter stormwater runoff for infiltration, evapotranspiration, and use of stormwater. These LID practices can effectively remove nutrients, bacteria, and metals from stormwater while reducing the volume and intensity of stormwater flows offsite. Through the use of various infiltration techniques, LID is geared towards minimizing surface area that produces large amounts of runoff and does not allow water to infiltrate into the ground.

In November 2013, the City of Vernon amended Chapter 21, Article V Storm Sewer System of the Municipal Code to include stormwater pollution controls for specific new development and redevelopment projects termed Planning Priority Projects (Ordinance No. 1216). The purpose of the provisions in Chapter 21 is to enhance and protect the water quality of the receiving waters of the United States in a manner that is consistent with the Clean Water Act and the Municipal NPDES Permit. The intent of Chapter 21 is to protect and control the City's sanitary sewer system; and to reduce Stormwater and urban runoff pollutants by improving the quality of Stormwater that are discharged into the regional Stormwater system within Los Angeles County known as the municipal separate storm sewer system.

#### *City of Vernon General Plan*

The following goals and policies of the *City of Vernon General Plan* are applicable to the Project:

**Goal CI-5. Maintain the storm drainage system to assure the protection of lives and property of in Vernon.**

**Policy CI-5.1:** Periodically evaluate the size and condition of the storm drainage system to determine its ability to handle expected storm runoff.

**Policy CI-5.2:** Evaluate the impact of all new developments and expansion of existing facilities on storm runoff and require that the cost of upgrading existing

drainage facilities to handle the additional runoff is paid for by the development which generates the need to improve a facility.

**Policy CI-5.3:** Monitor the use and storage of hazardous materials to prevent accidental discharge into the storm drainage system.

**Policy CI-5.4:** Allow new development projects to creatively implement NPDES standards and requirements.

**Goal R-1. Conserve and protect the region's water and energy resources.**

**Policy R-1.1:** Encourage water conservation and the use of recycled water in new developments and by all industries.

**Policy R-1.2:** Support the use of energy-saving designs and equipment in all new development and reconstruction projects.

**Policy R-1.3:** Seek and pursue the most practicable and cost-effective means of implementing National Pollutant Discharge Elimination Systems requirements.

**Policy LU-1.5:** Continue to maintain up-to-date information regarding flooding hazards consistent with the Safety Element.

**3.6.3 IMPACTS AND MITIGATION MEASURES**

**3.6.3.1 Thresholds of Significance**

The following thresholds for determining the significance of impacts related to hydrology and water quality are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts to hydrology and water quality, if any of the following would occur:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - Result in substantial erosion or siltation on- or off-site;
  - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
  - 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
  - Impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

### 3.6.3.2 Methodology

The analysis of water quality impacts identifies the types of pollutants potentially associated with future development as a result of implementation of the Plan and considers their effects on water quality. Consideration is given to BMPs, which would serve to minimize pollutants in stormwater runoff. Further, the Plan's consistency with relevant regulatory permits/requirements is evaluated to demonstrate how compliance would protect water quality.

As summarized in Regulatory Framework, independent of the CEQA process, there is a comprehensive set of regulations implemented at the State and jurisdictional level to impacts related to storm drainage, urban pollutants, and flood hazards. As such, the analysis presented herein assumes future projects would comply with these regulations.

This discussion of hydrology focuses on the Project Area and the surrounding areas downstream. The threshold of significance for hydrology and water quality is analyzed based on several factors, including the degree to which existing land uses in the region would.

### 3.6.5 ENVIRONMENTAL IMPACTS

**Impact HYD-1                      Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.**



## Construction

Project implementation may include infill development involving demolition of some existing structures, site preparation, construction of new buildings, and infrastructure improvements. Demolition of existing structures, removal of existing pavement and concrete replacement, grading, stockpiling of materials, excavation and the import/export of soil and building materials, construction of new structures, and landscaping activities would expose and loosen sediment and building materials, which have the potential to mix with stormwater and urban runoff and degrade surface and receiving water quality.

Additionally, construction generally requires the use of heavy equipment and construction-related materials and chemicals, such as concrete, cement, asphalt, fuels, oils, antifreeze, transmission fluid, grease, solvents, and paints. In the absence of proper controls, these potentially harmful materials could be accidentally spilled or improperly disposed of during construction activities and could wash into and pollute surface waters or groundwater, resulting in a significant impact to water quality.

Pollutants of concern during construction activities generally include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction, which would have the potential to be transported via storm runoff into nearby receiving waters and eventually may affect surface or groundwater quality. During construction activities, excavated soil would be exposed thereby increasing the potential for soil erosion and sedimentation to occur compared to existing conditions. In addition, during construction, vehicles and equipment are prone to tracking soil and/or spoil from work areas to paved roadways, which is another form of erosion that could affect water quality.

Each future site-specific development project occurring under the Project would require compliance with applicable regulations to obtain demolition, excavation, grading, or construction permits from the City. The permitting process would ensure each development project would be implemented in compliance with applicable NPDES requirements. In order to control the impact of erosion, sedimentation, and other pollutants on receiving waters, the SWRCB Construction General Permit (that would be implemented through the City's permitting process), requires the implementation of BMPs to eliminate or reduce the discharge of pollutants in stormwater discharges, and prohibits the discharge of non-storm water from construction sites as these non-storm water discharges are likely to carry pollutants to receiving waters.

The Project Area is within the region covered by the Los Angeles County Municipal Storm Water (MS4) NPDES Permit No. CAS004001, issued by the LARWQCB for MS4 discharges into the coastal watersheds

of Los Angeles County, except for the City of Long Beach as it operates under a separate permit. The NPDES permit requires implementation of a Standard Urban Storm Water Mitigation Plan (SUSMP) for projects that fall into one of nine categories, including development projects equal to one acre or greater of disturbed area that adds more than 10,000 square feet of impervious surface area. This requirement is also specified in the City of Vernon Municipal Code Section 13.24.210, Control of pollutants from new developments/redevelopment projects. The SUSMP typically contains a list of minimum required BMPs that must be used for a proposed project; additional BMPs may be required by ordinance or code adopted by the City and applied generally or on a case-by-case basis.

In addition, activities subject to the NPDES General Permit for construction must develop and implement a SWPPP, including a site map and description of construction activities. The SWPPP will identify BMPs that will be employed to prevent soil erosion and discharge of other construction-related pollutants, such as petroleum products, solvents, paints, and cement, that could contaminate nearby water resources. A monitoring program is generally required to ensure that BMPs are implemented according to the SWPPP and are effective at controlling discharges of pollutants that are related to storm water. As a result of compliance with NPDES General Permit and specific BMPs that are required for each construction project, construction impacts related to water quality standards or waste discharge requirements from implementation of the Project would be less than significant.

## Operation

Intensification of land uses that will occur due to implementation of the Project could introduce new or additional pollutants to an existing area. Pollutants associated with the operation of the infill and/or redeveloped retail, production, industrial, research and development, and residential uses generally include sediments, trash, petroleum products, metals, and chemicals that could potentially discharge into surface waters by storm drains either directly or during storm water runoff events.

Development projects proposed pursuant to the Project would be required to implement Source Control and Treatment Control BMPs to reduce the discharge of pollutants to the maximum extent practicable. Treatment Control BMPs would also be required to be incorporated into the design of onsite storm drain systems to treat runoff in accordance with the SUSMP standards and as required by the City. The County's MS4 permit lists various types of Site Design, Source Control and Treatment Control BMPs to be implemented by new development and redevelopment projects. BMPs would be implemented on a per site basis depending upon the size of the site and the types of potential pollutants that are related to operation of the new land uses.

Implementation of site-specific source control and treatment control BMPs in accordance with the County's SUSMP standards would remove potential pollutants from runoff and would not contribute additional pollutant loads into receiving waters. Applicable BMPs would be implemented on a project by-project basis in accordance with County of Los Angeles NPDES MS4 Permit and associated SUSMP requirements, as required per Order R4-2012-0175. SUSMP requirements provide that projects conduct a drainage hydrologic/hydraulic analysis that details the site's anticipated runoff calculations. From these calculations a WQMP is prepared to design the project so that a net increase in stormwater runoff would not occur from implementation of the development. Development projects are required through implementation of a project specific WQMP to retain and treat the storm water quality volume generated by the project to reduce pollutant loading in runoff. Furthermore, the City is a member of the Southeast Water Coalition, which encourages best practices to reduce contaminated groundwater. With implementation of these RWQCB, County, and City requirements, the development projects that would be implemented pursuant to the Project would not result in adverse impacts to water quality through violation of water quality standards or waste discharge requirements, and impacts would be less than significant.

### ***Significance Before Mitigation***

Less than Significant Impact.

### ***Mitigation Measures***

Because site-specific development pursuant to the Project would not violate any water quality or waste discharge requirements, impacts would be less than significant.

### ***Significance After Mitigation***

Less than Significant Impact.

---

**Impact HYD-2                      Potential to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.**

***Less than Significant.***

Groundwater levels are managed by the California Department of Water Resources to maintain a safe operating yield of groundwater, which is a sustainable pumping rate that does not exceed the total

recharge into the basin.

Water supply in the Project Area is provided by the City of Vernon's Water Department, which obtains its water from groundwater pumped via local municipal wells in the adjudicated Central Groundwater Basin (Central Basin), and from imported surface water contracted by the City through the Metropolitan Water District of Southern California (MWD).

The total allotted pumping right from the Central Basin from all wells is 233,894 acre-feet per year (AFY), while the total allotted pumping rights for the City of Vernon is 7,539 AFY. However, in accordance with the Adjudication Judgement for the Central Subbasin, members may pump up to 140% of their Allowable Pumping Rights.

Future infill and redevelopment that would be facilitated with implementation of the Project would result in population growth; thereby increasing demand on water supplies. The Project would add approximately 874 residential dwelling units and 157,960 square feet of nonresidential space to the Project Area. The City is allotted pumping rights for 7,539 AFY from the Central Basin, accounting for approximately three percent of the Central Basin's total allotted pumping rights. Because groundwater withdrawals from the Central Groundwater Basin are limited based on the adjudication, compliance with the judgment that set pumping rights would eliminate the potential for the water agencies, that will serve the Project Area, to substantially impact the groundwater aquifer. Therefore, implementation of the Project would result in less than significant impacts on the Central Groundwater Basin from groundwater use.

As described above, the Central Basin underlies the Project Area; however, the vast majority of the Project Area is developed and impervious, and thus does not have much groundwater recharge potential. Implementation of the Project would not increase the amount of impervious surface in the Project Area. In fact, future development would decrease impervious surfaces within the Project Area. The Project would require open space areas to be developed in each mixed-use zone, which in turn would improve stormwater collection.

The Central Basin is recharged mainly by stormwater, imported water, and reclaimed water along the upper reaches of the San Gabriel River and the Rio Hondo via the San Gabriel River Water Conservation System, which is located several miles away from the Project Area.

It is known that the total allotted pumping rights exceed the natural replenishment of groundwater to the Central Basin. To avoid conditions of overdraft, the Water Replenishment District was formed to ensure that water was purchased where necessary to fully replenish the quantity of groundwater that could not

be restored through natural processes. The Water Replenishment District manages the financial and logistical aspect of purchasing water to maintain safe groundwater levels.<sup>12</sup>

Future development under the Project does not include any additional groundwater wells. Therefore, development would not result in a net deficit in aquifer volume or a lowering of the groundwater table. As described above, while the allotted pumping rights within the Central Basin may exceed the natural groundwater replenishment rate, water could be purchased where necessary to fully replenish the quantity of groundwater that could not be restored through natural processes. Thus, the Project would not reduce the groundwater recharge potential of the Project Area. Therefore, implementation of the Project would result in less than significant impacts related to groundwater recharge.

***Significance Before Mitigation***

Less than Significant Impact.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

Less than Significant Impact.

---

**Impact HYD-3**      **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**

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

---

<sup>12</sup> City of Vernon. *2020 Urban Water Management Plan*. 2020. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/654/637619845748600000>, accessed February 28, 2023.

**i) impede or redirect flood flows.**

## **Erosion and Flooding**

### *Construction*

Grading, excavation, and other construction activities associated with development under the Project could adversely affect water quality due to erosion resulting from exposed soils and the generation of water pollutants, including trash, construction materials, and equipment fluids.

Associated construction activities would be subject to the NPDES Statewide General Construction Activity Stormwater Permit. Construction site operators would be responsible for preparing and implementing a SWPPP that outlines project-specific BMPs to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants in stormwater, consistent with the requirements of the NPDES Statewide General Construction Permit. Typical BMPs include:

- Utilizing temporary de-silting basins to ensure that surface water flows do not carry significant amounts of onsite soils and contaminants downstream;
- Conducting construction vehicle maintenance in staging areas where appropriate controls have been established to ensure that fuels, motor oil, coolant, and other hazardous materials are not deposited into areas where they may enter surface water and groundwater;
- Restricting the use of chemicals that may be transferred to surface waters by storm water flows or leach to groundwater basins through water percolation into the soil;
- Requiring that permanent slopes and embankments be vegetated following final grading;
- Installation of silt fences, erosion control blankets;
- Proper handling and disposal of wastes; and
- Installation of anti-tracking pads at site exits to prevent off-site transport of soil material.

Project-specific BMPs would minimize or avoid potential adverse effects associated with drainage pattern alterations, including those associated with infiltration, erosion, and potential for flooding. Project-specific SUSMPs would include conditions that consist of LID structural and non-structural BMP, source control BMP, and structural and non-structural BMP for specific types of uses. LID controls reduce the amount of impervious area of a completed project site and promote the use of infiltration and other controls that reduce runoff. LID controls would direct surface runoff to the appropriate storm drain

ensuring correct drainage flow. Source control BMP prevents runoff contact with pollutants that would otherwise be discharged to the municipal stormwater conveyance system. Specific structural controls are required to address pollutant discharges from certain uses including industrial and commercial facilities where pollutants are disposed, stored, or handled. Therefore, project specific BMPs and LID controls would reduce potential erosion and flooding impacts associated with construction to less than significant levels.

### *Operation*

Project implementation is not anticipated to substantially change the drainage patterns within the Project Area. Future projects would be developed with buildings, landscaped areas, roads, and other hardscape improvements; no bare areas of soil would be left vulnerable to erosion. While erosion and siltation impacts could occur during construction of individual development projects, existing state regulations (as discussed above under **Impact HYD-1** and **Impact HYD-6**) would mitigate impacts to a less than significant level.

As the City is responsible for land use planning and development within the municipal limits, City officials shall review and approve all local hydrology and hydraulic analyses. The City has not identified any existing storm drainage deficiencies in the Project Area. Thus, the projected increase in stormwater runoff would not result in flooding on or off site. Impacts would be less than significant.

### **Stormwater Drainage Systems**

Following implementation of a proposed development project, some amount of surface water runoff would exit the project site, particularly in response to heavy storm events, which also occurs under present conditions. With BMPs included in a proposed project's SUSMP, such as those to slow and treat surface water runoff (treatment provided through infiltration and bio-infiltration techniques), it is anticipated that less runoff would leave the site under project conditions than under present conditions. Upon leaving the project site, runoff would be conveyed through the City of Vernon's existing stormwater drainage system and facilities.

Project development could increase the rate and/or amount of stormwater runoff in comparison to existing conditions, which in turn could result in flooding issues on or off site. Growth and urbanization in the Project Area would place increased pressure on existing storm drain capacities. Storm water runoff is influenced by rainfall intensity, ground surface permeability, watershed size and shape, and physical barriers. The introduction of impermeable surfaces greatly reduces natural infiltration, allowing for a greater volume of runoff. In addition, paved surfaces and drainage conduits can accelerate the velocity of runoff, concentrating peak flows in downstream areas faster than under natural conditions. Significant

increases to runoff and peak flow could overwhelm drainage systems and alter flood elevations in downstream locations. Increased runoff velocity can promote scouring of existing drainage facilities, reducing system reliability, and safety. Future development under the Project would be required to undergo separate environmental review under CEQA to evaluate project-level impacts to the City's stormwater drainage system and facilities. Therefore, impacts to the existing stormwater drainage system would be less than significant.

### **Surface Flows**

Ground-disturbing activities during construction of future development facilitated by the Project, including but not limited to grading and excavation, could have potential to result in temporarily altered drainage patterns that could redirect surface flows. However, BMPs employed as part of an SWPPP for individual development projects would include measures to secure disturbed soils and require proper drainage in the Project Area.

Under the Project, the majority of the Project Area would remain impervious (although, as discussed above, expected to decrease slightly due to sustainable infrastructure) due to the presence of parking areas, walkways, hardscape, and building roofs and roadways. Future development may include landscaped areas, introducing opportunities for infiltration of stormwater runoff and roof discharges, thereby minimizing potential impacts associated with stormwater runoff exiting the area, and potentially improving conditions associated with current conditions. For these reasons, potential impacts to drainage pattern alterations, including how drainage pattern alterations could affect surface water runoff, erosion/siltation, flooding, and stormwater conveyance facilities, would be less than significant.

### ***Significance Before Mitigation***

Less than Significant Impact.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

Less than Significant Impact.



**Impact HYD-4            In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.**

Development accommodated by the Project would not be located in a flood hazard, tsunami, or seiche zones, that could risk release of pollutants due to project inundation. Therefore, no impact would occur. The nearest body of water to the Project Area is the Los Angeles River, located approximately one-half mile east from the northeastern tip of the Project Area, and three miles away at the southern tip as the river flows southeast.

According to FEMA, the entirety of the Project Area is located in in Federal Flood Zone X, meaning it is outside the 100-year flood hazard area and the 500-year flood hazard area. The eastern portion of the City, outside the Project Area, is identified as an Area with Reduced Risk Due to Levee, which means that the risk of flooding is reduced, but not completely removed.<sup>13</sup> Therefore, housing development or other structures under the Project would not be located within a 100-year flood hazard area. In addition, there are no dams or reservoirs located in the Project Area; the closest is the Garvey Reservoir located 6.8 miles northeast of the Project Area.

The Project Area is located approximately 12.3 miles east of the Pacific Ocean. Due to the distance and elevations, the potential for a tsunami affecting the Project Area is unlikely. Therefore, development that could be facilitated by the Project would not be located in a flood hazard, tsunami, or seiche zones that could risk release of pollutants due to project inundation. There would be no impact associated with the Project.

***Significance Before Mitigation***

No impact.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

No impact.

---

<sup>13</sup> FEMA. National Flood Hazard Layer (NFHL) Viewer. Available online at: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>, accessed February 28, 2023.

### 3.6.6 CUMULATIVE IMPACTS

The geographic scope for cumulative impacts related to compliance with NPDES permits and construction and operational surface water runoff quality and groundwater quality encompasses the Central Groundwater Basin. Implementation of cumulative development would be required to comply with all pertinent regulations, such as the Construction NPDES General Permit, County Stormwater Pollution Control Requirements for Construction Activities, and the County LID Standards Manual. Cumulative development would be required to comply with the NPDES MS4 permit by implementing BMPs. Therefore, construction activities associated with cumulative development would comply with the NPDES Permit and would not generate runoff that would violate the stormwater NPDES permit.

Cumulative development is required to also comply with all pertinent regulations, such as the Construction NPDES General Permit, County Stormwater Pollution Control Requirements for Construction Activities, and the County LID Standards Manual. Compliance with these regulations would require the implementation of BMPs to ensure the quality of surface water and groundwater would not be substantially degraded. Therefore, construction and operational activities would result in less than significant impacts to surface and groundwater quality.

Because the Project would be required to implement the NPDES requirements, County Stormwater Pollution Control Requirements for Construction Activities, and the LID Ordinance requirements, the project's contribution to cumulative impacts associated with compliance with NPDES permits and surface and groundwater quality would not be cumulatively considerable.

### 3.6.7 REFERENCES

California Fish and Game Commission. "Miscellaneous Policies: Wetlands Resources." Available online at: <https://fgc.ca.gov/About/Policies/Miscellaneous>, accessed February 28, 2023.

California Office of Emergency Services. "MyHazards." Available at: <https://myhazards.caloes.ca.gov/>, accessed February 28, 2023.

California Waterboard. "Los Angeles River Watershed." Available online at: [https://www.waterboards.ca.gov/rwqcb4/water\\_issues/programs/regional\\_program/Water\\_Quality\\_and\\_Watersheds/los\\_angeles\\_river\\_watershed/la\\_summary.shtml](https://www.waterboards.ca.gov/rwqcb4/water_issues/programs/regional_program/Water_Quality_and_Watersheds/los_angeles_river_watershed/la_summary.shtml), accessed February 28, 2023.

City of Vernon. *2020 Urban Water Management Plan*. 2020. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/654/637619845748600000>, accessed February 28, 2023.

City of Vernon. "Southeast Water Coalition." Available online at: <https://www.cityofvernon.org/government/public-utilities/water-services/southeast-water-coalition-sewc>, accessed February 28, 2023.

Department of Water Resources. "South Coast Hydrologic Region Coastal Plain of Los Angeles Groundwater Basin." 2004. Available at: [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4\\_011\\_04\\_CentralSubbasin.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/4_011_04_CentralSubbasin.pdf), accessed February 28, 2023.

Department of Water Resources. "California's Groundwater Update 2020 (Bulletin 118)" 2020. Available at: [https://data.cnra.ca.gov/dataset/calgw\\_update2020](https://data.cnra.ca.gov/dataset/calgw_update2020), accessed February 28, 2023.

FEMA. "National Flood Hazard Layer (NFHL) Viewer." Available online at: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>, accessed February 28, 2023.

Los Angeles County Department of Public Works. "El Niño Storm Hazard Areas." Available at: <https://dpw.lacounty.gov/disaster/elninostormhazardareas/>, accessed February 28, 2023.

Los Angeles County Department of Public Works. "Los Angeles River Watershed." Available at: <https://dpw.lacounty.gov/wmd/watershed/la/>, accessed February 28, 2023.

## 3.7 LAND USE AND PLANNING

---

### INTRODUCTION

*This section describes the existing land uses in the City, identifies the regulatory framework with respect to regulations that address land use, and evaluates the significance of the potential changes in existing land uses that could result from the implementation of the Project. CEQA Guidelines Section 15125(d) states that the PEIR shall discuss any inconsistencies between the Project and applicable general plans and regional plans. Therefore, it is appropriate to provide the reader information regarding relevant local and regional planning policies or programs that would be affected by this Project. The information provided below defines relevant City of Vernon General Plan policies and an associated consistency analysis. Following this general plan consistency analysis, further analysis is provided regarding consistency with regional plans (i.e., regional transportation plan and sustainable communities strategy).*

### 3.7.1 ENVIRONMENTAL SETTING

#### 3.7.1.1 City of Vernon

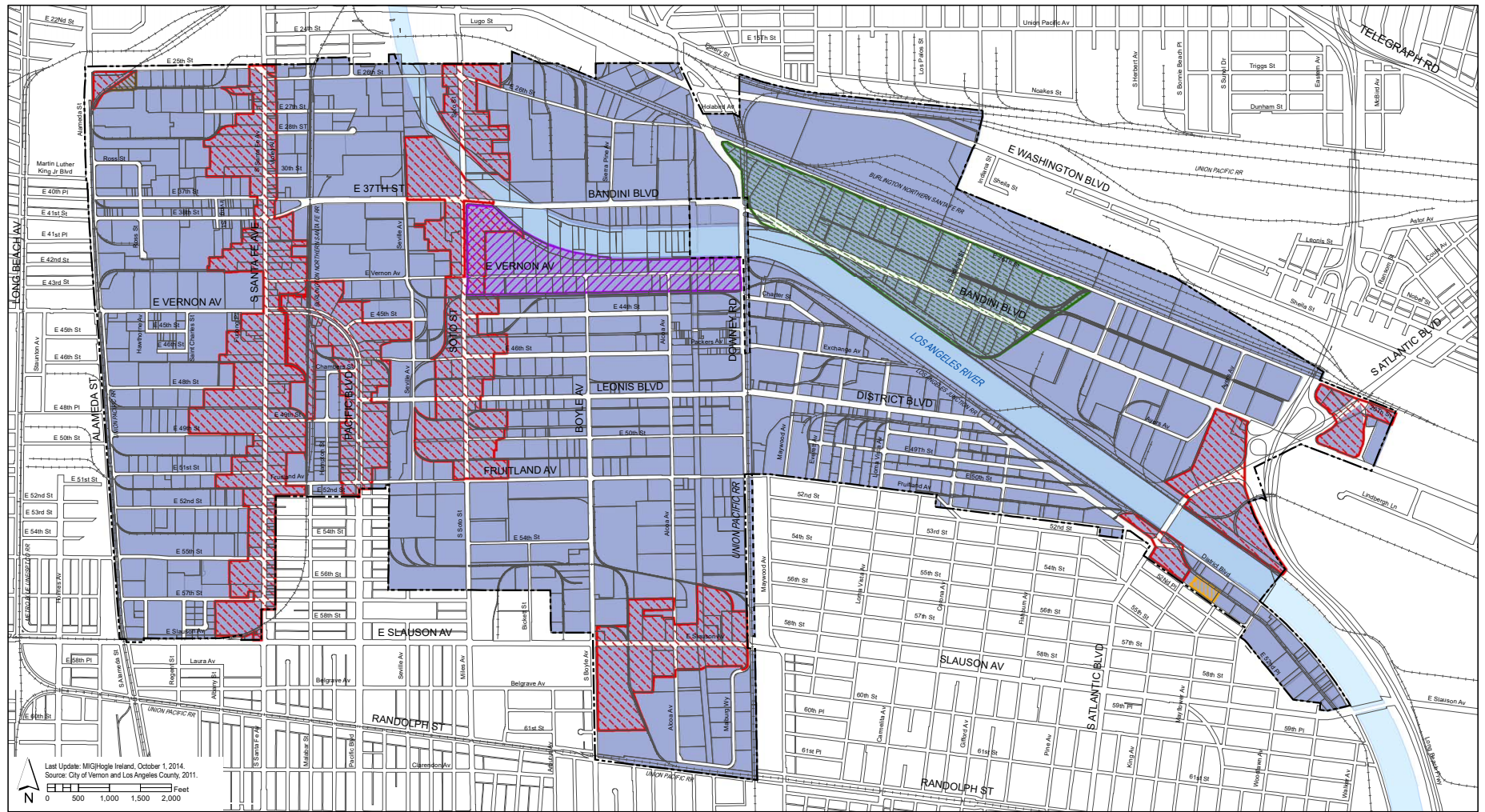
The City of Vernon is located five miles south of downtown Los Angeles. The City is zoned entirely as one land use category: Industrial. There are five “Overlay Districts” within the City. Each Overlay District permits a specialized use within the Industrial category: Commercial, Rendering, Slaughtering, Housing, and Emergency Shelter. The Industrial designation allows a broad range of activities with the intent to maintain the City’s status as a regional manufacturing and industrial center. Land uses within the City are almost solely industrial. However, there are pockets of commercial, civic, and residential uses. The City’s land uses, and established zoning are shown in **Figure 3.7-1, Existing Zoning in the City of Vernon**. The Housing Overlay District requires that all housing application are subject to discretionary review, given the ubiquitous nature of industrial uses in Vernon. According to the City’s 2021-2029 Housing Element, there are 76 housing units in the City of Vernon. Single-family detached homes account for 30 percent of the housing stock, while the remaining 70 percent is comprised of multi-family housing. The Commercial Overlay districts are primarily located along the major roads within the City, such as Santa Fe Avenue, Pacific Boulevard, Soto Street, and Slauson Avenue. However, commercial uses are limited, with scattered retail and food service operations that support the large day-time worker population and the few residences. The Slaughtering and Rendering Overlays encompass 83 and 164 acres respectively. The Slaughtering and Rendering Overlaps are located in the eastern portion of the City and permit the slaughtering of animals and rendering of meat products. Noxious odors in the City are associated with these uses, and both of these uses require a conditional use permit.

Due to the industrial nature of the City, Vernon is home to an extensive rail network, most notably the Alameda Corridor, which connects the ports of Los Angeles and Long Beach to the rest of the region, and nation beyond. There are several active and inactive rail lines that run through the Project Area. The Malabar Yard, operated by Burlington North and Santa Fe (BNSF) Railway, is located in the eastern part of the Project Area, between Santa Fe Avenue and Hampton Street. The Alameda Rail Corridor runs along the western portion of the Project Area, along Alameda Street. The Los Angeles River runs diagonally through the City of Vernon. The river is located approximately 0.5-mile from the eastern portion of the Project Area.

Much of the City of Vernon is located within a High-Quality Transit Area (HQTA), which are defined as areas within one half-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. The Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), Connect SoCal vision is to concentrate transit-oriented development (TOD) within QTAs. Connect SoCal projects that 46 percent of new housing and 55 percent of new employment within the SCAG region would take place with QTAs.<sup>1</sup> This would facilitate the use of public and active modes of transportation that would reduce VMT and the region's climate change contribution, as well as improve air quality.

---

<sup>1</sup> Southern California Association of Governments. HQTA ToolKit. 2019. Available online at: [https://scag.ca.gov/sites/main/files/file-attachments/part\\_1\\_hqta\\_toolkit.pdf?1621459061](https://scag.ca.gov/sites/main/files/file-attachments/part_1_hqta_toolkit.pdf?1621459061), accessed October 18, 2022.



Last Update: M/G/Hogge Ireland, October 1, 2014.  
 Source: City of Vernon and Los Angeles County, 2011.

- |                             |                          |                            |
|-----------------------------|--------------------------|----------------------------|
| <b>Land Use Designation</b> | <b>Overlay Districts</b> | <b>Base Map</b>            |
| Industrial                  | Housing                  | Vernon City Boundary       |
|                             | Commercial               | Vernon Sphere of Influence |
|                             | Rendering                | Freeway                    |
|                             | Slaughtering             | Railroad                   |
|                             |                          | Los Angeles River          |

SOURCE: City of Vernon, 2011

FIGURE 3.7-1



# Existing Zoning in the City of Vernon

### 3.7.1.2 Project Area

The Project Area encompasses approximately 780 acres on the westside of Vernon. The Project Area is located just south of the Arts District in Downtown Los Angeles. The Project Area is composed of four specific zone areas that are bound generally by 27<sup>th</sup> Street to the north; BNSF Railroad and Seville Avenue to the east; Slauson Avenue to the south; and Pacific Boulevard to the west. The Project Area is primarily industrial, but includes small pockets of civic, commercial and residential uses. According to a 2021 market study, the existing land uses of the Project Area are comprised of approximately 52 percent warehousing and 37 percent manufacturing. There are very few non-industrial uses.<sup>2</sup>

The industrial buildings within the Project Area are primarily large one-story buildings. The majority of the buildings are between 25,000 and 300,000 square feet, with large, fenced parking lots that front the street. Industrial buildings smaller than 25,000 square feet are concentrated within clusters along Santa Fe Avenue, 37<sup>th</sup> Street, 38<sup>th</sup> Street, and Hampton Street.

There is a limited amount of commercial uses within the City. The small pockets of commercial within the Project Area are located on Santa Fe Avenue, as well as a small center at 25<sup>th</sup> Street and Alameda Street, and are made up of retail, commercial, service, and restaurant uses that primarily serve the daytime working population. The small pockets of residential uses are located along Vernon Avenue and are composed of single-family homes and a duplex. There is currently no buffer between the residential and industrial uses.

The Vernon City Hall, Vernon Police Department, Los Angeles County Fire Station 52, and the Vernon City School are all clustered near the intersection of Santa Fe Avenue, West Vernon Avenue and Pacific Boulevard. This area is known as the Civic Center. The Civic Center also includes ten city-owned homes adjacent to Vernon City Hall, on Furlong Place. There is currently no designated open space in the Project Area. However, A landscaped lawn in front of Vernon City Hall fronts Santa Fe Avenue includes benches available for public use.

---

<sup>2</sup> City of Vernon. *Vernon Westside Specific Plan Baseline Studies Opportunities and Constraints*. 2021. Available online at: <https://static1.squarespace.com/static/5fa48817ca4776601586c4d8/t/6014692c9818a91c526a2973/1611950394830/Vernon+Westside+Baseline+Studies+Ch+1+-+Executive+Summary.pdf>, accessed August 10, 2022.

**Table 3.7-1  
Existing and Future Land Uses within the Project Area (Square Feet)**

<b>Land Use Category</b>	<b>Existing Conditions</b>	<b>Proposed New Development</b>	<b>Future Condition Under Project</b>
Residential (units)	12	874	887
Residential (square footage)	5,046	805,644	810,690
Retail	6,930	120,059	126,989
Production Retail	-	253,021	253,021
Research and Development	-	360,429	360,429
Industrial	14,942,363	(575,549)	14,366,814
<b>Total Non-Residential</b>	<b>14, 954,339</b>	<b>963,604</b>	<b>15, 917,943</b>

*Source: The Arroyo Group, 2023*

### 3.7.1.3 Zoning

Within the Project Area, 100 percent of the area is within the General Industry Zone (I Zone). The I Zone permits industrial uses. Special Overlay Zones have been established to allow for uses that may not be otherwise permitted elsewhere in the City. Within the Project Area, there are two Commercial Overlay Zones (C-1 and C-2). The Commercial Overlays are located along Santa Fe Avenue and Pacific Boulevard. Occasional commercial land uses are interspersed amongst industrial uses. The commercial uses in the Project Area include restaurants, convenience stores and wholesale stores.

## 3.7.2 REGULATORY FRAMEWORK

### 3.7.2.1 Federal

#### *National Environmental Policy Act (42 U.S.C. § 4321 et seq.)*

The United States Environmental Protection Agency (U.S. EPA) implements the National Environmental Policy Act (NEPA). NEPA provides information on expected environmental effects of federally funded projects. Impacts on land uses and conflicts with state, regional, or local plans and policies are among the considerations included in the regulations. The regulations also require that projects requiring NEPA review seek to avoid or minimize adverse effects of proposed actions and restore and enhance environmental quality as much as possible.



### 3.7.2.2 State

#### *General Plans and Land Use Regulations*

State planning law (California Government Code Section 65300) requires every city and county in California to adopt a comprehensive, long-term general plan for the physical development of the jurisdiction and of any land outside its boundaries that, in the planning agency's judgment, bears relation to its planning (sphere of influence). A general plan should consist of an integrated and internally consistent set of goals and policies grouped by topic into a set of elements and guided by a jurisdiction-wide vision. State law requires that a general plan address seven elements or topics (land use, circulation, housing, conservation, open space, noise, and safety), but allows some discretion on the arrangement and content. Additionally, each of the specific and applicable requirements in the state planning law should be examined to determine if there are environmental issues within the community that the general plan should address, such as hazards or flooding.

Cities and counties are also required to comply with the Subdivision Map Act (California Code section 66410 *et seq.*). The Subdivision Map Act sets forth the conditions for approval of a subdivision map and requires enactment of subdivision ordinances by which local governments have direct control over the types of subdivision projects to be approved and the physical improvements to be installed.

#### *State Density Bonus Law*

The State Density Bonus law (California Government Code Section 65915), signed into law in 1979, requires jurisdictions to provide applicants with a density bonus and incentives or concessions for the production of housing development in which affordable housing is also provided. Eligible projects include housing developments with 10 percent housing for lower income households, 5 percent of the housing for very low-income households, senior citizen housing, and 10 percent of the total dwelling units provided as affordable housing in condominium projects.

#### *Assembly Bill (AB) 2222*

On September 27, 2014, former Governor Jerry Brown signed AB 2222, which amended sections of the State Density Bonus Law. AB 2222 requires that density bonus projects resulting in a loss of existing affordable and otherwise locally regulated (i.e., rent-stabilized) housing units replace those units one-for-one. It also extends the affordability period from 30 to 55 years and expands the use of equity sharing in for-sale units. Several other clarifications of the existing law are also included, but they were not judged to represent a change to current City policy.

### ***Assembly Bill 2011***

Signed by Governor Gavin Newsom on September 28<sup>th</sup>, 2022, AB 2011 allows for ministerial, by-right approval for affordable housing on commercially-zoned lands, and also allows such approvals for mixed-income housing along commercial corridors, as long as the projects meet specified affordability, labor, and environmental criteria. The bill also requires that all projects seeking approval under its provisions ensure all construction workers earn prevailing wages and receive health benefits.

### ***Senate Bill 6***

SB 6 allows residential development on property zoned for retail and office space without needing a rezoning and allows project applicants to invoke the Housing Accountability Act (HAA) to limit local discretion to deny or condition approval. The Bill requires applicants to commit to both prevailing wage and more costly "skilled and trained workforce" requirements for project labor but does not contain Below Market Rate requirements.

### ***Senate Bill 375***

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the state's climate action goals to reduce greenhouse gas (GHG) emissions through coordinated transportation and land use planning with the goal of creating more sustainable communities. Under the Sustainable Communities Act, the California Air Resources Board (CARB) sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, ARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPO). CARB periodically reviews and updates the targets.

While CARB is responsible for setting region-wide targets for reduction of GHG emissions, each MPO is responsible for developing its own Sustainable Communities Strategy (SCS) in conjunction with a Regional Transportation Plan (RTP). The combined RTP/SCS provides integrated land use and transportation strategies and policies that, if implemented, are intended to allow the MPO region to meet the region wide GHG targets set by CARB. The City is a member of the SCAG MPO, which adopted the 2020-2045 RTP/SCS in 2020. The RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept SCAG's determination that the SCS, if implemented, would meet the regional GHG targets.<sup>3</sup> SB 375 uses CEQA streamlining as an incentive to encourage residential or mixed-use residential projects, which help achieve AB 32 goals to reduce GHG emissions.

---

<sup>3</sup> California Air Resources Board, "Sustainable Communities," Available online at: <https://www.arb.ca.gov/cc/sb375/sb375.htm>, accessed October 2, 2019.

SB 375 amends CEQA to add Chapter 4.2 Implementation of the SCS, which allows a CEQA exemption for Sustainable Community Projects (SCP), as well as streamlined CEQA analysis for Transit Priority Projects (TPPs) and certain residential or mixed-use projects. The following is a summary of the CEQA streamlining provisions in SB 375.

A TPP may be eligible for four types of CEQA relief: (1) SCP CEQA Exemption, (2) Sustainable Communities Environmental Assessment (SCEA), (3) a streamlined Environmental Impact Report (EIR), or (4) traffic mitigation measures. Each of the four types of CEQA relief enabled through SB 375 requires that TPPs meet specific criteria in order to be eligible.

To qualify as a TPP, a project must be consistent with the general plan land use designation, density, building intensity, and applicable policies in an SCS accepted by ARB. A project must also meet the following criteria to be considered a TPP:

- Be at least 50% residential use based on building square footage;
- Contain at least 20 dwelling units/acre;
  - Have a floor area ratio for the commercial portion of the project at 0.75 if the project contains between 26% and 50% nonresidential uses; and
  - Be within 0.5 mile of a major transit stop or high-quality transit corridor included in the RTP.

**(1) Sustainable Communities Project (SCP) Exemption.** A TPP is eligible for an SCP exemption from CEQA if it is consistent with the SCS and meets all of the following environmental criteria:

- The TPP and other projects that were approved prior to the TPP approval can be adequately served by existing utilities, and the project has paid or would pay any applicable in-lieu or development fees;
- The project site does not contain wetlands or riparian areas, and does not include wildlife habitat of significant value or harm protected species;
- The project site is not contaminated (i.e., the site is not on the Cortese list);
- The project site is subject to preliminary endangerment assessment regarding the potential for existing on-site activities to release hazardous substance and to determine the potential exposure of future occupants to health hazards from any nearby property or activities. Any hazards would be mitigated to a less-than-significant level;
- The project would not significantly affect an historic resource;

- The project site is not subject to wildland fire hazard, unusually high risk of fire/explosion from materials on adjacent properties, health hazards, seismic risk, landslide, or flood hazards;
- The project site is not located on developed open space; and
  - The project would be 15% more energy efficient than required by California Code of Regulations (CCR) Title 24, and landscaping would use 25% less water than the regional average household.

In addition, the project must meet all the following land use criteria:

- The site is not more than eight acres;
- The project does not contain more than 200 units;
- The project does not result in the net loss of affordable housing;
- None of the building levels exceeds 75,000 square feet;
- Applicable mitigation, performance standards, and criteria from prior EIRs would be incorporated into the TPP;
- The project would not conflict with nearby operating industrial use; and
- The project site is located within 0.5 miles of a rail transit station or a ferry terminal included in the RTP, or within 0.25 miles of a high-quality transit corridor.

Moreover, the project must meet at least one of the following criteria:

- At least 20% of the housing would be for families of moderate income, at least 10% would be rented to families of low income, or at least 5% would be rented to families of very low income, and the developer provides legal commitments to ensure continued availability to households of these income groups;
- The developer has paid or would pay in-lieu fees pursuant to local ordinance to result in an equivalent number of units that would otherwise be required above; or
- The project would provide public open space at a ratio of at least five acres per 1,000 residents.

After a public hearing where a legislative body finds that a TPP meets all the requirements, a project can be declared as an SCP and can be exempted from CEQA.

**(2) Sustainable Communities Environmental Assessment (SCEA).** A TPP that is not eligible for an SCP Exemption may nevertheless qualify for a SCEA if the project incorporates all feasible mitigation measures, performance standards, or criteria set forth in prior applicable certified environmental impact reports (including the RTP/SCS PEIR) (Public Resource Code [PRC] Section 21155.2(b)). A SCEA is comparable to a Negative Declaration in that the lead agency must find that all potentially significant impacts of a project have been identified, adequately analyzed, and mitigated to a level of insignificance. However, unlike a Negative Declaration, an SCEA need not consider the cumulative effects of the project that have been adequately addressed and mitigated in prior EIRs. Also, growth-inducing impacts are not required to be referenced, described, or addressed. Additionally, project-specific or cumulative impacts from cars and light duty truck trips on global warming or the regional transportation network need not be referenced, described, or discussed. The SCEA must be circulated for 30 days, comments would be considered, and then the SCEA may be approved after a public hearing provided impacts are mitigated. The adequacy of a SCEA is reviewed under the substantial evidence legal standard, which means a court would uphold an agency's decision if there is substantial evidence in light of the whole record to support its action. This is different from the typical "fair argument" standard of legal review for CEQA documents, which is less deferential and states that an EIR must be prepared when, after examining the entire record, there is substantial evidence to support a fair argument that the project may have a significant effect on the environment. The substantial evidence standard makes it more difficult for a petitioner to challenge a SCEA.

**(3) Transit Priority Project (TPP) Streamlined Environmental Impact Report (EIR).** Instead of a SCEA, a lead agency may choose to perform a streamlined EIR. If the lead agency determines that an EIR is required after conducting an Initial Study, it only needs to address potentially significant impacts. Where a cumulative effect has been adequately addressed and mitigated in a previous EIR, that cumulative effect shall not be treated as cumulatively considerable. The EIR is not required to analyze off-site alternatives to the TPP or discuss a reduced residential density alternative to address the effects of car and light duty truck trips generated by the project. Furthermore, the EIR is not required to include an analysis of growth-inducing impacts or any project-specific or cumulative impacts from cars and light duty trucks trips generated by the project on global warming or the regional transportation network. The Initial Study must identify any cumulative effects that have been adequately addressed and mitigated in the prior applicable certified EIRs, and these cumulative effects are not to be treated as cumulatively considerable in the EIR.

**(4) Traffic Mitigation Measures.** After a public hearing, a legislative body or local jurisdiction may adopt traffic mitigation measures that apply to TPPs (such measures must be updated as necessary every five years), including requirements for the installation of traffic control improvements, street or road improvements, and contributions to road improvement or transit funds, transit passes for future residents,

or other measures that would avoid or mitigate traffic impacts of TPPs. If such measures are adopted by a local jurisdiction, no additional traffic mitigation are required for TPPs (measures addressing public health and bicycle safety may still be imposed).

### ***Senate Bill 743***

SB 743, adopted September 27, 2013, amends the State Congestion Management Act (California Government Code Section 65088) to harmonize the act and its definitions with SB 743 and the SCS. SB 743 includes new definitions for “bus rapid transit corridor” and “infill opportunity zone.” Key provisions of SB 743 include adding a new chapter to CEQA for Modernization of Transportation Analysis for Transit-Oriented Infill Projects, beginning with PRC Section 21099.

An infill site is defined by PRC Section 21099(a)(4) as “a lot located within an urban area that has been previously developed, or on a vacant site where at least 75% of the perimeter of the site adjoins or is separated only by an improved public right-of-way from parcels that are developed with qualified urban uses.”<sup>4</sup>

A High Quality Transit Area (HQTA) is defined by the Southern California Association of Governments (SCAG) as an “an area along transit corridors or near major transit stations that have, or would have in place, 15 minute service, or better, during peak commuting hours.” See **Section 3.1, Aesthetics**, and **Section 3.13, Transportation**, for further discussion.

### ***CEQA Streamlining for Infill Projects Senate Bill 226 (SB 226)***

The CEQA Streamlining for Infill Projects (SB 226) sets forth a streamlined review process for infill projects and includes performance standards that would be used to determine an infill project’s eligibility for streamlined review. The purpose of SB 226 and updated *CEQA Guidelines* Section 15183.3 is to streamline the environmental review process by “limiting the topics subject to review at the project level where the effects of infill development have been addressed in a planning level decision or by uniformly applicable development policies.” Residential, commercial and retail, public office buildings, transit stations, and schools are eligible for this streamlining provided they meet the following requirements: (1) are located in an urban area on a site that has been previously developed or adjoins existing qualified urban uses on at least 75 percent of the site’s perimeter; (2) satisfy the performance standards provided in Appendix M [of CEQA]; and, (3) are consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning

---

<sup>4</sup> “Employment center project,” is defined as a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and that is located within a TPA (PRC Section 21099(a)(1)).

strategy, with some exceptions. Under SB 226, some development and transportation projects assumed as a part of the Project may be eligible to use a streamlined version of the environmental review process.

### ***Complete Streets Act***

Assembly Bill 1358, the Complete Streets Act (Government Code Sections 65040.2 and 65302), was signed into law by former Governor Arnold Schwarzenegger in September 2008. As of January 1, 2011, the law requires cities and counties, when updating the part of a local general plan that addresses roadways and traffic flows, to ensure that those plans account for the needs of all roadway users. Specifically, the legislation requires cities and counties to ensure that local roads and streets adequately accommodate the needs of bicyclists, pedestrians and transit riders, as well as motorists. At the same time, the California Department of Transportation (Caltrans) unveiled a revised version of Deputy Directive 64, an internal policy document that now explicitly embraces Complete Streets as the policy covering all phases of state highway projects, from planning to construction to maintenance and repair.

### ***Senate Bill 932***

Passed on September 28, 2022, SB 932 requires cities updating their circulation elements to incorporate the principles of the Federal Highway Administration’s Safe System Approach and develop bicycle plans, pedestrian plans, and traffic calming plans. Cities would be required to set goals for initiating and complicating all actions identified in the plans within 25 years of the adoption of the updated circulation element, as specified, and cities are required to begin implementation of the plan within 2 years of adoption of the plan, to regularly review its progress towards the goals identified in the plan.

### **3.7.2.3 Local and Regional**

#### ***Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS)***

The Southern California Association of Governments (SCAG) is an association of local governments and agencies that serves as a Metropolitan Planning Organization, a Regional Transportation Planning Agency, and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities. SCAG is responsible for developing long-range regional transportation plans, including the regional Sustainable Communities Strategy and associated growth forecasts, regional transportation improvement programs, regional housing needs allocations and a portion of the South Coast Air Quality management plans (SCAG 2018).

SCAG’s 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS, Connect SoCal) is a long-range regional transportation and land use network plan that looks ahead 20+ years and

provides a vision of the region’s future mobility and housing needs with economic, environmental and public health goals. Connect SoCal builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. SCAG adopted its current RTP/SCS in September 2020. One of the key strategies included in Connect SoCal is focus regional growth around High Quality Transit Areas that are within one half mile of existing or planned ‘major’ transit stops in the region.

### ***City of Vernon General Plan***

State Law (Government Code Section 65300) requires that each city and county, including charter cities and counties, adopt a comprehensive, integrated, long-term *General Plan* to direct future growth and development and accommodate potential changes or increases to population and employment. The General Plan is a fundamental policy document that defines how a city should use and manage its resources into the future. State law requires seven General Plan Elements: land use, circulation, housing, conservation, open space, noise, and safety. Additionally, consideration of environmental justice is also required either as a standalone element or incorporated into an existing element.

The City’s current *General Plan* was adopted in December 2007. The *General Plan* serves as a blueprint for the City’s planning efforts and vision for the future. The *General Plan* has six citywide elements: Land Use, Circulation and Infrastructure, Housing, Safety, Resources, and Noise. These elements contain goals, policies, and actions that apply to all incorporated areas in the City of Vernon.

### **City of Vernon Land Use Element**

The Land Use Element and the Land Use Policy Map establishes the broad, general policies for how properties are used in Vernon, including location, distribution, type, and intensity of development, with the overarching goal of maintaining Vernon as an industrial city. The Land Use Policy Map graphically illustrates the planned pattern of land use in Vernon. The Land Use Element describes a limited range of land use categories, establishes standards of use and intensity, and sets forth policies relating to use of properties.

### **City of Vernon Housing Element**

The Vernon Housing Element is an element of the *General Plan* required by State law to address current and future housing needs in the City (Government Code Section 65583). The City’s 2014-2021 Housing



Element sets housing policy from October 15, 2014, through October 15, 2021, defining how the City would meet State requirements, including how it would accommodate the Regional Housing Needs Assessment (RHNA) as allocated by the Southern California Association of Governments (SCAG). The City is in process of approving the 2021-2029 Housing Element. The most recent 6<sup>th</sup> cycle RHNA calls for 9 units to be added during the 2021-2029 planning period.

The following goals and policies of the *City of Vernon General Plan* are applicable to the Project.

**Land Use Goal LU-2. Phase out aging industrial building and sites through modernization and replacement.**

**Policy LU-2.3:** Continue to enforce all applicable building and health and safety codes.

**Policy LU-2.4:** Provide incentives to property owners to revitalize industrial structures or recycle/demolish obsolete or vacant structures.

**Policy LU-2.5:** Assist in the reuse of properties from one industrial use to another.

**Policy LU-2.7:** Consider and facilitate proposals for more intensive employment-generating, nonresidential development near transit stops.

**Land Use Goal LU-3. Maintain Vernon as a highly desirable location for industry and continue to attract the types of industry the City is well positioned to serve.**

**Policy LU-3.2:** Foster a City government and governmental structure that is responsive to the needs of industry located in a metropolitan area.

**Policy LU-3.5:** Use development proposals as opportunities to encourage modernization and broaden property improvements goals.

**Housing Goal H-3: Continue to promote the availability of a range in existing unit types and sizes, and equal housing opportunity in the City's housing market on the basis of age, race, sex, marital status, ethnic background, source of income, and other factors.**

**Policy H-3.1.** Implement the Housing Overlay Zone via the Zoning Ordinance and Zoning map to allow for a limited amount of new housing construction.

**Policy H-3.2.** Strategically locate sites for new housing so as to minimize noise, vibration, smoke, noxious gases, glare, heat, dust, odors, air pollution, and other adverse

impacts associated with industrial uses, slaughtering and rendering uses, businesses that

- Policy H-3.3.** Encourage development of residential uses in strategic proximity to schools, recreational facilities, commercial areas, parks and other public spaces, and transit routes.

### ***City of Vernon Zoning Ordinance***

Title 17 of the Charter and City Code, known as the Comprehensive Zoning Ordinance of the City of Vernon (Zoning Ordinance), implements the land use policies of the *General Plan*. The Zoning Ordinance is detailed with respect to specific development standards and land use requirements. The City’s Zoning Ordinance includes specific standards and development regulations regarding permitted uses, building heights, parking requirements, setbacks, and other requirements. Zoning is used to implement long-term land use policy. In accordance with State requirements, the City’s zoning patterns are consistent with Vernon’s Land Use Policy Map.

## **3.7.4 IMPACTS AND MITIGATION MEASURES**

### **3.7.4.1 Thresholds of Significance**

The following thresholds for determining the significance of impacts related to land use and planning are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts if any of the following would occur:

- Physically divide an established community.
- 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.

### **3.7.4.2 Methodology**

The discussion in this impact section serves two purposes, identifying significant impacts related to land use, and compliance with *CEQA Guidelines* Section 15125(d), which requires that an EIR include a discussion of any inconsistencies with applicable plans. However, it does not require the EIR to reach a conclusion on whether a conflict exists. Additionally, a conflict between a project and an applicable plan is not necessarily a significant impact under CEQA unless the inconsistency would result in an adverse physical change to the environment that is a “significant environmental effect” as defined by 15382. An

inconsistency between a proposed project and an applicable plan is a legal determination that may or may not indicate the likelihood of a physical environmental impact. In some cases, an inconsistency may be evidence that an underlying physical impact is significant and adverse. For example, if a proposed project affected agricultural land, one standard for determining whether the impacts were significant would be to determine whether the project violated a plan or policy protecting agricultural land; the environmental impact, however, would be the physical conversion of agricultural land to non-agricultural uses. Similarly, an excerpt from Section 12.34 of the legal practice guide, Practice under the California Environmental Quality Act by the Continuing Education of the Bar, illustrates the point:

*...if a project affects a river corridor, one standard for determining whether the impact is significant might be whether the project violates plan policies protecting the corridor; the environmental impact, however, is the physical impact on the river corridor.*

Analysis of conflicts and consistency with applicable plans would be included in this impact section. Under State Planning and Zoning law (Gov't Code §§ 65000, et seq.) strict conformity with all aspects of a plan is not required. Generally, plans reflect a range of competing interests and agencies are given great deference to determine consistency with their own plans. A proposed project should be considered consistent with a general plan or elements of a general plan if it furthers one or more policies and does not obstruct other policies. Generally, given that land use plans reflect a range of competing interests, a project should be compatible with a plan's overall goals and objectives but need not be in perfect conformity with every plan policy.

For purpose of identifying significant impacts related to land use impacts, they can be either direct or indirect. Direct impacts result in division of neighborhoods or communities, such as a community that could be physically divided by the construction of a new road, freeway, or railway that effectively isolates a portion of the community from the remainder of the community; or interference with land use plans, including habitat or wildlife conservation plans that result in significant environmental effects. Land use compatibility is typically addressed based on direct physical environmental impacts – primarily noise and air quality but also aesthetics, traffic, hazards, water quality and other physical environmental issues, i.e., where one use generates physical impacts that could significantly adversely affect another use. These issues are generally addressed through existing regulations and policies and are comprehensively addressed in each environmental issue area in this document and summarized as applicable and appropriate in the discussion of **Impact LAN-2** below. As related to impact analysis, this section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use policy implementation are generally addressed in other topical sections of this PEIR. For example, traffic impacts resulting from increased traffic as a result of anticipated development under the Project would be discussed in the transportation section

of this PEIR; public service impacts resulting from increased demand from increased development under the Project is discussed in public services section of this PEIR.

### 3.7.5 ENVIRONMENTAL IMPACTS

#### **Impact LAN-1            Physically divide an established community.**

The Project Area includes a small cluster of residences units along Furlong Place and Vernon Avenue. The Alameda Corridor, which borders the Project Area to the west, acts as a dividing boundary between the City of Vernon and the Los Angeles neighborhood of Central-Alameda to the west. Additionally, railroad tracks run along Slauson Avenue, turning north between South 2<sup>nd</sup> Street and Santa Fe Avenue, and running parallel to Malabar Street. The tracks act as a dividing boundary between the Project Area and the City of Huntington Park to the south and the rest of Vernon to the east. The Project does not propose any new roadways, highways, airports, railways, or other physical features that would physically divide an established community in the Project Area, as the only established community is the pocket of homes near the City Center.

Project implementation would increase residential uses, which would increase community. The growth proposed under the Project (approximately 874 new units) is directed towards four specific mixed-use zones. These zones are detailed as follows:

- **Mixed-Use City Center Zone.** The MU-CC Zone functions as the “downtown” of Vernon, with a concentration of density, activity and amenities for residents and employees of the City. It builds upon the existing government, educational, religious and residential uses and is intended to form a hub for retail, food, business and personal services and public spaces which would serve the entire Vernon community. The proposed development standards would include public open space requirements, and would provide a buffer between the various active commercial uses and the dense residential development, which is located as far away from existing heavy industrial uses as practical.
- **Mixed-Use Santa Fe South Zone.** Located close to existing residential neighborhoods in Huntington Park, the MU-S Zone would include low-to-medium density residential and live/workspaces, supported with local services. Much of development under the MU-S Zone is anticipated as adaptive reuse. Heights would be limited to three stories for the first 50 feet of parcel depth, with five stories permitted with a minimum 50-foot setback.
- **Mixed-Use Santa Fe North Zone.** The MU-N Zone stretches along Santa Fe Avenue from the MU-CC Zone to the City limit at 25th Street. Land uses would focus on production retail such as beverages, fashion, furniture, floral, or food, as well as stand-alone manufacturing and retail uses.

Separate from the MU-CC, MU-S, and MU-N zones, the Project would also introduce a fourth zone in the southeast portion of the Project Area:

- **Mixed-Use Pacific Hampton Zone.** This is the only mixed-use zone that is not located along Santa Fe Avenue. The MU-PH Zone is currently comprised of smaller-scale, 1940's single-story industrial buildings. Under the Project, these building would potentially be transformed into production studios, creative offices, commercial kitchens and other office and industrial type uses. The Project would support this transformation by providing more flexible development and parking standards as the current parking and design standards are often too restrictive for the types of uses proposed, and by providing attractive walking and biking connections to the zone, including a bicycle/greenway path along the west side of Pacific Boulevard. Residential uses are not permitted.

The Project would allow for future redevelopment and infill development that would result in higher density housing, employment opportunities, and mixed-use development. The Project would not directly result in the construction of any development or infrastructure that could physically divide a community: such as major roadways, utility transmission lines, or storm channels.

Development under the Project would involve an increase over time of infill development utilizing the established roadway network. The increase in development capacity that would occur through implementation of the Project is intended primarily to allow intensified development and a mix of land uses. The proposed zoning changes would enhance mobility and connectivity of land uses through implementation of mixed uses, resulting in a more physically connected community.

Overall, Project implementation would increase the density/intensity of development over time as well as the presence of pedestrians throughout the Project Area. The only existing residential community within the Project Area is the cluster of 13 residential units located in the Civic Center. Augmenting this community, the Project would provide for additional residential and related commercial and employment development and improved connectivity within the existing community and transit network and would not result in the division of an established community. Conversely, the Project would establish a more integrated network of community land uses and mobility. Thus, impacts related to physical division of an established community would be beneficial.

### ***Significance Before Mitigation***

This would be a beneficial impact.

**Mitigation Measures**

No mitigation measures are required.

**Significance After Mitigation**

Beneficial impact.

**Impact LAN-2** 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.

**Project Consistency with Applicable Land Use Plan, Policies, and Regulations**

The SCAG’s Connect SoCal RTP/SCS is a long-range regional transportation and land use network plan that provides a vision of the region’s future mobility and housing needs with economic, environmental and public health goals. Similarly, the City’s General Plan (2007) serves as a blueprint for the City’s planning efforts and vision for the future.

**Table 3.7-2, Project Consistency with SCAG’s Connect SoCal Land Use Policies**, demonstrates the Project’s consistency with relevant Connect SoCal’s goals and policies, whereas **Table 3.7-3, Project Consistency with the City of Vernon General Plan**, discusses the Project’s consistency with relevant policies from the *City of Vernon General Plan’s* Land Use, Housing, and Circulation and Infrastructure elements. Policies that are redundant between elements are omitted, as are policies that call for City actions independent of review and approval or denial of the Project. The ultimate determination of whether the Project is consistent with applicable general plans lies with the City of Vernon’s decision-making bodies, specifically the City Council.

**Table 3.7-2  
Project Consistency with SCAG’s Connect SoCal Land Use Policies**

Connect SoCal RTP/SCS Goals	Discussion
<p><b>Goal 1.</b> Encourage regional economic prosperity and global competitiveness</p>	<p><b>Consistent.</b> The Project would allow for future mixed-use development for residential, commercial retail, production retail, and research and development uses within the Project Area. These land uses would increase regional competitiveness through the area’s proximity to Downtown Los Angeles and the Arts District. The zone changes would preserve industrial uses, while increasing economic opportunity through the development of</p>

Connect SoCal RTP/SCS Goals	Discussion
	new industries and uses. The diversity of land uses would increase the competitiveness of Vernon as a desirable place to live and work.
<b>Goal 2:</b> Improve mobility, accessibility, reliability, and travel safety for people and goods	<b>Consistent.</b> The Project would allow for the creation of neighborhoods focused on housing, local and regional commercial services, and community resources. The Project would therefore increase mobility, accessibility, and safety by placing housing with adequate access to services, transportation, and jobs.
<b>Goal 3:</b> Enhance the preservation, security, and resilience of the regional transportation system	<b>Not Applicable.</b> This Goal is directed towards SCAG and does not apply to the Project. While this strategy calls on enhancing the preservation, security, and resilience of the transportation system, the Project would not interfere with such policymaking.
<b>Goal 4:</b> Increase person and goods movement and travel choices within the transportation system	<b>Consistent.</b> The Project aims to provide access to employment, retail services, and other daily needs via alternate modes of transportation. The Project encourages a walkable, vibrant, and safe community through the introduction of mixed-use developments, densification of land uses, and proximity of residential uses to employment.
<b>Goal 5:</b> Reduce greenhouse gas emissions and improve air quality	<b>Consistent.</b> The Project would decrease criteria air pollutant and GHG emissions because of its densification of land uses and proximity of residential uses to employment centers and transit, reducing commute time and vehicle miles traveled.
<b>Goal 6:</b> Support healthy and equitable communities	<b>Consistent.</b> The Project would maintain and create additional employment opportunities adjacent to new residential uses, introducing new retail and office uses while preserving existing industrial and commercial jobs in the remainder of the Project Area.
<b>Goal 7:</b> Adapt to a changing climate and support an integrated regional development pattern and transportation network	<b>Consistent.</b> The Project would respond to increased development pressures in the surrounding region, particularly from Downtown Los Angeles and the Arts District. The Project would increase housing opportunities and encourage mixed-use development within proximity of the Downtown Los Angeles area. The Project contains sustainability guidelines, such as the encouragement of green roofs and implementation of low-impact development requirements such as stormwater best management practices.
<b>Goal 8:</b> Leverage new transportation technologies and data-driven solutions that result in more efficient travel	<b>Not Applicable.</b> This Goal is directed towards SCAG and does not apply to the Project. This strategy calls on SCAG to use new transportation technologies and data-driven solutions to increase travel efficiency. The Project would not interfere with this goal.
<b>Goal 9:</b> Encourage development of diverse housing types in areas that are supported by multiple transportation options	<b>Consistent.</b> The Project would allow for the development of multi-family residential buildings within walking distance to multiple bus lines.
<b>Goal 10:</b> Promote conservation of natural and agricultural lands and restoration of habitats	<b>Not Applicable.</b> This Goal is directed towards SCAG and does not apply to the proposed project. This strategy calls on SCAG to promote the conservation of natural and agricultural land and the restoration of habitats. The Project is located in an urban area. Therefore, the Project would not interfere with this goal.

Connect SoCal RTP/SCS Goals	Discussion
Connect SoCal RTP/SCS Strategies	Discussion
<b>Strategy 1:</b> Focus growth near destinations and mobility options	<b>Consistent.</b> The Project would result in future population growth within walking distance to multiple bus lines.
<b>Strategy 2:</b> Promote diverse housing choices.	<b>Consistent.</b> The Project would encourage the development of multi-family residential buildings, while preserving existing single-family homes.
<b>Strategy 3:</b> Leverage technology innovations	<b>Not Applicable.</b> This strategy is directed to SCAG and does not apply to the Project. This strategy aims to promote low emission technologies, improve access to services through technology, and identify ways to incorporate “micro-power grids” in communities. The Project. would not interfere with this strategy.
<b>Strategy 4:</b> Support implementation of sustainability policies	<b>Consistent.</b> Future development associated with the Project would adhere to all applicable sustainability guidelines at the local, regional and state levels.
<b>Strategy 5:</b> Promote a Green Region	<b>Consistent.</b> The Project would include development standards and regulations for the development of new open spaces. Future development associated with the Project would also include key development features including buffering requirements, and would be subject to applicable City standards and regulations.

Project implementation would establish development standards and regulations in the Project Area. By adopting the Project, including the General Plan Amendment, the City of Vernon would also be adopting the anticipated development associated with the Project. Thus, development under the Project would be consistent with the City of Vernon General Plan. **Table 3.7-3, Project Consistency with the City of Vernon General Plan**, includes the goals and policies included in the General Plan and pertinent to the project. As shown in **Table 3.7-3**, the Project would be consistent with the applicable goals and policies outlined in in the Land Use Element and Housing Element of the City’s *General Plan*.

**Table 3.7-3  
Project Consistency with the City of Vernon General Plan**

General Plan Policy	Discussion
Land Use Element	
<b>Goal LU-2: Phase out aging industrial building and sites through modernization and replacement</b>	
<b>Policy LU-2.3:</b> Continue to enforce all applicable building and health and safety codes.	<b>Consistent.</b> Future development associated with the Project would comply with the Vernon Municipal Code, the California Building Code (CBC), and the California Fire Code (CFC).
<b>Policy LU-2.4:</b> Provide incentives to property owners to revitalize industrial structures or recycle/demolish obsolete or vacant structures.	<b>Consistent.</b> Project implementation would result in the future redevelopment of existing underutilized industrial structures for mixed-use development.



General Plan Policy	Discussion
<b>Policy LU-2.5:</b> Assist in the reuse of properties from one industrial use to another.	<b>Consistent.</b> Project implementation would allow for adaptive reuse of industrial uses within the four mixed-use zones.
<b>Policy LU-2.7:</b> Consider and facilitate proposals for more intensive employment-generating, nonresidential development near transit stops.	<b>Consistent.</b> Implementation of the Project would increase density along Santa Fe Avenue and other corridors that are in walking distance to multiple bus lines.
<b>Goal LU-3. Maintain Vernon as a highly desirable location for industry, and continue to attract the types of industry the City is well positioned to serve.</b>	
<b>Policy LU-3.2:</b> Foster a City government and governmental structure that is responsive to the needs of industry located in a metropolitan area.	<b>Consistent.</b> The Project would allow for industrial uses to continue to occur within the Project Area, while also allowing additional housing units in the form of mixed-use development.
<b>Policy LU-3.5:</b> Use development proposals as opportunities to encourage modernization and broaden property improvements goals.	<b>Consistent.</b> The Project would result in the modernization of the existing underutilized industrial buildings. Additionally, the Project would result in future development of residential development and live/workspaces.
Housing Element	
<b>Goal H-3: Create opportunities for the development of new housing in areas of the City that have the least potential for adverse impacts associated with established industrial uses and truck routes. Locate such new housing nearby community services.</b>	
<b>Policy H-3.1.</b> Implement the Housing Overlay Zone via the Zoning Ordinance and Zoning map to allow for a limited amount of new housing construction.	<b>Consistent.</b> The adoption of the Project would change the zoning ordinance to introduce four new mixed-use development zones, allowing housing development in the specified mixed-use zones.
<b>Policy H-3.2.</b> Strategically locate sites for new housing so as to minimize noise, vibration, smoke, noxious gases, glare, heat, dust, odors, air pollution, and other adverse impacts associated with industrial uses, slaughtering and rendering uses, businesses that	<b>Consistent.</b> The Project would establish new development standards that govern where housing can be located. These standards would ensure that housing is not located within close proximity to heavy industrial uses that would negatively impact residents. Buffers to ensure adequate screening from adjacent industrial uses or transportation routes would be implemented.
<b>Policy H-3.3.</b> Encourage development of residential uses in strategic proximity to schools, recreational facilities, commercial areas, parks and other public spaces, and transit routes	<b>Consistent.</b> The Project provides for a flexibility of land uses, including residential, retail, research and development, and production uses within development nodes.

The Project includes the changes to the zoning designation for four specific areas and associated General Plan amendments. Adoption of the zoning changes and General Plan Amendments would ensure there are no conflicts with the Municipal Code. As a result, impacts would be less than significant.

### *Significance Before Mitigation*

This impact would be less than significant.

### *Mitigation Measures*

No mitigation measures are required.

### *Significance After Mitigation*

Less than significant.

#### **3.7.6 CUMULATIVE IMPACTS**

As discussed in **Section 2.0, Project Description**, the Project would accommodate up to 874 multi-family residential units, 120,059 square feet of retail, 253,021 square feet of production retail, 360,429 square feet of research and development space, and a reduction of 575,549 square feet of industrial space. While the Project and other land use changes would increase the intensity of development in Vernon beyond that envisioned in the Vernon General Plan adopted in 2007 and Connect SoCal RTP/SCS, the project-specific impacts related to land use compatibility would be less than significant, as discussed in **Impact LAN-2**. The development would be consistent with overall goals and policies in the Vernon General Plan, as discussed in **Section 3.7.2, Regulatory Framework**. Any future development projects proposed within the Project Area and the City would need to be reviewed on a case-by-case basis for compliance with the City's *General Plan*, Zoning Code, and any other relevant governing policies or plans. Therefore, the project-specific impacts associated with land use consistency would be less than significant. Potential impacts would not be cumulatively considerable.

#### **3.7.6 REFERENCES**

California Air Resources Board, "Sustainable Communities," Available online at:  
<https://www.arb.ca.gov/cc/sb375/sb375.htm>, accessed October 2, 2019.

City of Vernon. *Vernon Westside Specific Plan Baseline Studies Opportunities and Constraints*. 2021. Available online at:  
<https://static1.squarespace.com/static/5fa48817ca4776601586c4d8/t/6014692c9818a91c526a2973/1611950394830/Vernon+Westside+Baseline+Studies+Ch+1+-+Executive+Summary.pdf>, accessed August 10, 2022.

Southern California Association of Governments. "HQTA ToolKit. 2019." Available online at:  
[https://scag.ca.gov/sites/main/files/file-attachments/part\\_1\\_hqta\\_toolkit.pdf?1621459061](https://scag.ca.gov/sites/main/files/file-attachments/part_1_hqta_toolkit.pdf?1621459061), accessed October 18, 2022.

### INTRODUCTION

The purpose of this noise analysis is twofold: (1) to evaluate the Project in terms of its design to ensure that it is appropriately planned from a noise perspective, and (2) to evaluate the noise impact of the Project on the surrounding (off-site) areas. Noise data and modeling conducted for the Project is contained within **Appendix 3.8** of this EIR.

### 3.8.1 FUNDAMENTALS OF NOISE AND VIBRATION

#### 3.8.1.1 Characteristics of Noise

Noise is usually defined as unwanted sound. Noise becomes unwanted when it interferes with normal activities, causes actual physical harm, or has adverse effects on health. The definition of “noise” as unwanted sound implies that it has an adverse effect on people and their environment.

Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). The human ear does not respond uniformly to sounds at all frequencies; it is less sensitive to low and high frequencies than to medium frequencies, which correspond with human speech. In response, the A-weighted noise level (or scale) has been developed. It corresponds better with people’s subjective judgment of sound levels. This A-weighted sound level is called the “noise level” and is referenced in units of dBA. Because noise is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in noise levels. However, changes in a noise level of less than 3 dBA are not typically noticed by the human ear.<sup>1</sup> A change from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise, and a 5.0 dBA increase is readily noticeable. The human ear perceives a 10 dBA increase in sound level as a doubling of sound.

On the A-weighted scale, the range of human hearing extends from approximately 3 to 140 dBA. **Table 3.8-1, A-Weighted Decibel Scale**, provides examples of A-weighted noise levels from common sources. Noise sources occur in two forms: (1) point sources, such as stationary equipment or individual motor vehicles; and (2) line sources, such as a roadway with a large number of point sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6 dBA for each doubling of distance from the source to the receptor at acoustically “hard” sites and 7.5 dBA at acoustically “soft”

---

<sup>1</sup> California Department of Transportation. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. 2013. Available online at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>, accessed February 23, 2023.

sites.<sup>2,3</sup> For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, the noise level would be 83 dBA at a distance of 100 feet from the noise source, 77 dBA at a distance of 200 feet, and so on. Noise generated by a mobile source will decrease by approximately 3 dBA over hard surfaces and 4.5 dBA over soft surfaces for each doubling of distance.<sup>4</sup>

**Table 3.8-1  
A-Weighted Decibel Scale**

Typical A-Weighted Sound Levels	Sound Level (dBA, Leq)
Threshold of Pain	140
Jet Takeoff at 100 Meters	125
Jackhammer at 15 Meters	95
Heavy Diesel Truck at 15 Meters	85
Conversation at 1 Meter	60
Soft Whisper at 2 Meters	35

Source: United States Occupational Safety & Health Administration, *Noise and Hearing Conservation Technical Manual*, 1999.

Sound levels also can be attenuated by man-made or natural barriers (e.g., sound walls, berms, and ridges), as well as elevational differences. Noise is most audible when traveling by direct line-of-sight, an uninterrupted visual path between the noise source and noise receptor. Barriers, such as walls or buildings that break the line-of-sight between the source and the receiver, can greatly reduce noise levels from the source since sound can only reach the receiver by diffraction. However, if a barrier is not high or long enough to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced.

Sound barriers typically reduce noise levels by 5 to 10 dBA, depending on factors such as their height and distance relative to the noise source and the noise receptor.<sup>5</sup> Sound levels may also be attenuated 3 dBA

<sup>2</sup> Federal Highway Administration. *Highway Traffic Noise: Analysis and Abatement Guidance*. 2011. Available online: [https://www.fhwa.dot.gov/environment/noise/regulations\\_and\\_guidance/analysis\\_and\\_abatement\\_guidance/revguidance.pdf](https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf), accessed February 23, 2023.

<sup>3</sup> Examples of “hard” or reflective sites include asphalt, concrete, and hard and sparsely vegetated soils. Examples of acoustically “soft” or absorptive sites include soft, sand, plowed farmland, grass, crops, heavy ground cover, etc.

<sup>4</sup> Federal Highway Administration. *Highway Traffic Noise: Analysis and Abatement Guidance*. 2011. Available online: [https://www.fhwa.dot.gov/environment/noise/regulations\\_and\\_guidance/analysis\\_and\\_abatement\\_guidance/revguidance.pdf](https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf), accessed February 23, 2023.

<sup>5</sup> Federal Highway Administration. *Highway Traffic Noise: Analysis and Abatement Guidance*. 2011. Available online: [https://www.fhwa.dot.gov/environment/noise/regulations\\_and\\_guidance/analysis\\_and\\_abatement\\_guidance/revguidance.pdf](https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf), accessed February 23, 2023.

by a first row of houses and 1.5 dBA for each additional row of houses.<sup>6</sup> The minimum noise attenuation provided by typical structures in California is provided in **Table 3.8-2, Building Noise Reduction Factors**.

**Table 3.8-2  
Building Noise Reduction Factors**

Building Type	Noise Reduction - dBA	
	Window Condition	Noise Reduction Due to Exterior of the Structure
All	Open	10
Light Frame	Ordinary Sash (Closed)	20
	Storm Windows	25
Masonry	Single Glazed	25
	Double Glazed	35

*Source: Federal Highway Administration, Highway Traffic Noise Analysis and Abatement Guidance. December 2011.*

### 3.8.1.2 Sound Rating Scales

Various rating scales approximate the human subjective assessment to the “loudness” or “noisiness” of a sound. Noise metrics have been developed to account for additional parameters, such as duration and cumulative effect of multiple events. Noise metrics are categorized as single event metrics and cumulative metrics, as summarized below.

In order to simplify the measurement and computation of sound loudness levels, frequency weighted networks have obtained wide acceptance. The A-weighted scale, discussed above, has become the most prominent of these scales and is widely used in community noise analysis. Its advantages are that it has shown good correlation with community response and is easily measured. The metrics used in this analysis are all based upon the dBA scale.

#### *Equivalent Noise Level*

Equivalent Noise Level (Leq) is the sound level corresponding to a steady-state A-weighted sound level containing the same total energy as several single event noise exposure level events during a given

<sup>6</sup> California Department of Transportation. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. 2013. Available online at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>, accessed February 23, 2023.

sample period. Leq is the “acoustic energy” average noise level during the period of the sample. It is based on the observation that the potential for noise annoyance is dependent on the total acoustical energy content of the noise. The equivalent noise level is expressed in units of dBA. Leq can be measured for any period, but is typically measured for 15 minutes, 1 hour, or 24 hours. Leq for a 1-hour period is used by the Federal Highway Administration (FHWA) for assessing highway noise impacts. Leq for 1 hour is referred to as the Hourly Noise Level (HNL) in the California Airport Noise Regulations and is used to develop Community Noise Equivalent Level values for aircraft operations. Construction noise levels and ambient noise measurements in this section use the Leq scale.

### ***Community Noise Equivalent***

Community Noise Equivalent Level (CNEL) is a 24-hour, time-weighted energy average noise level based on the A-weighted decibel. It is a measure of the overall noise experienced during an entire day. The term “time-weighted” refers to the penalties attached to noise events occurring during certain sensitive periods. In the CNEL scale, 5 dB are added to measured noise levels occurring between the hours of 7:00 p.m. and 10:00 p.m. For measured noise levels occurring between the hours of 10:00 p.m. and 7:00 a.m., 10 dB are added. These decibel adjustments are an attempt to account for the higher sensitivity to noise in the evening and nighttime hours and the expected lower ambient noise levels during these periods.

### ***Day-Night Average Noise Level***

The day-night average sound level (Ldn) is another average noise level over a 24-hour period. Noise levels occurring between the hours of 10:00 p.m. and 7:00 a.m. are increased by 10 decibels (dB). This noise is weighted to take into account the decrease in community background noise of 10 dBA during this period. Noise levels measured using the Ldn scale are typically similar to CNEL measurements.

#### **3.8.1.3 Adverse Effects of Noise Exposure**

Noise is known to have several adverse effects on humans, which has led to laws and standards being set to protect public health and safety, and to ensure compatibility between land uses and activities. Adverse effects of noise on people include hearing loss, communication interference, sleep interference, physiological responses, and annoyance. Each of these potential noise impacts on people is briefly discussed in the following narrative.

### *Hearing Loss*

Hearing loss is generally not a community noise concern, even near a major airport or a major freeway. The potential for noise-induced hearing loss is more commonly associated with occupational noise exposures in heavy industry, very noisy work environments with long-term exposure, or certain very loud recreational activities (e.g., target shooting and motorcycle or car racing). The Occupational Safety and Health Administration (OSHA) identifies a noise exposure limit of 90 dBA for 8 hours per day to protect from hearing loss (higher limits are allowed for shorter duration exposures). Noise levels in neighborhoods, even in very noisy neighborhoods, are not sufficiently loud enough to cause hearing loss.

### *Communication Interference*

Communication interference is one of the primary concerns in environmental noise. Communication interference includes speech disturbance and intrusion with activities such as watching television. Noise can also interfere with communications such as within school classrooms. Normal conversational speech is in the range of 60 to 65 dBA and any noise in this range or louder may interfere with speech.

### *Sleep Interference*

Noise can make it difficult to fall asleep, create momentary disturbances of natural sleep patterns by causing shifts from deep to lighter stages, and cause awakening. Noise may even cause awakening that a person may or may not be able to recall.

### *Physiological Responses*

Physiological responses are those measurable effects of noise on people that are realized as changes in pulse rate, blood pressure, and other physical changes. Studies to determine whether exposure to high noise levels can adversely affect human health have concluded that, while a relationship between noise and health effects seems plausible, there is no empirical evidence of the relationship.

### *Annoyance*

Annoyance is an individual characteristic and can vary widely from person to person. Noise that one person considers tolerable can be unbearable to another of equal hearing capability. The level of annoyance depends both on the characteristics of the noise (including loudness, frequency, time, and duration), and how much activity interference (such as speech interference and sleep interference) results from the noise. However, the level of annoyance is also a function of the attitude of the receiver. Personal sensitivity to noise varies widely. Attitudes may also be affected by the relationship between the person affected and the source of noise, and whether attempts have been made to abate the noise.

### 3.8.1.4 Characteristics of Vibration

Vibration consists of waves transmitted through solid material. Groundborne vibration propagates from a source through the ground to adjacent buildings by surface waves. Vibration may comprise a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating and is measured in hertz (Hz). Most environmental vibrations consist of a composite, or “spectrum” of many frequencies, and are generally classified as broadband or random vibrations. The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than one Hz to a high of about 200 Hz. Vibration is often measured in terms of the peak particle velocity (PPV) in inches per second (in/sec) when considering impacts on buildings or other structures, as PPV represents the maximum instantaneous peak of vibration that can stress buildings. Because it is a representation of acute vibration, PPV is often used to measure the temporary impacts of short-term construction activities that could instantaneously damage built structures. Vibration is often also measured by the Root Mean Squared (RMS) because it best correlates with human perception and response. Specifically, RMS represents “smoothed” vibration levels over an extended period of time and is often used to gauge the long-term chronic impact of a project’s operation on the adjacent environment. RMS amplitude is the average of a signal’s squared amplitude. It is most commonly measured in decibel notation (VdB).

Vibration energy attenuates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High frequency vibrations reduce much more rapidly than low frequencies, so that in the far-field from a source, the low frequencies tend to dominate. Soil properties also affect the propagation of vibration. When groundborne vibration interacts with a building, there is usually a ground-to-foundation coupling loss (i.e., the foundation of the structure does not move in sync with the ground vibration), but the vibration can also be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows or items on shelves, or the motion of building surfaces. At high levels, vibration can result in damage to structures.

Manmade groundborne vibration is generally limited to areas within a few hundred feet of certain types of construction activities, especially pile driving. Road vehicles rarely create enough groundborne vibration to be perceptible to humans unless the road surface is poorly maintained and there are potholes or bumps. If traffic induces perceptible vibration in buildings, such as window rattling or shaking of small loose items (typically caused by heavy trucks in passing), then it is most likely an effect of low-frequency airborne noise or ground characteristics. Human annoyance by vibration is related to the number and duration of events. The more events or the greater the duration, the more annoying it will be to humans.



## 3.8.2 ENVIRONMENTAL SETTING

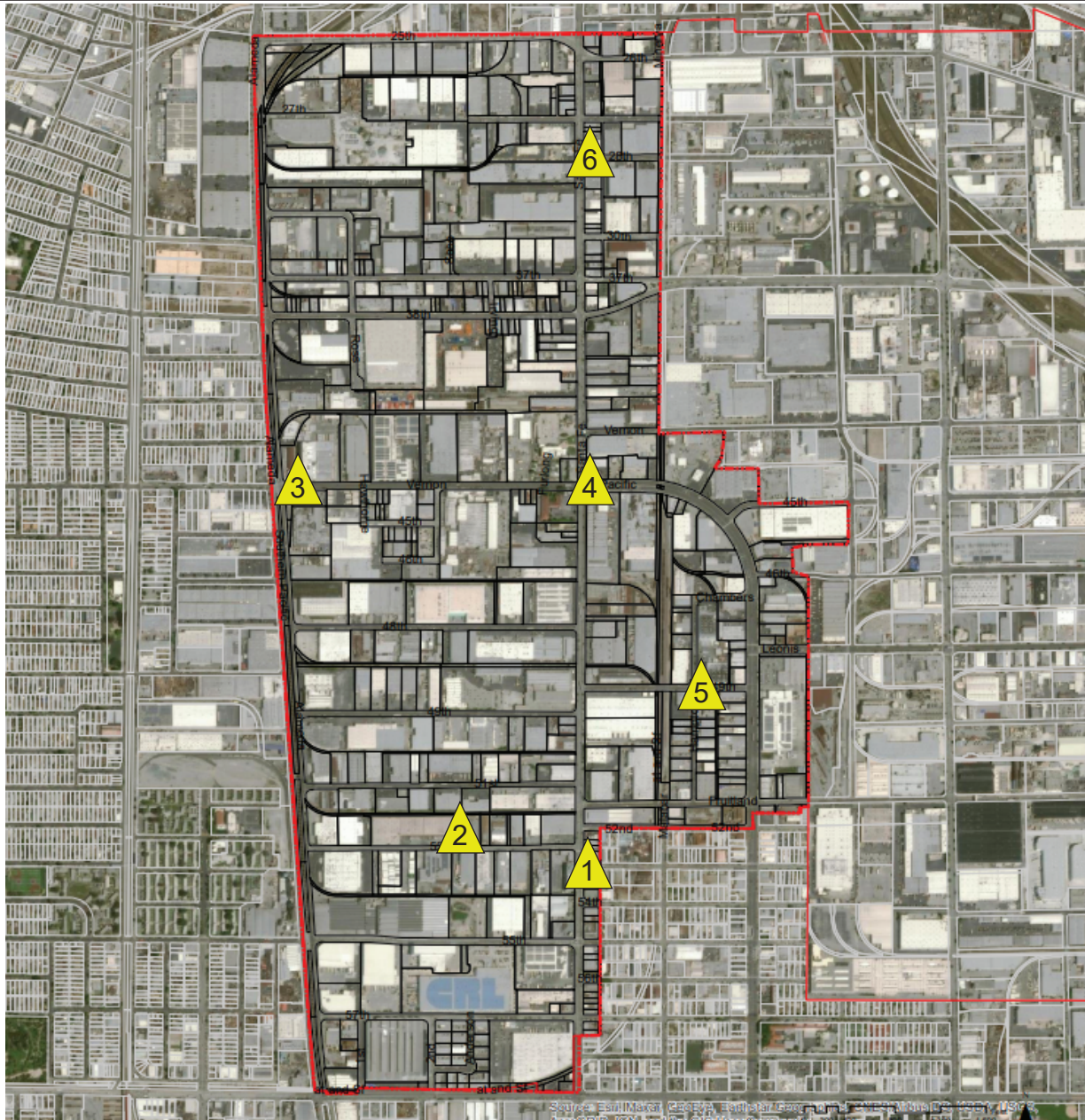
### 3.8.2.1 Existing Ambient Noise Levels

To establish baseline noise conditions, existing noise levels were monitored at six locations within the Project Area. The locations of the noise measurements are depicted in **Figure 3.8-1, Noise Measurement Locations**. The noise survey was conducted in August 2022 using the Larson Davis SoundTrack LxT (Type 1) sound level meter, which conforms to industry standards set forth in ANSI S1.4-1983 (R2006) – Specification for Sound Level Meters/Type 1. This instrument was calibrated and operated according to the manufacturer’s written specifications. At the measurement sites, the microphone was placed at a height of approximately five feet above grade. The results of the measurements are summarized in **Table 3.8-3, Existing Noise Levels in the Project Area**. As shown in **Table 3.8-3**, the daytime ambient noise levels ranged from 63.1 dBA Leq to 76.1 dBA Leq in the Project Area.

**Table 3.8-3  
Existing Noise Levels in the Project Area**

Noise Monitoring Locations	Primary Noise Sources	Noise Levels (dBA)		
		Leq	Lmin	Lmax
1. Santa Fe Ave./53 <sup>rd</sup> St.	Traffic	73.4	57.2	83.4
2. 2315 E. 52 <sup>nd</sup> St.	Traffic, trucking	66.2	55.9	82.6
3. Vernon Ave./Alameda St.	Traffic	76.1	61.1	90.5
4. Santa Fe Ave./Vernon Ave and Pacific Blvd.	Traffic	75.1	62.8	91.7
5. 49 <sup>th</sup> St./Hampton St.	Traffic	63.1	52.5	80.9
6. Santa Fe Ave./28 <sup>th</sup> St.	Traffic	73.3	56.3	85.6

Source: Impact Sciences, Inc., August 2022. See Appendix 3.8 – Noise and Vibration Technical Data.



SOURCE: Google Earth, 2020

FIGURE 3.8-1

Noise Measurement Locations

### 3.8.2.2 Existing Modeled Roadway Noise Levels

Existing roadway noise levels were calculated for primary roadway segments located throughout the Project Area. The roadways selected are representative of the segments that would be most impacted by an increase in traffic according to the Project's Traffic Impact Analysis included as **Appendix 3.11** to this Draft EIR.

Calculations of the existing roadway noise levels are based on the Federal Highway Administration Highway Noise Prediction Model (FHWA-RD-77-108) and traffic volumes from the Project's Traffic Impact Analysis.<sup>7</sup> The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data show that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along study area roadway segments are presented in **Table 3.8-4, Existing Roadway Noise Levels**.

**Table 3.8-4  
Existing Roadway Noise Levels**

Roadway	Roadway Segment	Predominant Existing Land Use Along Segment	dBA CNEL
Santa Fe. Ave	North of Vernon Ave.	Institutional, Industrial	70.7
	South of Vernon Ave.	Institutional, Industrial	69.7
Vernon Ave.	West of Alameda St.	Commercial	65.4
	Between Alameda St. & Santa Fe Ave.	Industrial	68.9
Pacific Blvd.	East of Santa Fe Ave.	Industrial	69.0
Alameda St. (west)	North of Vernon Ave.	Commercial	69.6
	South of Vernon Ave.	Commercial	69.2
Alameda St. (east)	North of Vernon Ave.	Industrial	62.2
	South of Vernon Ave.	Industrial	61.4
55 <sup>th</sup> St.	East of Alameda St.	Industrial	64.7

Source: Impact Sciences, February 2023. See Appendix 3.8. Traffic data: Traffic information from Traffic Impact Analysis, see Appendix 3.11.

<sup>7</sup> See **Appendix 3.8** for roadway noise calculations.

### 3.8.2.3 Existing Groundborne Vibration

The primary sources of groundborne vibration in the Project Area are heavy-duty vehicles (e.g., refuse trucks, delivery trucks, and school buses) traveling on local roadways, particularly along Santa Fe Avenue. Trucks and buses typically generate groundborne vibration velocity levels of around 63 VdB, and these levels could reach 72 VdB where trucks and buses pass over bumps in the road.<sup>8</sup> Other sources of groundborne vibration include trains running along the Alameda Corridor on the Project Area's western boundary and heavy industrial uses throughout the Project Area.

### 3.8.2.4 Noise Sensitive Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. Noise-sensitive receptors within the Project Area include residential uses, schools, and medical facilities.

## 3.8.3 REGULATORY FRAMEWORK

### 3.8.3.1 Federal Laws and Regulations

Currently, no federal noise standards regulate environmental noise associated with short-term construction or the long-term operations of development projects.

#### *Federal Transit Administration Vibration Guidance*

The Federal Transit Administration (FTA) has published guidance relative to vibration impacts. Construction vibration damage criteria are assessed based on structural category (e.g., reinforced-concrete, steel, or timber). The Federal Transit Administration (FTA) guidelines consider 0.2 inch/sec PPV to be the significant impact level for non-engineered timber and masonry buildings. Structures or buildings constructed of reinforced concrete, steel, or timber have a vibration damage criterion of 0.5

---

<sup>8</sup> California Department of Transportation. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. 2013. Available online at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>, accessed February 23, 2023.

inch/sec PPV pursuant to FTA guidelines.<sup>9</sup> The FTA guidelines include a table showing the vibration damage criteria based on structural category and is presented below in **Table 3.8-5, Construction Vibration Damage Criteria**.

**Table 3.8-5  
Construction Vibration Damage Criteria**

Building/Structural Category	PPV, in/sec
I. Reinforced-concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

*Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual. September 2018.*

The FTA has also adopted standards associated with human annoyance for determining the groundborne vibration and noise impacts from ground-borne noise on the following three off-site land-use categories: Vibration Category 1 – High Sensitivity, Vibration Category 2 – Residential, and Vibration Category 3 – Institutional.<sup>10</sup> The FTA defines Category 1 as buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations. Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes. Category 2 refers to all residential land uses and any buildings where people sleep, such as hotels and hospitals. Category 3 refers to institutional land uses such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment but that still potentially involve activities that could be disturbed by vibration. The vibration thresholds associated with human annoyance for these three land-use categories are shown in **Table 3.8-6, Groundborne Vibration and Groundborne Noise Impact Criteria for General Assessment**. No thresholds have been adopted or recommended for commercial or office uses.

<sup>9</sup> Federal Transit Administration. *Transit Noise and Vibration Impact Assessment Manual*. 2018. Available online at: [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](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), accessed February 23, 2023.

<sup>10</sup> Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, Table 6-1, page 124, 2018.

**Table 3.8-6  
Groundborne Vibration and Groundborne Noise Impact Criteria for General Assessment**

Land Use Category	Frequent Events <sup>a</sup>	Occasional Events <sup>b</sup>	Infrequent Events <sup>c</sup>
<b>Category 1:</b> Buildings where vibration would interfere with interior operations.	65 VdB <sup>d</sup>	65 VdB <sup>d</sup>	65 VdB <sup>d</sup>
<b>Category 2:</b> Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
<b>Category 3:</b> Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB

*a* "Frequent Events" is defined as more than 70 vibration events of the same source per day.

*b* "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

*c* "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day.

*d* This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes.

Source: FTA, Transit Noise and Vibration Impact Assessment Manual, 2018.

### 3.8.3.2 State Laws and Regulations

#### *Title 24, California Code of Regulations*

The California Noise Insulation Standards of 1988 (California Code of Regulations Title 24, Section 3501 et seq.) require that interior noise levels from the exterior sources not exceed 45 dBA Ldn/community noise equivalent level (CNEL)<sup>11</sup> in any habitable room of a multi-residential use facility (e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses and other dwellings, except detached single-family dwellings) with doors and windows closed. Where exterior noise levels exceed 60 dBA CNEL/Ldn, an acoustical analysis is required to show that the building construction achieves an interior noise level of 45 dBA CNEL/Ldn or less.

#### *Caltrans Vibration/Groundborne Noise Standards*

The State of California has not adopted Statewide standards or regulations for evaluating vibration or groundborne noise impacts from land use development projects such as the Project. Although the State has not adopted any vibration standard, Caltrans in its Transportation and Construction Vibration Guidance Manual (Caltrans 2020) recommends the following vibration thresholds that are more practical than those provided by the FTA.

<sup>11</sup> Measurements are based on Ldn or CNEL.

The state noise and vibration guidelines are to be used as guidance with respect to planning for noise, not standards and/or regulations to which the City must adhere.

**Table 3.8-7  
Guideline Vibration Damage Potential Threshold Criteria**

Structure and Condition	Maximum PPV (inch/sec)	
	Transient Sources <sup>1</sup>	Continuous/Frequent Intermittent Sources <sup>2</sup>
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Source: Table 19, *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020).

<sup>1</sup> Transient sources create a single, isolated vibration event, such as blasting or drop balls.

<sup>2</sup> Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

### 3.8.3.3 Local Plans and Policies

#### *City of Vernon General Plan Noise Element*

The following goals and policies of the *City of Vernon General Plan* are applicable to the Project.<sup>12</sup>

**Goal N-1.** Reduce impacts from transportation noise sources to the extent they may affect industrial businesses.

**Policy N-1.1.** Encourage the effective enforcement of local, state, and federal noise levels by all appropriate City divisions.

<sup>12</sup> City of Vernon. *City of Vernon General Plan – Noise Element*. 2015. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/1306/637635880850570000>, accessed February 23, 2023.

**Policy N-1.3.** Minimize adverse noise effects on new residential developments through carefully planned site design and construction approaches that limit noise intrusion, wherever practical.

**Goal N-2.** Incorporate noise and vibration considerations into land use planning decisions.

**Policy N-2.1.** Consider the noise levels likely to be produced by any new businesses or substantially expanded business activities locating near existing noise-sensitive uses such as schools, community facilities, and residences, as well as adjacent to established businesses involving vibration-sensitive activities.

**Policy N-2.2.** Encourage acoustical design in all new construction.

**Policy N-2.3.** Prohibit the establishment of new noise-sensitive land uses in Vernon, including but not limited to schools, day-care facilities, and community facilities. Permit new residential uses only within the Housing Overlay District and require new developments to incorporate appropriate noise attenuation to achieve City noise standards.

**Goal N-3.** Develop measures to control non-transportation noise and similar impacts.

**Policy N-3.1.** Continue to enforce the noise and vibration performance standards in the City Code to mitigate conflicts among neighboring uses.


**Policy N-3.2.** Establish and maintain coordination among City agencies involved in noise abatement.


In addition to the listed policies, the City's *General Plan* includes a land use compatibility matrix as a guide for noise standards. **Table 3.8-8, Land Use Compatibility Standards**, shows the noise level standards for various land uses throughout the City, as shown in the City's *General Plan Noise Element*.





**Table 3.8-8  
Land Use Compatibility Standards**

Land Use Category	Community Noise Exposure (dB, L <sub>dn</sub> or CNEL)					
	55	60	65	70	75	80
Residential - Multiple-family, Duplex						
Schools, Churches						
Office Building, Research & Development, Professional Offices, City Building Office						
Commercial, Retail, Banks, Restaurants						
Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities						
Agriculture						

 Clearly Compatible – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements

 Normally Compatible – New construction or development should be undertaken only after detailed analysis of the noise reduction requirements is made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

 Normally Incompatible – New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

 Clearly Incompatible – New construction or development should generally not be undertaken.

*\*Please note that these guidelines are general and may not apply to specific sites.  
Source: California General Plan Guidelines. City of Vernon General Plan Noise Element (Figure N-3).*

**City of Vernon Municipal Code**

Section 17.24.070 of the Vernon Municipal Code (VMC) establishes development standards, including noise standards which regulates the allowable exterior noise. Noise standards for noise zones in the City are set forth in **Table 3.8-9, Vernon Municipal Code Noise Standards.**

**Table 3.8-9  
Vernon Municipal Code Noise Standards**

Noise Zone	Time	Allowable Exterior Noise
Lots located within 1/10 of a mile of any residence or school located in Vernon or abutting communities.	10:00 P.M. to 7:00 A.M.	60 dBA
	7:00 A.M. to 10:00 P.M.	65 dBA
All other lots	Any time	75 dBA

Source: VMC, Table 17.24.070.

Section 17.24.070 (B)(2)(b) further states:

*No person, in any location within the City, shall create any noise, or allow the creation of noise, on any lot owned, leased, occupied or otherwise controlled by such person which causes the cumulative noise level when measured at any point along the lot line of the lot on which the source of the noise is located to exceed:*

- i. The applicable noise standard for a cumulative period of more than 30 minutes in any hour; or*
- or*
- ii. The applicable noise standard plus five dBA for a cumulative period of more than 15 minutes in any one hour; or*
- iii. The applicable noise standard plus 10 dBA for a cumulative period of more than five minutes in any hour; or*
- iv. The applicable noise standard plus 15 dBA for a cumulative period of more than one minute in any hour.*

Section 17.24.070 (B)(2)(c) states:

*In the event the ambient noise level exceeds any of the noise limit categories set forth in subsection (B)(2)(b) of this section, the cumulative period applicable to such category shall be increased to reflect the ambient noise level, plus five dBA.*

Section 17.24.070 (B)(2)(f) states:

*Any noise source in excess of the standards set forth herein shall be permitted only with a Conditional Use Permit.*

### **3.8.4 THRESHOLDS OF SIGNIFICANCE**

Pursuant to Appendix G of the *State CEQA Guidelines*, potentially significant impacts would occur if the Project would 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.
- Generation of excessive groundborne vibration or groundborne noise levels.
- 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.

The *CEQA Guidelines* do not provide a definition for “substantial increase” of noise and they do not provide a threshold of significance for potential noise or vibration impacts. Therefore, the following discussion explains the application of thresholds of significance developed for this noise analysis based upon the regulatory standards, General Plan Noise Element, and VMC as discussed previously in this EIR section. These thresholds apply to both Project impacts and cumulative impacts.

The City has not adopted or established quantitative standards specific to construction noise. However, the Vernon Municipal Code Section 17.24.070 (B)(2)(b) provides noise limits and includes time intervals which have been used herein to illustrate the potential scope of construction noise levels under the Project. Although the noise standards identified in VMC Section 17.24.070 are not specifically intended to regulate construction noise, this analysis has conservatively applied these standards to determine if construction noise generated by forecast development under the Project would be potentially significant.

The Project would have a significant impact on noise levels from operations if permanent ambient noise level measured at the property line of affected uses increases by 3 dBA CNEL to or within the “normally incompatible” or “clearly incompatible” categories, as shown in **Table 3.8-8, Land Use Compatibility Standards**, or any 5 dBA CNEL or more increase in noise level.

Caltrans provides groundborne vibration impact criteria with respect to building damage during construction activities (see **Table 3.8-7, Guideline Vibration Damage Potential Threshold Criteria**). PPV, expressed in inches per second, is used to measure building vibration damage. Construction vibration damage criteria are assessed based on structural condition (e.g., fragile, historic, modern, etc.). The guidelines consider 0.08 inch/sec PPV to be the criteria for extremely fragile historic buildings, 0.10 inch/sec PPV for fragile buildings, 0.25 inch/sec PPV for historic and some old buildings, 0.30 inch/sec PPV for older residential structures, 0.50 inch/sec PPV for new residential buildings and modern industrial or commercial buildings.

The FTA also provides human annoyance criteria for groundborne vibrations (see **Table 3.8-6, Groundborne Vibration and Groundborne Noise Impact Criteria for General Assessment**). These criteria utilize the root mean square (RMS) velocity to describe human response measured using vibration decibels (VdB). The FTA criteria include 72 VdB at residences and buildings where people normally sleep for frequent events and 75 VdB at institutional buildings such as schools or churches for frequent events. No criteria for human annoyance have been adopted or recommended for commercial and office uses.

### 3.8.5 METHODOLOGY

#### Construction Noise

The primary source of temporary noise associated with the Project would be construction activities associated with the forecasted development in the Project Area. The Project would focus future development along Santa Fe Avenue within designated mixed-use zones located in the center of the Project Area. Construction would typically involve several stages, including demolition, site preparation, grading, building construction, architectural coating, and paving. Noise generated by construction equipment can vary in intensity and duration during each phase of construction. While construction in the Project Area would occur over several years (the planning horizon year for the Project is 2040), the actual location from which construction noise would be generated would shift as different areas are developed.

The Federal Highway Administration's Roadway Construction Noise Model (RCNM) was used to estimate the equipment noise levels at distances of 50 feet, 100 feet, and 500 feet for each phase of construction. This model predicts noise levels based on the expected construction equipment in each phase of construction, empirical data for noise generated by this equipment, the expected usage of equipment during each workday, and formulas to estimate sound attenuation from source to receiver. Equipment used and number of each piece of equipment during construction was obtained from Appendix G, Default Data Tables of the CalEEMod User Guide for each construction phase.<sup>13</sup> Construction noise levels would attenuate at a rate of approximately 6 dBA per doubling of distance (line-of-sight method of sound attenuation for point sources of noise). Ground absorption adds to the attenuation from distance alone. The analysis does not account for attenuation from intervening structures between construction equipment and receivers and/or for soft-site attenuation.

---

<sup>13</sup> California Air Pollution Control Officers Association (CAPCOA). *California Emissions Estimator Model (CalEEMod) User's Guide Appendix G – Default Data Tables*. 2022. Available at: <https://www.caleemod.com/user-guide>, accessed February 23, 2023.

## Operational Noise

The land use and noise compatibility guidelines in the Noise Element are not adopted standards relevant to determining the significance of incremental increases in permanent noise levels. Instead, the City's Noise Element includes criteria or general guidance (shown above in **Table 3.8-8**) associated with incremental increases in noise. **Table 3.8-8** is intended to guide determination of appropriate land use and mitigation measures related to existing or anticipated ambient noise levels. This guidance is useful in determining if a land use is compatible with the existing noise environment (i.e., identifying the impact of the environment on a project) but is not useful alone for assessing if a project would significantly increase noise levels compared to existing conditions. This is particularly true in urban environments like the Project Area, where existing noise levels often exceed the guidelines shown in **Table 3.8-8**. In addition, sound transmission control requirements are included in the International Building Code, which are the basis for the California Building Standards Code (CCR Title 24). Section 1207.4 of CCR Title 24 provides noise insulation standards. The standards require that intrusive noise not exceed 45 dB in any habitable room.

## Groundborne Vibration

Construction activities have the greatest potential to generate groundborne vibration affecting nearby receivers. Since groundborne vibration could cause physical damage to structures, vibration impacts were modeled based on the distance from the location of vibration-intensive construction activities, conservatively assumed to be at edge of a development area to the edge of nearby structures. Due to the anticipated construction in the Project Area, this analysis conservatively assumes that construction would potentially occur as close as 25 feet from vibration-sensitive structures.

### 3.8.6 ENVIRONMENTAL IMPACTS

**Impact NOI-1                      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.**

## Construction Noise

Construction activities under the Project would result in temporary increases in ambient noise in the Project Area on an intermittent basis and, as such, would expose nearby sensitive receivers both in and adjacent to the Project Area to increased noise levels. The increase in noise at off-site receivers during construction would be temporary in nature and would not generate continuously high noise levels,

although occasional single-event disturbances from construction would occur. Construction noise would typically be higher during the heavier periods of initial construction (i.e., demolition and grading work) and reduced in the later construction phases (i.e., interior building construction) because the physical structure of the building would break line-of-sight noise transmission from the construction area to the nearby sensitive receivers. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receivers, and presence or absence of intervening structures, terrain, or other noise attenuation barriers.

**Table 3.8-10, Estimated Construction Noise Levels by Phase**, shows the maximum expected noise levels at distances of 50, 100, and 500 feet from construction equipment, based on the combined use of equipment anticipated to be used concurrently during demolition, site preparation, grading, building construction, paving, and architectural coating.

**Table 3.8-10  
Estimated Construction Noise Levels by Phase**

Construction Phase	Equipment	Estimated Construction Noise Level (dBA Leq)		
		50 feet	100 feet	500 feet
Demolition	Dozer, Concrete Saw, Tractor, Front End Loader	85.7	79.7	65.7
Site Preparation	Grader, Tractor	83.6	77.5	63.6
Grading	Dozer, Tractor, Grader	84.6	78.5	64.6
Building Construction	Crane, Backhoes (2), Tractors (2)	84.2	78.2	64.2
Architectural Coating	Air Compressors	73.7	67.7	53.7
Paving	Paver, Drum Mixers (4), Roller, Backhoe	84.3	78.3	64.3

*Source: Impact Sciences, February 2023. See Appendix 3.8 for equipment noise data sheets and assumptions.*

As shown in **Table 3.8-10, Estimated Construction Noise Levels by Phase**, construction activity would generate noise levels up to an estimated 85.7 dBA Leq for sensitive receptors located 50 feet from construction activities. As such, temporary construction noise would exceed existing ambient noise levels measured throughout the Project Area, which were measured between 63.1 dBA Leq to 76.1 dBA Leq (see **Table 3.8-3, Existing Noise Levels in the Project Area**). The construction noise levels identified in **Table 3.8-10** would also have the potential to conflict with the noise standards identified in VMC Section 17.24.070, including 65 dBA for lots located Lots located within 1/10 of a mile of any residence or school and 75 dBA for all other lots. However, it should be noted that these estimates are conservative because they assume no attenuation of noise by intervening structures and assume construction activity would occur as close as 50 feet to sensitive receptors. As individual project applications are processed under the

Project, project-specific design features and mitigation measures would be considered on a case-by-case basis to reduce construction noise levels to the maximum extent feasible (see **Mitigation Measures NOI-1** and **NOI-2**). Nevertheless, as temporary construction noise would exceed existing ambient noise levels and have the potential to conflict with the noise standards identified in VMC Section 17.24.070, this impact is considered potentially significant.

### *Significance Before Mitigation*

Impacts associated with construction noise would be potentially significant.

### *Mitigation Measures*

**NOI-1** During case-by-case review of individual projects, the City shall consider the application of the following strategies to reduce construction noise levels to the maximum extent feasible:

- **Mufflers.** Construction equipment shall be properly maintained and all internal combustion engine driven machinery with intake and exhaust mufflers and engine shrouds, as applicable, shall be in good condition and appropriate for the equipment. During construction, all equipment, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers, consistent with manufacturers' standards.
- **Electrical Power.** Electrical power, rather than diesel equipment, shall be used to run compressors and similar power tools and to power any temporary structures, such as construction trailers or caretaker facilities.
- **Equipment Staging.** All stationary equipment shall be staged as far away from the adjacent sensitive receptors as feasible.
- **Equipment Idling.** Construction vehicles and equipment shall not be left idling for longer than five minutes when not in use.
- **Workers' Radios.** All noise from workers' radios shall be controlled to a point that they are not audible at sensitive receptors near construction activity.
- **Smart Back-up Alarms.** Mobile construction equipment shall have smart back-up alarms that automatically adjust the sound level of the alarm in response to ambient noise levels. Alternatively, back-up alarms shall be disabled and replaced with

human spotters to ensure safety when mobile construction equipment is moving in the reverse direction.

- **Disturbance Coordinator.** Project applicants shall designate a disturbance coordinator who shall be responsible for responding to any local complaints about construction noise. The noise disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and identify remedies to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site.

**NOI-2:** During case-by-case review of individual projects, the City shall consider the application of the following strategy to reduce construction noise levels to the maximum extent feasible:

- **Temporary Sound Barriers.** For construction activities located directly adjacent to sensitive receivers (e.g., residences, schools), temporary sound barriers shall be installed and maintained by the construction contractor between the construction site and adjacent receivers during the demolition, site preparation, grading phases, and building phases of construction. Temporary sound barriers shall consist of either sound blankets or other sound barriers/techniques such as acoustic padding or acoustic walls placed near adjacent residential buildings that have been field-tested to reduce noise. Barriers shall be placed such that the line-of-sight between noise-generating construction equipment and adjacent sensitive land uses is blocked and shall be placed as close to the source equipment as feasible. As an alternative, applicants may prepare a Noise Study that demonstrates construction noise would not exceed ambient noise levels at nearby sensitive resources. The Noise Study shall incorporate best management practices and other noise reduction measures to reduce noise levels.

### ***Significance After Mitigation***

While **Mitigation Measures NOI-1** and **NOI-2** would reduce construction noise impacts associated with the Project, subsequent development projects would still have the potential to exceed ambient noise levels and conflict with noise standards identified in VMC Section 17.24.020. Impacts would be considered significant and unavoidable.



## Operational Noise

### *Traffic Noise*

The Project would increase the number of vehicle trips within the Project Area which would increase traffic noise on roadways in the vicinity. To determine whether the Project would create traffic noise resulting in a significant noise increase, existing and potential future noise levels were calculated based on the FHWA Traffic Noise Model consistent with the Project Traffic Impact Analysis (see **Appendix 3.11**).

Roadway noise impacts were assessed on primary roadway segments within the Project Area. The noise increases between the Existing, Future Without Project, and Future With Project scenarios are shown in **Table 3.8-11, Project Traffic Noise**.

**Table 3.8-11  
Project Traffic Noise**

Roadway	Roadway Segment	dBA CNEL				
		Existing	Future Without Project	Future With Project	Project Increase/Decrease (Compared to Future Without Project)	Project Increase/Decrease (Compared to Existing)
Santa Fe Ave.	North of Vernon Ave.	70.7	70.8	71.2	0.4	0.5
	South of Vernon Ave.	69.7	69.7	70.3	0.6	0.6
Vernon Ave.	West of Alameda St.	65.4	65.5	65.6	0.1	0.2
	Between Alameda St.	68.9	68.9	69.3	0.4	0.4
Pacific Blvd.	East of Santa Fe Ave.	69.0	69.0	69.5	0.5	0.5
Alameda St. (west)	North of Vernon Ave.	69.6	69.6	69.8	0.2	0.2
	South of Vernon Ave.	69.2	69.3	69.4	0.1	0.2
Alameda St. (east)	North of Vernon Ave.	62.2	62.3	62.6	0.3	0.4
	South of Vernon Ave.	61.4	61.5	61.8	0.3	0.4
55 <sup>th</sup> St.	East of Alameda St.	64.7	64.8	64.9	0.1	0.2

Sources: Impact Sciences, February 2023. Traffic count information from Traffic Impact Analysis (Appendix 3.11). See Appendix 3.8 for noise calculations.

As shown in **Table 3.8-11, Project Traffic Noise**, the future noise levels with implementation of the Project would increase local traffic noise levels by a maximum of 0.6 dBA CNEL along Santa Fe Avenue, south of Vernon Avenue compared to future without Project conditions (i.e., Project-level increase; see ‘Cumulative Impacts’ for a discussion on cumulative noise level increases compared to existing conditions). As discussed previously, operational noise level increases would be significant if ambient noise levels increase by 3 dBA CNEL to or within the “normally incompatible” or “clearly incompatible”

categories, as shown previously in **Table 3.8-8, Land Use Compatibility Standards**, or any 5 dBA CNEL or more increase. As shown in **Table 3.8-11**, no roadway segments would experience noise level increases that exceed either the 3 dBA CNEL threshold or 5 dBA CNEL threshold. Therefore, traffic noise levels would not exceed the applicable thresholds of significance and this impact would be less than significant.

### Significance Before Mitigation

Impacts associated with traffic noise would be less than significant.

### Mitigation Measures

No mitigation measures are required.

### Significance After Mitigation

Less than Significant Impact.

### On-Site Noise

Operation of the Project would generate on-site noise from HVAC equipment, delivery trucks, trash hauling trucks, and typical noise associated with urban environments, specifically from industrial uses. Noise from HVAC equipment serving new development in the Project Area would typically generate noise in the range of 60 to 70 dBA Leq at a reference distance of 15 feet from the source.<sup>14</sup> Noise-sensitive receivers would typically be located at least 50 feet from the nearest HVAC equipment, and noise from HVAC equipment would attenuate at a rate of approximately 6 dBA per doubling of distance from the source (i.e., 50 to 60 dBA Leq at 50 feet). As shown in **Table 3.8-3, Existing Noise Levels in the Project Area**, ambient noise levels in the Project Area were measured between 63.1 dBA Leq to 76.1 dBA Leq. Based on estimated noise levels between 50 to 60 dBA Leq at 50 feet for HVAC equipment, noise levels from such equipment in the Project Area would not exceed ambient noise levels or noise standards as regulated per Section 17.24.070 of the VMC (see **Section 3.8.3, Regulatory Framework**, above). Furthermore, HVAC units are traditionally rooftop-mounted and shielded from surrounding land uses, and roofs that block line-of-sight to sensitive receivers would further attenuate noise. Therefore, operational noise impacts associated with HVAC equipment would be less than significant.

Other operational noise sources associated with on-site vehicle circulation include delivery trucks and trash-hauling trucks. The average noise level for a single idling truck is generally 85 dBA at a distance of

---

<sup>14</sup> Illingworth & Rodkin. *Environmental Noise Assessment for Wal-Mart Expansion, Williamson Ranch Plaza – Antioch, California*. Available at: <https://www.antiochca.gov/fc/community-development/planning/Walmart/DEIR-VOLII-APPENDICES-C-H/Appendix%20G%20Noise%20Assessment.pdf>, accessed February 23, 2023.

50 feet.<sup>15</sup> However, noise associated with commercial and trash-hauling trucks would be intermittent and currently occur in the Project Area and surrounding environment due to existing industrial and commercial uses that make up much of the developed urban area. Operational noise impacts associated with delivery and trash-hauling trucks would be less than significant.

Noise associated with future residential and outdoor noise sources under the Project would generally consist of conversations, music, and light recreation. The Project would target development along Santa Fe Avenue, which may include a variety of potential noise source uses such as restaurants, retail, food halls, markets, and production-retail uses among others. However, any uses would be required to comply with Section 17.24.070 of the VMC which sets noise standards in the City. When a property is located within 1/10 of a mile from a residences or school, the allowable exterior noise is 60 dBA between the hours of 10:00 p.m. and 7:00 a.m. and 65 dBA between 7:00 a.m. and 10:00 p.m. These VMC regulations would apply to all operational noise sources associated with outdoor gathering spaces and recreational uses which could occur as a result of the Project. Operational noise impacts associated with residential and outdoor noise sources in the Project Area would be less than significant.

### **Significance Before Mitigation**

Impacts associated with on-site noise would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

### **Significance After Mitigation**

Less than Significant Impact.

### ***Land Use Compatibility***

While agencies subject to CEQA are not required to analyze or mitigate the impact of existing environmental conditions on a project's future users or residents, the following discussion associated with the placement of future residences within the Project Area is included for informational purposes. **Table 3.8-11, Project Traffic Noise**, indicates existing and future noise levels in the Project Area could reach 70.7 and 71.2 dBA CNEL along Santa Fe Avenue, respectively. As such, future residences within the Project Area could experience exterior noise levels that are considered incompatible unless design

---

<sup>15</sup> Federal Highway Administration. *Reviewing Noise Analysis, Figure 1-1: Common Sound Levels*. Available online at: [https://www.fhwa.dot.gov/Environment/noise/resources/reviewing\\_noise\\_analysis/#toc494122595](https://www.fhwa.dot.gov/Environment/noise/resources/reviewing_noise_analysis/#toc494122595), accessed February 23, 2023.

measures are identified to reduce interior noise levels to acceptable levels. With respect to acceptable interior noise levels, consistent with State and City standards, all habitable spaces associated with the Project would be required to provide indoor noise levels of 45 dBA CNEL or less. Exterior-to-interior noise reduction of newer residential buildings can reach more than 30 dBA depending on the type of building materials and methods used. This is based in part on mandatory compliance with CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, which requires substantial building insulation, improving exterior-to-interior noise reductions. As exterior noise levels along Santa Fe Avenue could reach up to 71.2 dBA CNEL, exterior-to-interior noise reductions from current construction standards could reduce interior noise levels to approximately 41.2 dBA CNEL, ensuring the Project is consistent with interior noise level standards. Additionally, during case-by-case review of individual development applications, the City may request project applicants to provide additional project-specific information to demonstrate proposed residences would meet the required interior 45 dBA CNEL standard. The Project would also implement key development features and requirements for future development within areas that are zoned as mixed-use. These features are intended to minimize potential conflicts between residential or live/work uses and on-site or neighboring uses. **Table 2.0-1, Key Development Features and Regulations, in Section 2.0 (Project Description)** summarizes the development standards for future development within each proposed zone. Most notably, the Project would minimize exposure to ambient noise levels through the use of setbacks, buffering and orientation, building and performance requirements, and unit design.

---

**Impact NOI-2                      Generation of excessive groundborne vibration or groundborne noise levels.**

The busy building period of the 1920s and 1930s produced several structures and brick buildings that can be found throughout the City. Consequently, numerous properties are of historic age and have the potential to qualify as historical resources as defined by CEQA. Impacts associated with historical resources are discussed in **Section 3.3, Cultural Tribal Cultural, and Paleontological Resources**. Due to their age and structural integrity, historic buildings are sometimes classified as extremely fragile, indicating their increased susceptibility to potential building damage from elevated vibration levels. Construction activities in the Project Area would intermittently generate vibration in and near the Project Area when it reaches building walls and floors of sensitive receptors. Vibration-generating equipment could include bulldozers and loaded trucks to move materials and debris, jackhammers to break apart concrete, and caisson drills to install shoring. **Table 3.8-12, Vibration Source Levels for Construction Equipment**, identifies vibration velocity levels at various distances from the source.

**Table 3.8-12**  
**Vibration Source Levels for Construction Equipment**

Equipment	Approximate PPV (in/sec)					Approximate RMS (VdB)				
	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Large Bulldozer	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Caisson Drilling	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Loaded Trucks	0.076	0.027	0.020	0.015	0.010	86	77	75	72	68
Jackhammer	0.035	0.012	0.009	0.007	0.004	79	70	68	65	61
Small Bulldozer	0.003	0.001	0.0008	0.0006	0.0004	58	49	47	44	40

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018.

With respect to human annoyance, the FTA thresholds are 72 VdB at residences and buildings where people normally sleep for frequent events and 75 VdB at institutional buildings such as schools or churches for frequent events. No thresholds for human annoyance have been adopted or recommended for commercial and office uses.

With respect to building damage, the Caltrans guidelines consider 0.08 inch/sec PPV to be the potential threshold criteria for extremely fragile historic buildings, 0.10 inch/sec PPV for fragile buildings, 0.25 inch/sec PPV for historic and some old buildings, 0.30 inch/sec PPV for older residential structures, 0.50 inch/sec PPV for new residential buildings and modern industrial or commercial buildings.

Based on **Table 3.8-12, Vibration Source Levels for Construction Equipment**, construction equipment could reach levels of 87 VdB at 25 feet away. As such, the 72 VdB residential annoyance threshold and 75 VdB institutional annoyance threshold could be exceeded during a worst-case construction activity. However, it should be noted that vibration levels experienced would be temporary and intermittent. Additionally, as individual project applications are processed, project-specific design features and mitigation measures would be considered on a case-by-case basis to reduce construction vibration levels to the maximum extent feasible (see **Mitigation Measures NOI-1** and **NOI-2**). Nevertheless, as temporary construction vibration would exceed human annoyance thresholds, this impact is considered potentially significant.

Based on **Table 3.8-12, Vibration Source Levels for Construction Equipment**, construction equipment would reach a maximum of 0.089 PPV (in/sec) at 25 feet. These vibration levels would exceed the most conservative 0.08 inch/sec PPV threshold for extremely fragile historic buildings. Since the exact location of future development projects, distances to nearby buildings, and the architectural integrities of nearby

buildings are all unknown at this time, it is possible for individual development projects to generate construction vibration levels that could result in damage to extremely fragile buildings located on site or within 25 feet of potential construction activities. Thus, this impact is considered potentially significant, and implementation of **Mitigation Measure NOI-3** is required.

### *Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**NOI-3** Prior to any grading or construction activity within 25 feet of an extremely fragile building (as defined in Caltrans' *Transportation and Construction Vibration Guidance Manual*, April 2020) or any construction activity associated with the rehabilitation of an extremely fragile building, applicants shall prepare a Vibration Control Plan. The Vibration Control Plan shall be prepared by a qualified structural engineer and shall include methods to minimize vibration, including but not limited to:

- Use of drilled piles or the use of a sonic vibratory pile driver rather than impact pile driving;
- Use of rubber-tired equipment rather than metal-tracked equipment; and
- Avoiding the use of vibrating equipment when allowed by best engineering practices.

The Vibration Control Plan shall include a pre-construction survey letter establishing baseline conditions at potentially affected buildings. The survey letter shall provide a shoring design to protect the buildings from potential damage. The structural engineer may recommend alternative procedures that produce lower vibration levels, such as sonic pile driving or caisson drilling instead of impact pile driving. Development projects shall implement the structural engineer's recommendations.

A Statement of Compliance signed by the Applicant and Owner is required to be submitted to Building and Safety at plan check and prior to the issuance of any permit. The Vibration Control Plan, prepared as outlined above, shall be documented by a qualified structural engineer, and shall be provided to the City upon request.

### ***Significance After Mitigation***

While **Mitigation Measures NOI-1** and **NOI-2** would reduce potential vibration impacts associated with human annoyance, the 72 VdB residential annoyance threshold and 75 VdB institutional annoyance threshold could be exceeded during a worst-case construction activity and this impact would be considered significant and unavoidable.

Implementation of **Mitigation Measure NOI-3** will ensure construction vibration impacts with respect to building damage would be less than significant.

---

**Impact NOI-3**                      **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.**

The Project Area is not in the vicinity of a private airstrip or airport land use plan.<sup>16</sup> The nearest boundary of the Project Area is approximately 8.8 miles northeast of the Los Angeles International Airport. The Project Area would not be located within the airport's noise contours.<sup>17</sup> As such, the Project would not expose people residing or working in the Project Area to excessive airport-related noise levels and there would be no impact.

### ***Significance Before Mitigation***

No impact.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

No impact.

---

<sup>16</sup> Los Angeles County Airport Land Use Commission. Airports, Plans and Maps. Available online at: <https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=acf2e87194a54af9b266bf07547f240a>, accessed February 23, 2023.

<sup>17</sup> Los Angeles County Airport Land Use Commission. Airports, Plans and Maps. Available online at: <https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=acf2e87194a54af9b266bf07547f240a>, accessed February 23, 2023.

### 3.8.7 CUMULATIVE IMPACTS

#### Construction

Construction activities associated with development under the Project may overlap for some time with construction activities for other development projects that are adjacent to, or within, the Project Area. Typically, if a development site is 500 feet or more away from another site, then noise levels would have attenuated to a point that they would not combine to produce a cumulative noise impact. Therefore, construction noise levels would typically become cumulative if two development sites were to have construction occurring within 500 feet of each other.

Development under the Project would implement project-specific design features and mitigation measures on a case-by-case basis to reduce construction noise levels to the maximum extent feasible. However, projects could still result in significant short-term increases in noise levels. Multiple projects, both within and outside of the Project Area, could combine together, to substantially increase noise levels at specific land uses. Therefore, the significant and unavoidable construction noise impacts identified for the Project could add to construction noise impacts associated with cumulative development. The impact of the Project is considered significant and unavoidable and therefore the incremental effect of the Project related to construction noise would be cumulatively considerable.

For a combined vibration impact from simultaneous construction projects to reach cumulatively significant levels, intense construction from these projects would have to occur simultaneously in close proximity to a sensitive receptor. Project construction-related vibration would not result in additive vibration in combination with cumulative development in most areas of the City. However, individual development projects near the periphery of the Project Area could potentially be constructed concurrently with other development adjacent to, but outside the Project Area, such that intense construction from two or more projects would simultaneously occur in close proximity to existing sensitive receptors. While possible, this would be unlikely considering much of the Project Area and adjacent areas consist of industrial or commercial uses. Nevertheless, the significant and unavoidable construction vibration impacts from the Project could add to vibration impacts associated with cumulative development on the periphery of the Project Area. The impact of the Project is considered significant and unavoidable and therefore the incremental effect of the Project on temporary annoyance-related vibration levels would be cumulatively considerable.

#### Operation

Stationary noise impacts are localized to a project site and sensitive receptors within the immediate vicinity. Therefore, for stationary noise sources, the cumulative setting is development in the Project Area



and areas immediately adjacent to the Project Area. Future development in the City would include mechanical equipment, loading, trash pick-up, and other noise-generating activities. However, such activities would be typical of the urban environment within the City and any on-site activities would be required to comply with applicable provisions of the VMC. Sources of stationary noise are generally well-regulated. The potential for any individual site to include a source of stationary noise that would be significant is unlikely and would be speculative to address. Similarly, the potential for overlapping of such sources is unlikely and would also be speculative to address. Therefore, the incremental effect of the Project with respect to stationary noise sources would not be cumulatively considerable.

The traffic noise analysis in **Table 3.8-11, Project Traffic Noise**, is cumulative in nature, as it accounts for future traffic from the Project as well as future traffic which would have resulted from regional population growth, regardless of the Project. As shown in **Table 3.8-11, Project Traffic Noise**, when compared to existing conditions, traffic noise levels under future with project conditions would increase by a maximum of 0.6 dBA CNEL along Santa Fe Avenue, south of Vernon Avenue. As discussed previously, operational noise level increases would be significant if ambient noise levels increase by 3 dBA CNEL to or within the “normally incompatible” or “clearly incompatible” categories, as shown previously in **Table 3.8-8, Land Use Compatibility Standards**, or any 5 dBA CNEL or more increase. As shown in **Table 3.8-11**, no roadway segments would experience noise level increases that exceed either the 3 dBA CNEL threshold or 5 dBA CNEL threshold. Therefore, the cumulative impact would be less than significant and the incremental effect of the Project on exterior noise levels would not be cumulatively considerable.

### 3.8.8 REFERENCES

California Air Pollution Control Officers Association (CAPCOA). *California Emissions Estimator Model (CalEEMod) User's Guide Appendix G – Default Data Tables*. 2022. Available at: <https://www.caleemod.com/user-guide>, accessed February 23, 2023.

California Department of Transportation. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. 2013. Available online at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>, accessed February 23, 2023.

City of Vernon. *City of Vernon General Plan – Noise Element*. 2015. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/1306/637635880850570000>, accessed February 23, 2023.

Federal Highway Administration. *Reviewing Noise Analysis*, Figure 1-1: Common Sound Levels. Available online at: [https://www.fhwa.dot.gov/Environment/noise/resources/reviewing\\_noise\\_analysis/#toc494122595](https://www.fhwa.dot.gov/Environment/noise/resources/reviewing_noise_analysis/#toc494122595), accessed February 23, 2023.

Federal Highway Administration. *Highway Traffic Noise: Analysis and Abatement Guidance*. 2011. Available online at:

[https://www.fhwa.dot.gov/environment/noise/regulations\\_and\\_guidance/analysis\\_and\\_abatement\\_guidance/revguidance.pdf](https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf), accessed February 23, 2023.

Federal Transit Administration. *Transit Noise and Vibration Impact Assessment Manual*. 2018. Available online at: [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](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), accessed February 23, 2023.

Illingworth & Rodkin. *Environmental Noise Assessment for Wal-Mart Expansion, Williamson Ranch Plaza – Antioch, California*. Available at: [https://www.antiochca.gov/fc/community-development/planning/Walmart/DEIR-VOLII-APPENDICES-C-](https://www.antiochca.gov/fc/community-development/planning/Walmart/DEIR-VOLII-APPENDICES-C-H/Appendix%20G%20Noise%20Assessment.pdf)

[H/Appendix%20G%20Noise%20Assessment.pdf](https://www.antiochca.gov/fc/community-development/planning/Walmart/DEIR-VOLII-APPENDICES-C-H/Appendix%20G%20Noise%20Assessment.pdf), accessed February 23, 2023.

Los Angeles County Airport Land Use Commission. *Airports, Plans and Maps*. Available online at:

<https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=acf2e87194a54af9b266bf07547f240a>, accessed February 23, 2023.

## 3.9 POPULATION AND HOUSING

---

### INTRODUCTION

*This section identifies the regulatory framework with respect to regulations that addresses population and housing and evaluates the significance of the potential changes that could result from implementation of Project. In addition, to reduce impacts, mitigation measures are included when applicable. Sources of information used in this section include the City of Vernon General Plan and the Housing Element contained therein. Information was also obtained from the Southern California Association of Governments (SCAG) Local Profiles, City of Vernon, the State of California Department of Finance (DOF) population and housing estimates, and U.S. Census Bureau population and housing data.*

### 3.9.1 ENVIRONMENTAL SETTING

#### 3.9.1.1 Demographic Forecasts

Population, housing, and employment numbers for cities and counties are provided by three standard sources: the U.S. Census Bureau, the California DOF, and SCAG. Since these three organizations use different methods of data collection and calculation, they do not always arrive at the exact same results. For purposes of this section, the term “households” refers to occupied dwelling units, as defined in the U.S. Census. Therefore, household counts do not include all inhabitable dwelling units existing within the City.

The U.S. Census Bureau decennial census occurs every 10 years in the years ending in zero to count the population and housing units in the entire United States. While its primary purpose is to provide the population counts that determine how seats in the U.S. House of Representatives are apportioned, the census data forms the basis for which most demographic projections are calculated. The most recent census for which data is available was collected in 2020. The 2020 national census data, which was compiled using answers to surveys sent to all households within the United States, are provided for the nation, all states, and all counties, as well as each individual city. Additionally, the U.S. Census conducts the American Community Survey annually, to provide updated data estimates between its decennial censuses.

The State of California DOF publishes population and housing estimates, updated yearly, for the state’s counties and cities. The DOF estimates population growth based on census data and growth calculations.

SCAG has adopted population, dwelling unit, household, and employment forecasts for the Los Angeles region. The Los Angeles region includes all the cities and unincorporated areas in Los Angeles County. These growth forecasts, which are based on U.S. Census data, were developed by SCAG staff with input from the planning staffs of the County and each pertinent city and are used for regional planning efforts

such as the Regional Transportation Plan (RTP). Growth forecasts are provided for the total region, each growth and non-growth area within the County, and each city within the region. Growth areas within Los Angeles County are defined as geographic subareas where urban development has already taken place or is expected to take place, while nongrowth areas are defined as where urban development is not expected to occur.

In 2008, SCAG initiated the Local Profiles project as a part of a larger initiative to provide a variety of new services to its member cities and counties. Through extensive input from member jurisdictions, the inaugural Local Profiles Reports were released at the SCAG General Assembly in May 2009. The Local Profiles have since been updated every two years.

The 2019 Local Profiles reports provide a variety of demographic, economic, education, housing, and transportation information about each member jurisdiction including, but not limited to, the following:

- Population growth since 2000
- Population growth relative to Los Angeles County
- Homeownership rates
- Employment information

### 3.9.1.2 Population

According to the U.S. Census, the County of Los Angeles' population increased from 9,818,605 persons in 2010 to 10,014,009 persons in 2020.<sup>1</sup> This represents a 1.99 percent increase in County population from 2010 to 2020. The City of Vernon's population increased from 112 persons in 2010 to 222 persons in 2020.<sup>2</sup> This represents a 98.2 percent increase in City population from 2010 to 2020. According to the City of Vernon's Housing Element, the doubling of the population was a result from the construction of a 45-unit affordable housing building in 2015 on the eastern side of the City outside the Project Area. **Table 3.9-1, Population Growth Trends**, shows Vernon's and the County's population in 2000, 2010, and 2020.

---

<sup>1</sup> U.S. Census Bureau. "Los Angeles County Population Data." Available online at: <https://data.census.gov/cedsci/table?q=Los%20Angeles%20County,%20California&tid=DECENNIALPL2020.P1>, accessed August 11, 2022.

<sup>2</sup> U.S. Census Bureau. "City of Vernon Population Data." Available online at: <https://data.census.gov/cedsci/table?q=Vernon%20city,%20California&tid=DECENNIALPL2020.P1>, accessed August 11, 2022.

**Table 3.9-1  
Population Growth Trends**

Jurisdiction	2000	2010	2020	Percent Change 2000-2020
Vernon	91	112	222	98.2%
Los Angeles County	9,519,315	9,818,605	10,014,009	5.2%

Source: US Census Bureau. *City of Vernon Population Data*. Available online at: <https://data.census.gov/cedsci/table?q=Vernon%20city,%20California&tid=DECENNIALPL2020.P1>  
 US Census Bureau. *Los Angeles County Population Data*. Available online at: <https://data.census.gov/cedsci/table?q=Los%20Angeles%20County,%20California&tid=DECENNIALPL2020.P1>, accessed August 11, 2022.

The Project Area is comprised of the approximately 780 acres in the westside of Vernon. The Project Area is predominantly industrial but contains pockets of commercial and residential uses. The estimated 2022 population within the Project Area is approximately 37 persons.

### 3.9.1.3 Housing

There is a total of 74 housing units in the City of Vernon.<sup>3</sup> According to the City of Vernon's 2021-2029 Housing Element the City's housing stock was built slowly from 1939 to today.<sup>4</sup> Of the 74 units, the City owns 26 units. In 2015, 45 affordable units were added to the housing stock with the construction of the Vernon Village Park Apartments, which is owned and operated by a private housing corporation. This housing development encompasses the majority of the privately-owned housing stock within the City. The majority of the units in the City are in good condition. The City recently updated all but two of these City-owned units, and the 50 privately-owned units in the City are also in good condition.<sup>5</sup>

<sup>3</sup> City of Vernon. *Housing Element 2021-2029*. 2021. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/2064/637788133673870000>, accessed August 15, 2022.

<sup>4</sup> City of Vernon. *Housing Element 2021-2029*. 2021. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/2064/637788133673870000>, accessed August 15, 2022.

<sup>5</sup> City of Vernon. *Housing Element 2021-2029*. 2021. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/2064/637788133673870000>, accessed August 15, 2022.

Seventy percent of the housing stock in the City of Vernon is made up of multi-family residential, and 30 percent is single-family detached housing (23 units).<sup>6</sup> Within the Project Area there are 13 units of housing.<sup>7</sup>

**Table 3.9-2**  
**Housing for the City of Vernon and County of Los Angeles (2021)**

	City of Vernon <sup>1</sup>	LA County
Housing Units	74	10,014,009
Persons per Household	2.92-4.00	2.92

Source:

<sup>1</sup> City of Vernon Housing Element 2021-2029.

The average number of persons per owner-occupied household in Vernon is 4.00 persons. For renter-occupied units, the persons per household decreases to 2.92 persons. Within the City, there are only four owner-occupied units, equaling a rate of 9.3 percent. Additionally, the City of Vernon owns many homes and rents them to residents. As a result, the average renter-occupied persons per household in Vernon is the most reflective of the City's household size. There is very little vacancy within the City; with an overall vacancy rate of 2.6 percent, which is lower than the Los Angeles County rate of 6.4.

### 3.9.1.4 Growth Forecast

The State of California requires that cities plan for changes in population, housing, and employment. If growth is projected, each city must accommodate a share of anticipated regional growth. SCAG is responsible for producing socio-economic estimates and projections at multiple geographic levels. The socio-economic estimates and projections are used for federal, and state mandated long-range planning efforts, such as the RTP/SCS. In preparing the 2020 RTP/SCS, SCAG prepared population, housing, and employment projections in consultation with jurisdictions in the region. These projections are derived from a combination of sources and consider factors such as birth rates; migration rates; historical trends; household size; market and economic projections; existing and planned land uses; and consistency with relevant adopted local, regional, and state land use policies and growth strategies. These growth forecasts

<sup>6</sup> City of Vernon. *Housing Element 2021-2029*. 2021. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/2064/637788133673870000>, accessed August 15, 2022.

<sup>7</sup> The Arroyo Group

provide a good basis from which reasonable determinations can be made about planned growth for both the local (i.e., city and county level) and the regional level.

**Table 3.9-3, Population, Housing, and Jobs Forecast Without the Project**, summarizes the City of Vernon’s and Los Angeles County population, household, and employment current growth forecast for the City of Vernon without implementation of the Project. These growth projections are based on SCAG’s 2020 Connect SoCal. SCAG does not project any growth in population and housing for the City of Vernon between 2016 and 2045.<sup>8</sup> As shown in **Table 3.9-3**, the City of Vernon’s population and number of households are expected remain the same in 2040, without implementation of the Project. SCAG does project a slight increase in the number of employees. The number of employees is projected to increase from 43,565 in 2022 to 44,361 in 2040, a 1.8 percent increase.

**Table 3.9-3  
Population, Housing, and Jobs Projections Without the Project**

	2022		2040		2021-2040 Growth	
	City of Vernon	LA County	City of Vernon	LA County	City of Vernon	LA County
Population <sup>1</sup>	222	10,411,619	222	11,316,477	0%	9% (904,857)
Households <sup>1</sup>	74	3,467,842	74	3,914,368	0%	13% (446,523)
Employment <sup>1</sup>	43,565	4,867,299	44,361	5,240,195	1.8% (795)	8% (372,896)

Source:

<sup>1</sup> Southern California Association of Governments. 2020. *Connect SoCal: Demographics and Growth Forecast*.

[https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial\\_demographics-and-growth-forecast.pdf?1606001579](https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579) \*

\* A compound annual growth rate was used to project SCAG population, housing, and employment numbers to estimate 2022 and 2040 conditions

The Project Area is located within a HQTAs, which are defined as areas within one half-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. SCAG’s 2020-2045 RTP/SCS, Connect SoCal vision is to concentrate transit-oriented development (TOD) within HQTAs. Connect SoCal projects that 46 percent of new housing and 55 percent of new employment within the SCAG region will take place with HQTAs.<sup>9</sup> This would facilitate the use of public

<sup>8</sup> Southern California Association of Governments. *Connect SoCal: Demographics and Growth Forecast*. 2020. Available online at: [https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial\\_demographics-and-growth-forecast.pdf?1606001579](https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579), accessed October 19, 2022.

<sup>9</sup> Southern California Association of Governments. *HQTA Toolkit*. 2019. Available online at: [https://scag.ca.gov/sites/main/files/file-attachments/part\\_1\\_hqta\\_toolkit.pdf?1621459061](https://scag.ca.gov/sites/main/files/file-attachments/part_1_hqta_toolkit.pdf?1621459061), accessed October 18, 2022.

and active modes of transportation that will reduce VMT and the region’s climate change contribution, as well as improve air quality.

**3.9.1.5 Regional Housing Needs Assessment**

The Regional Housing Needs Assessment (RHNA) is a requirement of State housing law and is a process that determines projected and existing housing need for all jurisdictions (city or unincorporated county) in California. The process to determine the RHNA allocations is conducted by a council of governments, such as SCAG, every eight (8) years. Every jurisdiction must plan for its RHNA allocation in the housing element of its *General Plan* by ensuring there is enough sites and zoning to accommodate the specified number of housing units. Many jurisdictions use the housing element as an opportunity to complement the city’s economic development, open space, and sustainability goals with its housing goals. Once updated, housing elements are reviewed by the California Department of Housing and Community Development (HCD) and must be adopted by the jurisdiction.

The most recent RHNA allocation for the SCAG region, or the 6th cycle RHNA was adopted in March 2021 and covers the housing element planning period October 2021 to October 2029. The RHNA Allocation Plan has allocated an additional nine residential units to the City of Vernon. The breakdown of the RHNA allocation by income level is shown in **Table 3.9-4, City of Vernon 2021-2029 Regional Housing Needs Assessment Allocation.**

**Table 3.9-4  
City of Vernon 2021-2029 Regional Housing Needs Assessment Allocation**

Total	Very-low Income	Low Income	Moderate Income	Above-moderate Income
9	5	4	0	0

*Source: SCAG 6<sup>th</sup> Cycle RHNA Allocation*

**3.9.2 REGULATORY FRAMEWORK**

**3.9.2.1 Federal Regulations**

***Federal Uniform Act (URA) (1970)***

The Federal Uniform Act (Uniform Relocation Assistance and Real Property Acquisition Policies Act; 42 U.S. Code [USC] 61), passed by Congress in 1970, is a federal law that establishes minimum standards for federally funded programs and projects that require the acquisition of real property (real estate) or displace



persons from their homes, businesses, or farms. The Uniform Act's protections and assistance apply to the acquisition, rehabilitation, or demolition of real property for federal or federally funded projects.

### ***Department of Housing and Urban Development Act***

The Department of Housing and Urban Development Act created the U.S. Department of Housing and Urban Development (HUD) as a Cabinet-level agency. HUD is responsible for national policy and programs that address housing needs in the U.S. HUD is responsible for enforcing fair housing laws. HUD plays a major role in supporting homeownership by underwriting homeownership for lower- and moderate-income families through its mortgage insurance programs.

### ***Fixing America's Surface Transportation Act (FAST)***

The Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94), enacted in 2015, builds on the changes to federal transportation planning law made by MAP-21. It was the first long-term surface transportation authorization enacted in a decade that provides long-term funding certainty for surface transportation. The FAST Act authorizes \$305 billion over fiscal years 2016 through 2020 for highway improvements, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. The FAST Act maintains the focus on safety, keeps intact the established structure of the various highway-related programs, continues efforts to streamline project delivery, and provides a dedicated source of federal dollars for freight projects.

### ***Federal planning regulations, Title 23 CFR 450.322(e)***

This federal regulation requires that in development of the regional transportation plan that the MPO validate data utilized in preparing other existing modal plans (such as transit providers long range plans) for providing input to the regional transportation plan. In updating the plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO shall approve transportation plan contents and supporting analyses produced by a transportation plan update.

#### **3.9.2.2 State**

### ***1969 California Housing Element Law***

The California Housing Element Law (California Government Code §65300) requires SCAG and other regional councils of government in California to determine the existing and projected regional housing needs for persons at all income levels. According to California Government Code §65300, each governing body of a local government in California is required to adopt a comprehensive, long-term general plan for

the physical development of the city, city and county, or county. The California Housing Element Law, enacted in 1969, mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community as part of the housing element, one of the seven mandated elements of the local general plan. The California Housing Element Law is implemented by the California Department of Housing and Community Development (HCD), which is responsible for reviewing local governments' housing elements for compliance with state law and providing written comments to the local governments. Using the information provided by local governments in its Housing Element, the HCD determines the regional housing need for each county and allocates funding to meet this need to the council of governments for distribution to its jurisdictions. The HCD also oversees distribution of funding related to the regional housing need by the council of governments to the local governments to ensure that funds are appropriately allocated. The requirements for the Housing Element are delineated in California Government Code Section 65580–65589.9.

### ***SB 375 - The Sustainable Communities and Climate Protection Act of 2008***

Senate Bill 375 (SB 375) focuses on aligning transportation, housing, and other land uses to achieve regional greenhouse gas (GHG) emission reduction targets established under the California Global Warming Solutions Act, also known as Assembly Bill No. 32 (AB 32). SB 375 requires California Metropolitan Planning Organizations to develop a Sustainable Communities Strategy (SCS) as part of the RTP, with the purposes of identifying policies and strategies to reduce per capita passenger-vehicle generated GHG emissions. In application, the SCS must identify the general location of land uses, residential densities, and building intensities within the region; identify areas within the region sufficient to house all the population of the region; identify areas within the region sufficient to house an eight-year projection of the regional housing need; identify a transportation network to service the regional transportation needs; gather and consider the best practically available scientific information regarding resources areas and farmland in the region; consider the state housing goals; set forth a forecasted development pattern for the region; and allow the regional transportation plan to comply with the federal Clean Air Act (CAA) of 1970 (42 USC. § 7401 *et seq.*) (Gov. Code, § 65080, subd. (b)(F)(2)(B)), of which, when integrated with the transportation network, and other transportation measures and policies will reduce the GHG from automobiles and light duty trucks to achieve, if there is a reasonable way to do so, the GHG emission reduction targets approved by the California Air Resources Board (ARB). If the SCS does not achieve the GHG emission targets set by ARB, an Alternative Planning Strategy (APS) must be developed to demonstrate how the targets could be achieved.

SB 375 also imposes a number of new requirements on the regional housing needs process. Prior to SB 375, the regional transportation plan and regional housing needs processes were not required to be coordinated. SB 375 now synchronizes the schedules of the regional housing needs allocation (RHNA) and regional

transportation plan processes every eight years. The RHNA, which is developed after the regional transportation plan, must also allocate housing units within the region consistent with the development pattern included in the SCS. Previously, the RHNA determination was based on population projections produced by the Department of Finance. SB 375 requires the determination to be based upon population projections by the Department of Finance and regional population forecasts used in preparing the regional transportation plan. If the total regional population forecasted and used in the regional transportation plan is within a range of 1.5 percent (previously 3 percent) of the regional population forecast completed by the Department of Finance for the same planning period, then the population forecast developed by the regional agency and used in the regional transportation plan shall be the basis for the determination. If the difference is greater than 1.5 percent, then the two agencies shall meet to discuss variances in methodology and seek agreement on a population projection for the region to use as the basis for the RHNA determination. If no agreement is reached, then the basis for the RHNA determination shall be the regional population projection created by the Department of Finance.

Existing law requires local governments to adopt a housing element as part of their general plan. Unlike the rest of the general plan, where updates sometimes occur at intervals of 20 years or longer, under previous law the housing element was required to be updated as frequently as needed and no less than every five years. Under SB 375, this period has been lengthened to eight years and timed so that the housing element period begins no less than 18 months after adoption of the regional transportation plan, to encourage closer coordination between the housing and transportation planning. SB 375 also changes the implementation schedule required in each housing element. Previous law required the housing element to contain a program which set forth a five-year schedule of to implement the goals and objectives of the housing element. The new law instead requires this schedule of actions to occur during the eight-year housing element planning period, and requires each action have a timetable for implementation.

### ***Regional Housing Needs Assessment***

As discussed above in the discussion of SB 375, State law requires preparation of a Regional Housing Needs Assessment (RHNA) allocation plan every eight years. The RHNA is a key tool for the Southern California Association of Governments (SCAG) and its member governments to plan for this growth. The RHNA quantifies the regional need for housing that is allocated to each jurisdiction for a certain planning period (the current forecast extends through 2029). Communities then plan, consider, and decide how they will address this need through the process of completing the Housing Elements of their General Plans. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that they can grow in ways that enhance quality of life, improve access to jobs, transportation and housing, and not adversely impact the environment.

This region's RHNA allocation plan is developed every eight years by SCAG after preparation of the RTP, as mandated by state law, to coincide with the region's schedule for preparing Housing Elements. It consists of two measurements of housing need: (1) existing need and (2) future need for very-low income, low-income, moderate, and above-moderate income categories.

The existing need assessment is based on data from the most recent US Census to measure ways in which the housing market is not meeting the needs of current residents. These variables include the number of low-income households paying more than 30 percent of their income for housing, as well as severe overcrowding.

The future need for housing is determined primarily by the forecasted growth in households in a community, based on historical growth patterns, job creation, household formation rates, and other factors to estimate how many households will be added to each community over the projection period. The housing need for new households is then adjusted to account for an ideal level of vacancy needed to promote housing choice, maintain price competition, and encourage acceptable levels of housing upkeep and repair. The RHNA also accounts for units expected to be lost due to demolition, natural disaster, or conversion to non-housing uses. The sum of these factors: household growth, vacancy need, and replacement need form the "construction need" assigned to each community.

Finally, the RHNA considers how each jurisdiction might grow in ways that will decrease the concentration of low-income households in certain communities. The need for new housing is distributed among income groups so that each community moves closer to the regional average income distribution.

### ***California Department of Housing and Community Development***

State Housing Law (Government Code Section 65580) requires local government plans to address the existing and projected housing needs of all economic segments of the community through their housing elements. The housing element is one of seven state-mandated elements that every General Plan must contain, and it is required to be updated every eight years and determined legally adequate by the state. The purpose of the housing element is to identify the community's housing needs, state the community's goals and objectives with regard to housing production, rehabilitation, and conservation to meet those needs. In addition, the Housing Element defines the related policies and programs that the community will implement in order to achieve the stated goals and objectives. This would be accomplished through the allocation of regional housing needs consistent with the SCS.

### ***Senate Bill 2***

SB 2 (Chapter 633, Statutes of 2007) strengthens state housing element law (Government Code Section 65583) by ensuring that every jurisdiction identifies potential sites where new emergency shelters can be located without discretionary review by the local government. It also increases protections for providers seeking to open a new emergency shelter, transitional housing, or supportive housing development, by limiting the instances in which local governments can deny such developments.

### ***Senate Bill 6***

SB 6 allows residential development on property zoned for retail and office space without needing a rezoning and allows project applicants to invoke the Housing Accountability Act (HAA) to limit local discretion to deny or condition approval. The Bill requires applicants to commit to both prevailing wage and more costly "skilled and trained workforce" requirements for project labor but does not contain Below Market Rate requirements.

### ***Senate Bill 9***

Passed in 2021, Senate Bill 9, or the California Housing Opportunity and More Efficiency (HOME) Act streamlines the process for a homeowner to create a duplex or subdivide an existing lot. New housing created as a result of this bill must meet a specific list of qualifications that protects historic districts, preserves environmental quality and the look of communities, and prevents tenants from being displaced. This legislation enables homeowners to create intergenerational wealth and provide access to more rental and ownership options for working families who would otherwise be priced out of neighborhoods.

### ***Senate Bill 35***

Senate Bill 35, passed in 2017, aims to expedite the approval process of housing developments, including affordable housing, to address the state's housing shortage crisis. SB 35 created a streamlined and ministerial approval process for certain housing projects under Government Code §65913.4. The bill streamlines projects that add low-income housing units and permit cities on track to meet RHNA goals to maintain control of housing approvals. Projects that are permitted for streamlining are multifamily development projects of two units or more; projects in an urbanized area, where at least 75% of the perimeter is developed with urbanized uses; projects located on a parcel zoned for residential, or for residential mixed use, where 2/3 of the use is for residential; projects consistent with objective zoning and design review standards in effect at the time it is proposed; projects must not be located in or on environmentally sensitive lands, including coastal zones farm land, wetlands, fire hazard zones, earthquake fault zones, flood plains, conservation areas, protected habitats, and others. These types of

projects shall not be subject to a conditional use permit or any other discretionary review. Cities may only evaluate the proposal against objective zoning standards, objective subdivision standards, and objective design review standards in effect at the time the completed notice of intent is submitted to the city.

### ***Assembly Bill 2011***

Signed by Governor Gavin Newsom on September 28, 2022, AB 2011 allows for ministerial, by-right approval for affordable housing on commercially-zoned lands, and also allows such approvals for mixed-income housing along commercial corridors, as long as the projects meet specified affordability, labor, and environmental criteria. The bill also requires that all projects seeking approval under its provisions ensure all construction workers earn prevailing wages and receive health benefits.

### ***California Relocation Assistance Act***

The California Relocation Assistance Act (Government Code Section 7260 *et seq.*) establishes uniform policies to provide for the fair and equitable treatment of people displaced from their homes or businesses as a direct result of state and/or local government projects or programs. The California Relocation Assistance Act requires that comparable replacement housing be made available to displaced persons within a reasonable period of time prior to the displacement. Displaced persons or businesses are assured payment for their acquired property at fair market value. Relocation assistance in the form of advisory assistance and financial benefits would be provided at the local level. This includes aid in finding a new home location, payments to help cover moving costs, and additional payments for certain other costs.

### ***Zenovich–Moscone–Chacon Housing and Home Finance Act of 1975***

In response to state population and household growth, and to ensure the availability of affordable housing for all income groups, the State Department of Housing and Community Development (HCD) is responsible for determining the regional housing need for all jurisdictions in California.

### ***Homeowners and Private Property Protection Act***

In 2008, California voters approved Proposition 99, the Homeowners and Private Property Protection Act, which amended the California Constitution so that local governments are prohibited from using eminent domain authority to acquire an owner-occupied residence for the purposes of conveying it to a private recipient, with limited exceptions. Proposition 99 applies only to owner-occupied residences, but cities may still use eminent domain authority to convey multi-family and non-residential property to other private parties.

### 3.9.2.3 Local and Regional

#### *Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS)*

SCAG is an association of local governments and agencies that serves as a Metropolitan Planning Organization, a Regional Transportation Planning Agency, and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities. SCAG is responsible for developing long-range regional transportation plans, including the regional Sustainable Communities Strategy and associated growth forecasts, regional transportation improvement programs, regional housing needs allocations and a portion of the South Coast Air Quality management plans (SCAG 2018).

SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), Connect SoCal, is a long-range regional transportation and land use network plan that looks ahead 20+ years and provides a vision of the region's future mobility and housing needs with economic, environmental and public health goals. Connect SoCal builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. SCAG adopted the current RTP/SCS in September 2020.

#### *City of Vernon General Plan*

State Law (Government Code Section 65300) requires that each city and county, including charter cities and counties, adopt a comprehensive, integrated, long-term *General Plan* to direct future growth and development and accommodate potential changes or increases to population and employment. The *General Plan* is a fundamental policy document that defines how a city should use and manage its resources into the future. State law requires seven General Plan Elements: land use, circulation, housing, conservation, open space, noise, and safety.

The City's current *General Plan* was adopted in December 2007. The *General Plan* serves as a blueprint for the City's planning efforts and vision for the future. The *General Plan* has six citywide elements: Land Use, Circulation and Infrastructure, Housing, Safety, Resources, and Noise. These elements contain goals, policies, and actions that apply to all incorporated areas in the City of Vernon.

### City of Vernon Land Use Element

The Land Use Element and the Land Use Policy Map establishes the broad, general policies for how properties are used in Vernon, including location, distribution, type, and intensity of development, with the overarching goal of maintaining Vernon as an industrial city. The Land Use Policy Map graphically illustrates the planned land use pattern in Vernon. The Land Use Element describes a limited range of land use categories, establishes standards of use and intensity, and sets forth policies relating to use of properties.

### City of Vernon Housing Element

The Vernon Housing Element is an element of the General Plan required by State law to address current and future housing needs in the City (Government Code Section 65583). The City's 2014-2021 Housing Element sets housing policy from October 15, 2014, through October 15, 2021, defining how the city will meet State requirements, including how it will accommodate the RHNA developed by SCAG. The City is in process of approving the 2021-2029 Housing Element. The most recent 6<sup>th</sup> cycle RHNA calls for nine units to be accommodated for during the 2021-2029 planning period.

The following goals and policies of the *City of Vernon General Plan* are applicable to the Project.

**Land Use Goal LU-2:** Phase out aging industrial building and sites through modernization and replacement.

**Policy LU-2.3:** Continue to enforce all applicable building and health and safety codes.

**Policy LU-2.4:** Provide incentives to property owners to revitalize industrial structures or recycle/demolish obsolete or vacant structures.

**Policy LU-2.5:** Assist in the reuse of properties from one industrial use to another.

**Policy LU-2.7:** Consider and facilitate proposals for more intensive employment-generating, nonresidential development near transit stops.

**Land Use Goal LU-3:** Maintain Vernon as a highly desirable location for industry and continue to attract the types of industry the City is well positioned to serve.

**Policy LU-3.2:** Foster a City government and governmental structure that is responsive to the needs of industry located in a metropolitan area.



**Policy LU-3.5:** Use development proposals as opportunities to encourage modernization and broaden property improvements goals.

**Circulation Goal CI-1:** Provide a balanced transportation system for the safe and efficient movement of people, goods, and emergency services throughout the City.

**Policy CI-1.4:** Evaluate implementing measures that reduce the maneuvering of trucks on streets with substantial traffic during periods of high traffic volumes.

**Policy CI-1.6:** Encourage the continued improvement of services provided by the Los Angeles County Metropolitan Transit Authority to Vernon and adjacent cities to provide good access from home to job and job to home for persons employed in Vernon.

**Housing Goal H-3:** Continue to promote the availability of a range in existing unit types and sizes, and equal housing opportunity in the City's housing market on the basis of age, race, sex, marital status, ethnic background, source of income, and other factors.

**Policy H-3.1.** Implement the Housing Overlay Zone via the Zoning Ordinance and Zoning map to allow for a limited amount of new housing construction.

**Policy H-3.2.** Strategically locate sites for new housing so as to minimize noise, vibration, smoke, noxious gases, glare, heat, dust, odors, air pollution, and other adverse impacts associated with industrial uses, slaughtering and rendering uses, businesses that release toxic materials, and trucking and railroad facilities and routes.

**Policy H-3.3.** Encourage development of residential uses in strategic proximity to schools, recreational facilities, commercial areas, parks and other public spaces, and transit routes.

### ***City of Vernon Zoning Ordinance***

Title 17 of the Charter and City Code, known as the Comprehensive Zoning Ordinance of the City of Vernon (Zoning Ordinance), implements the land use policies of the *General Plan*. The Zoning Ordinance is detailed with respect to specific development standards and land use requirements. The City's Zoning Ordinance includes specific standards and development regulations regarding permitted uses, building heights, parking requirements, setbacks, and other requirements. Zoning is used to implement long-term

land use policy. In accordance with State requirements, the City's zoning patterns are consistent with Vernon's Land Use Policy Map.

### 3.9.3 IMPACTS AND MITIGATION MEASURES

#### 3.9.3.1 Thresholds of Significance

The following thresholds for determining the significance of impacts related to population and housing are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts due to the unplanned changes in population and housing, if any of the following would occur:

- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure).
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

#### 3.9.3.2 Methodology

The analysis assesses the potential impacts to population, housing, and employment resources that could result from implementation of the Project.

The population estimates contained herein provide a conservative estimate of the anticipated number of new units that would be constructed and the number of people that could potentially reside in these units based on the average vacancy rate and household size in the City and Project Area. The vacancy rates and household sizes can vary based on economic conditions and other factors. The number of vacant units and household sizes used in this analysis are provided in **Table 3.9-2**. It should be noted that the population estimates contained in **Section 3.11, Transportation**, differ due to the SCAG RTP/SCS Travel Demand Forecast Model which utilizes different forecast assumptions and Transportation Analysis Zones that do not fully align with the boundaries of the Project Area. As the population estimates identified herein are greater than those presented in **Section 3.11**, the population impact analysis presented below reflects a conservative and worst-case scenario.

### 3.9.4 ENVIRONMENTAL IMPACTS

**Impact POP-1 Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)**

It is conservatively anticipated that implementation of the Project would result in an addition of 874 housing units, along with an increase in 157,960 square feet of non-residential square footage. The proposed addition of 874 residential dwellings would increase the number of residents in the Project Area by approximately 2,486 residents, resulting in a total population of 2,708.

#### Population and Housing

Implementation of the Project would result in a pattern of land use that directs future growth in an already urbanized area where growth can be supported by existing bus routes and where different types of land uses can be intermingled to reduce the length and frequency of vehicle trips, in line with state mandates to achieve sustainability targets. The intermingling or co-locating of different types of land uses reduces the length and frequency of vehicle trips by allowing people to trip chain, grouping two or more trip purposes into one single trip. By locating housing and jobs together, VMT reductions and its associated benefits (i.e., air quality and GHG reductions) can be better achieved.

The Project would introduce mixed-use residential and commercial development that would be concentrated in Vernon's westside. The addition of 874 housing units will increase the housing stock to a total of 950 units and 887 units in the City of Vernon and Project Area, respectively. The residential units are conservatively expected to exhibit the characteristics of average Project Area renter households, which are 97.4 percent occupied<sup>10</sup> with about 2.92 persons per household (see **Table 3.9-2**).<sup>11</sup> Based on these characteristics, the Project would add approximately 2,486 residents to the Project Area, the City of Vernon, and County of Los Angeles, resulting in total population of 2,523, 2,708, and 3,642,683 persons, respectively. **Table 3.9-5, Population and Housing Increase Associated with the Project**, shows details on how the Project would increase housing and population in the City and County.

<sup>10</sup> City of Vernon. *Housing Element 2021-2029*. 2021. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/2064/637788133673870000>, accessed August 15, 2022.

<sup>11</sup> City of Vernon. *Housing Element 2021-2029*. 2021. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/2064/637788133673870000>, accessed August 15, 2022.

**Table 3.9-5  
Population and Housing Increase Associated with the Project**

	Project Area <sup>1</sup>	City of Vernon <sup>2</sup>	Los Angeles County <sup>3</sup>
Population			
Existing (2022)	37	222	10,014,009
Proposed (2040)	2,486	2,486	2,486
New Total	2,523	2,708	10,016,495
Housing			
Existing (2021)	13	74	3,641,809
Proposed (2040)	874	874	874
New Total	887	950	3,642,683

Source:

<sup>1</sup> The Arroyo Group

<sup>2</sup> City of Vernon 2021-2029 Housing Element, proposed population was calculated based on the City's average household size of 2.92 and occupancy rate of 97.4%

<sup>3</sup> US Census

The projected growth as a result of the Project is not considered significant because the growth within the Project Area would only represent a 0.02 percent increase of the County's incremental population growth. Further, the actual numbers are minor when compared with population growth anticipated in nearby cities, such as Los Angeles, Commerce, Maywood, and Huntington Park. In addition, while SCAG relies on local input, including plans, from local jurisdictions to develop the housing forecast, the timing of the input does not always line up with the RTP/SCS, which is updated every four years. In this case, the Project likely was not considered in the growth forecast simply because the Project was not yet in development. Lastly, as discussed in **Section 3.12, Utilities and Service Systems**, and **Section 3.10, Public Services**, the Project would not increase the need for additional housing, commercial, or public services beyond what is proposed in the Project and the City can accommodate the proposed growth over the Project horizon.

The Project accommodates the RHNA allocation for the City, which is only nine affordable units as shown in **Table 3.9-4, City of Vernon 2021-2029 Regional Housing Needs Assessment Allocation**. While the Project would create population growth, the Project would be consistent with the applicable goals and polices of the Housing Element, which aim to welcome new residents to maintain fiscal sustainability and increase the voting populations, and build new, quality housing to attract and accommodate a broad, diverse, and engaged citizenry. The Project furthers the City's goals to reform its government and stabilize its population, as well as further the region's goals of addressing the current housing crisis.

The Project’s anticipated concentration of new mixed-use development near job centers and transit is consistent with State policy aimed at meeting housing needs while reducing vehicle trips and improving air quality and GHG conditions. As a result, the Project would better accommodate projected population and housing demand with the proposed land use and zoning changes in place. While implementation of the Project is expected to result in population growth in the Project Area that would exceed the current SCAG forecasts for this area, the Project is designed to accommodate this growth in a more intentional and sustainable manner in accordance with the policies of SB 375 and Connect SoCal and would not induce significant unplanned population growth. Therefore, the Project would not induce substantial unplanned population growth in an area, and impacts would be *less than significant*.

## Employment

**Table 3.9-6, Estimated Onsite Employment Within the Project**, shows the estimated employment upon implementation of the Project. Development under the Project is expected to include a decrease of 575,549 square feet in industrial uses and a mix of commercial, retail production, and research and development uses, resulting in a total of 157,960 square feet of net new non-residential uses. SCAG’s growth forecast assumes a total increase of 1,300 jobs for the City by 2045.

While there will be a loss of 403 industrial jobs as industrial space is adapted into other uses, there would be an increase of 100 retail jobs, 177 production retail jobs, and 252 research and development jobs in the Project Area, resulting in a net gain of 126 jobs. Additionally, the proximity of housing to commercial and industrial centers would encourage complete neighborhoods where jobs and services are close to where people live.

**Table 3.9-6  
Estimated Onsite Employment Within the Project**

Land Use	Build Out Square Footage	Square Feet per Employee <sup>1</sup>	Total New Employees
Commercial	120,059	1,200	100
Production Retail	253,021	1,429*	177
Research and Development	360,429	1,429*	252
Industrial	-575,549	1,429*	-403
<b>Total</b>	<b>157,960</b>		<b>126</b>

<sup>1</sup>Source: U.S. Energy Information Administration Table B2 Summary table: total and medians of floorspace, number of workers, and hours of operation, 2018. Available online at: <https://www.eia.gov/consumption/commercial/data/2018/bc/html/b2.php>.

\* The EIA does not include square foot per employee metrics for production retail, research and development, and industrial space. The “other” square foot per employee metric was used for these categories.

The projected increase in jobs resulting under the Project would support new employment opportunities but would not include employment-generating uses that would result in unanticipated or unplanned for growth in population. The Project directs growth to an area identified by SCAG as High-Quality Transit Areas (HQTA).<sup>12</sup> Therefore, the Project is consistent with the RTP/SCS assumptions by directing the majority of new housing and commercial development in the region within a half mile of well-serviced transit stops. Job growth in the area will be within a half mile of several bus lines. The proximity of these jobs to transit will result in fewer vehicle trips as commuters travel to and from home to work daily. It is generally more sustainable and desirable for jobs and housing to be concentrated in areas well-served by transit, assuming jobs wages, housing costs, and location are balanced, allowing people to live closer to their jobs. Therefore, the Project would not induce substantial unplanned employment growth in an area, and impacts would be *less than significant*.

### ***Growth Forecast***

The 2,486 new residents associated with Project would exceed SCAG's growth forecast for the area and the 874 housing units would exceed the projected housing growth for the City, but this growth would represent a marginal amount of growth within the County over the planning period and would not increase the need for additional housing and infrastructure. Additionally, this growth would be in line with SCAG's policies and the City's housing and land use elements goals and policies, which aim to increase the number of housing units and population in the City. The Project would allow for medium- and high-density development in proximity to several bus lines, thereby locating residents and job opportunities near transportation. In addition, the Project would provide the framework for developing pedestrian amenities and complete street corridors.

The SCAG Connect SoCal RTP/SCS provides the framework for growth in the region. In accordance with the RTP/SCS, the Project would promote development in the Project Area by including housing and employment opportunities near job centers. The Project would concentrate development in the mixed use zones, near transit, and between the industrial and commercial areas. This type of development is encouraged in the goals and land use policies of SCAG's Connect SoCal RTP/SCS and incorporates all five of the land use strategies discussed in the RTP/SCS. As such, development anticipated in the Project Area is in line with the goals and policies of SCAG's Connect SoCal RTP/SCS.

In summary, population, housing, and employment generation associated with the Project exceeds the growth forecasts for the City of Vernon. However, implementation of the Project would help the State, the

---

<sup>12</sup> SCAG. *High Quality Transit Areas (HQTA) 2016 – SCAG Region*. Available online at: <https://gisdata-scag.opendata.arcgis.com/datasets/SCAG::high-quality-transit-areas-hqta-2016-scag-region/explore?location=34.019880%2C-118.192267%2C12.66>, accessed August 18, 2022.

SCAG region and City achieve its goals relating to growth, housing, and employment as the Project would encourage sustainable development and transit-oriented planning. The Project is also in line with State policies for housing, economic development, air quality, and sustainability, as well as other adopted housing growth policies. Lastly, the population, housing, and employment growth under the Project would be in line with the goals and policies of the City's Housing Element, as described above. For these reasons, impacts to population, housing, and employment growth would be less than significant.

### ***Significance before Mitigation***

This impact would be less than significant.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance after Mitigation***

Less than significant.

---

### **Impact POP-2                      Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.**

A primary objective of the Project is to facilitate the addition of mixed-use development in a predominately industrial area. The Project Area currently only includes 13 residential units, and those units are not proposed for redevelopment. Therefore, the Project proposes no demolition or changes to the existing residential housing stock. Instead, the Project would permit up to 874 units of high-density, infill, mixed-use developments in existing non-residential areas.

The exact location and size of future residential development is unknown at this time, but future growth would be concentrated along Santa Fe Avenue.

In conclusion, impacts related to displacement would be *less than significant*, as the adoption of the Project would not directly result in physical changes that would cause the displacement of any people or housing, necessitating the construction of replacement housing elsewhere. Impacts would be less than significant.

Additionally, the City's Housing Element includes several policies to ensure that existing residents are able to stay in place, including Policy 3.5 which states: "Provide for the retention of housing units in the City that are physically and environmentally sound, which includes the maintenance of city-owned residences,

and preservation of at-risk housing.” The Housing Element also includes Policy 3.4 which states: “Mitigate any residential displacement impacts occurring from housing demolition, which ensures that in case of displacement, residents will be provided assistance to relocate.” Furthermore, the State of California has recently passed several state laws to address the housing crisis. Recent state laws such as AB 1482, also set forth requirements for landlords to have a “just cause” in order to terminate a tenancy and limits to annual rent increases.<sup>13</sup>

### *Significance before Mitigation*

This impact would be less than significant.

### *Mitigation Measures*

No mitigation measures are required.

### *Significance after Mitigation*

Less than significant.

## **3.9.6 CUMULATIVE IMPACTS**

As discussed in **Section 2.0, Project Description**, the Project would accommodate up to 874 multi-family residential units, 120,059 square feet of retail, 253,021 square feet of production retail, 360,429 square feet of research and development space, and a reduction of 575,549 square feet of industrial space. While the Project and other developments would increase the intensity of population, housing, and employment growth in Vernon beyond the anticipated growth identified in the *Vernon General Plan* and Connect SoCal RTP/SCS, the development would be consistent with overall goals and policies of the *General Plan*, 2021-2029 Housing Element, and Connect SoCal RTP/SCS to focus growth and investment near job centers. In addition, the growth in housing units would accomplish the goals of the Regional Housing Needs Assessment and support the significant housing needs of the Los Angeles region. Any future developments proposed within the Project Area and the City would need to be reviewed on a case-by-case basis for compliance with the City’s *General Plan*, Housing Element, SCAG Connect SoCal RTP/SCS, and any other relevant governing policies or plans. Therefore, the project-specific impacts associated with population and housing would be less than significant. Potential impacts would not be cumulatively considerable.

---

<sup>13</sup> City of Los Angeles, “Housing Department. AB 1482 – State Rent Control.” Available at: <https://housing.lacity.org/residents/ab-1482>.



### 3.9.7 REFERENCES

City of Los Angeles, Housing Department. AB 1482 – State Rent Control. Available at: <https://housing.lacity.org/residents/ab-1482>.

City of Vernon. *Housing Element 2021-2029*. 2021. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/2064/637788133673870000>, accessed August 15, 2022.

Southern California Association of Governments. *High Quality Transit Areas (HQTAs) 2016 – SCAG Region*. Available online at: <https://gisdata-scag.opendata.arcgis.com/datasets/SCAG::high-quality-transit-areas-hqta-2016-scag-region/explore?location=34.019880%2C-118.192267%2C12.66>, accessed August 18, 2022.

Southern California Association of Governments. *Connect SoCal: Demographics and Growth Forecast*. 2020. Available online at: [https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial\\_demographics-and-growth-forecast.pdf?1606001579](https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579), accessed August 18, 2022.

U.S. Census Bureau. “City of Vernon Population Data.” Available online at: <https://data.census.gov/cedsci/table?q=Vernon%20city,%20California&tid=DECENNIALPL2020.P1>, accessed August 11, 2022.

U.S. Census Bureau. “Los Angeles County Population Data.” Available online at: <https://data.census.gov/cedsci/table?q=Los%20Angeles%20County,%20California&tid=DECENNIALPL2020.P1>, accessed August 11, 2022.

U.S. Energy Information Administration. Table B2 Summary table: total and medians of floorspace, number of workers, and hours of operation, 2018. Available online at: <https://www.eia.gov/consumption/commercial/data/2018/bc/html/b2.php>.

## 3.10 PUBLIC SERVICES AND RECREATION

---

### INTRODUCTION

*This section describes the existing public services within the City, identifies the regulatory framework with respect to regulations that addresses public resources, and evaluates the significance of the potential changes to public resources that could result from implementation of the proposed Project. In addition, to reduce impacts, mitigation measures are included when applicable. The public services evaluated in this section include Fire Services, Police Services, Educational Facilities, Recreational Facilities, and Library Services.*

#### 3.10.1 FIRE PROTECTION

##### 3.10.1.1 Environmental Setting

In 2021, the Vernon Fire Department was disbanded and merged with the Los Angeles Fire Department (LACoFD).<sup>1</sup> Fire protection and other related services in the City are now provided by LACoFD. Vernon is located within Division VI, which encompasses Battalions 13 and 20, and serves seven cities. There are several fire stations that serve the Project Area. Station 52, located at 4301 S. Santa Fe Avenue, is within the Project Area. Station 13 is located approximately one mile east of the Project Area at 3375 Fruitland Avenue, and Station 164 is located approximately 0.4 miles south of the Project Area at 6301 Santa Fe Avenue in the City of Huntington Park. **Figure 3.10-1, Vernon Fire Stations**, illustrates the location of these stations relative to the City and Project Area.

LACoFD is responsible for providing fire protection and life safety services to residents in 59 cities and all unincorporated areas of Los Angeles County, including the City of Vernon.<sup>2</sup> LACoFD services include firefighting, emergency medical services, fire prevention, hazardous materials, urban search and rescue, air and wildland, lifeguarding, emergency preparedness, and public education. It serves over four million residents. LACoFD has 177 fire stations, 288 engine companies, 112 paramedic units, 10 helicopters. It also has specialized resources, including four hazardous material squads, six swift water rescue units, two urban search and rescue squads, and two fire boats.<sup>3</sup> In 2021, LACoFD had

---

<sup>1</sup> Fire Wiki. Vernon Fire Department (California). Available online at: [https://fire.fandom.com/wiki/Vernon\\_Fire\\_Department\\_\(California\)#:~:text=As%20of%20October%202021%2C%202020,Los%20Angeles%20County%20Fire%20Department.](https://fire.fandom.com/wiki/Vernon_Fire_Department_(California)#:~:text=As%20of%20October%202021%2C%202020,Los%20Angeles%20County%20Fire%20Department.), accessed August 18, 2022.

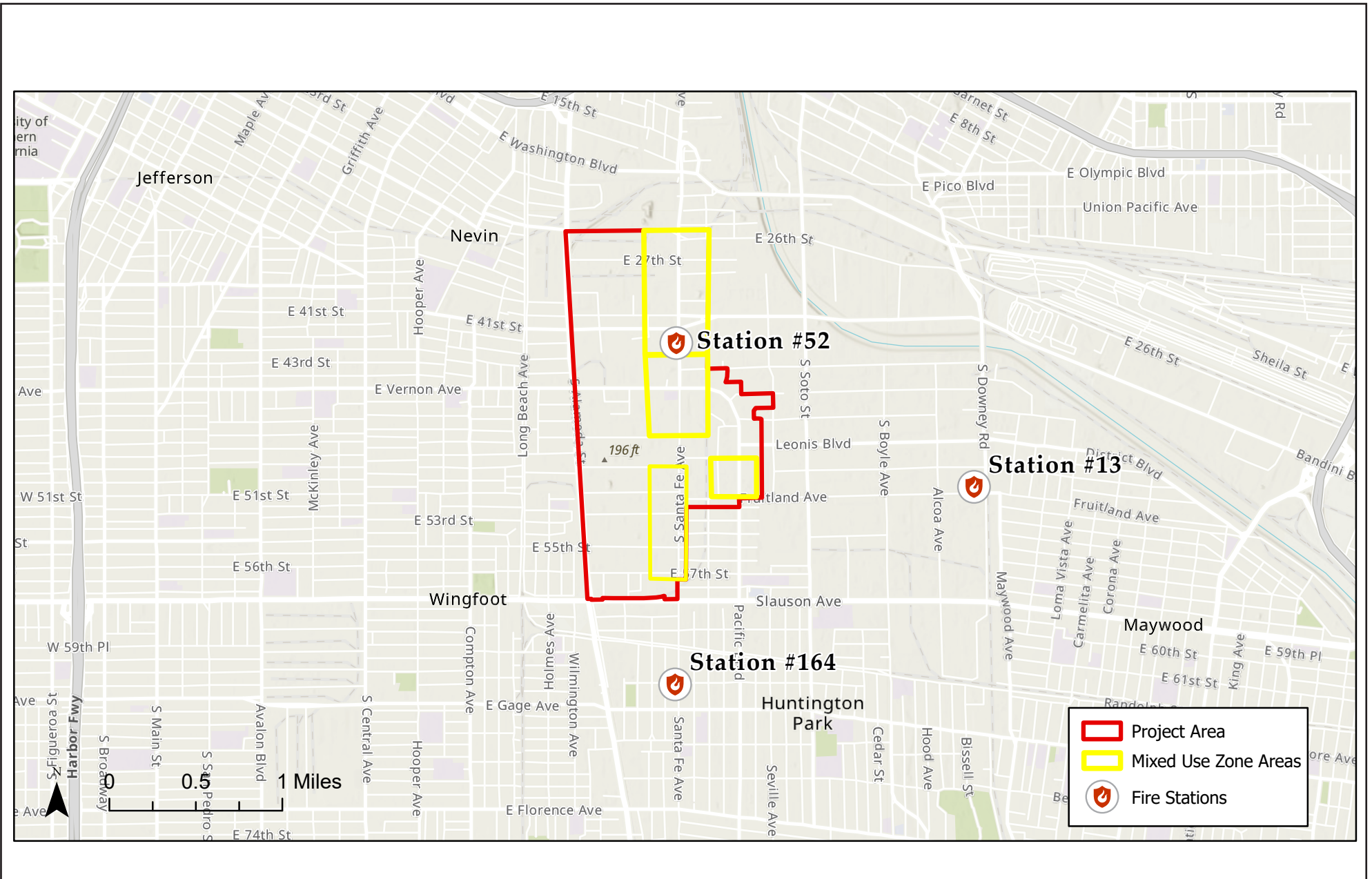
<sup>2</sup> LACoFD. 2017-2021 Strategic Plan. Available online at: <https://fire.lacounty.gov/wp-content/uploads/2019/09/LACoFD-Strategic-Plan-2017-2021.pdf>, accessed August 18, 2022.

<sup>3</sup> LACoFD. Emergency Operations. Available online at: <https://fire.lacounty.gov/emergency-operations/>, accessed August 18, 2022.

5,028 personnel, and they responded to 11,373 fire incidents, 312,550 emergency medical responses, and 80,001 other incidents.<sup>4</sup>

---

<sup>4</sup> LACoFD. 2021 Statistical Summary. Available online at: <https://fire.lacounty.gov/wp-content/uploads/2022/06/2021-Statistical-Summary.pdf>, accessed August 18, 2022.



SOURCE: Esri, 2022

FIGURE 3.10-1

Fire Stations Serving the City of Vernon

### 3.10.1.2 Regulatory Framework

#### *Federal*

##### **Federal Emergency Management Act (FEMA)**

In March 2003, the Federal Emergency Management Agency (FEMA) became part of the U.S. Department of Homeland Security. FEMA's continuing mission within the new department is to lead the effort to prepare the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the U.S. Fire Administration

##### **Disaster Mitigation Act of 2000**

The Disaster Mitigation Act of 2000 (42 U.S.C. § 5121 note) was signed into law to amend the Robert T. Stafford Disaster Relief Act of 1988 (42 U.S.C. §5121-5207). Among other things, this new legislation reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide and is aimed primarily at the control and streamlining of the administration of federal disaster relief and programs to promote mitigation activities. Some of the major provisions of the Act include:

- funding pre-disaster mitigation activities;
- developing experimental multi-hazard maps to better understand risk;
- establishing state and local government infrastructure mitigation planning requirements;
- defining how states can assume more responsibility in managing the Hazard Mitigation Grant Program (HMGP); and
- adjusting ways in which management costs for projects are funded.

The mitigation planning provisions outlined in Section 322 of the Act establish performance-based standards for mitigation plans and requires states to have a public assistance program (Advance Infrastructure Mitigation—AIM) to develop county government plans. The consequence for counties that fail to develop an infrastructure mitigation plan is the chance of a reduced federal share of damage assistance from 75 percent to 25 percent if the damaged facility has been damaged on more than one occasion in the preceding ten-year period by the same type of event.

### **Federal Fire Safety Act**

The Federal Fire Safety Act (FFSA) of 1992 is significantly different from other laws affecting fire safety as the Law applies to federal operations, and there is no requirement for local action unless a private building owner leases space to the federal government. The FFSA requires federal agencies to provide sprinkler protection in any building, whether owned or leased by the federal government that houses at least 25 federal employees during the course of their employment.

### ***State***

#### **California Fire Code**

Title 24, Part 9 of the California Code of Regulations (CCR) is the California Fire Code. Title 24, Part 9 of the CCR sets forth regulations regarding building standards, fire protection and notification systems, fire protection devices such as fire extinguishers and smoke alarms, high-rise building standards, and fire suppression training. The 2019 California Fire Code is the incorporation of the 2018 International Fire Code of the International Code Council with necessary California amendments. Development under the proposed project would be subject to applicable regulations of the California Fire Code.

#### **Title 8 California Code of Regulations Sections 1270 and 6773**

In accordance with C.C.R., Title 8 Sections 1270 “Fire Prevention” and 6773 “Fire Protection and Fire Equipment,” the California Occupational Safety and Health Administration (Cal OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hosing sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

#### **Uniform Fire Code**

The Uniform Fire Code (UFC) contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises.

### **California Health and Safety Code**

State fire regulations are set forth in Sections 13000 *et seq.* of the California Health and Safety Code, which includes regulations for building standards (as set forth in the California Building Code), fire protection and notification systems, fire protection devices, and fire suppression training.

### **Mutual Aid Agreements (MAA)**

The Emergency Managers Mutual Aid (EMMA) system is a collaborated effort between city and county emergency managers in the Office of Emergency Services (OES) in the coastal, southern, and inland regions of the state. EMMA provides service in the emergency response and recovery efforts at the Southern Regional Emergency Operations Center (REOC), local Emergency Operations Centers (EOCs), the Disaster Field Office (DFO), and community service centers. The purpose of EMMA is to support disaster operations in affected in affected jurisdictions by providing professional emergency management personnel. In accordance with the Master Mutual Aid Agreement, local and state emergency managers have responded in support of each other under a variety of plans and procedures.

### **California Code of Regulations Division 2 Section 16**

The State of California passed legislation creating the California Emergency Management Agency (Cal EMA) and authorizing it to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

Cal EMA serves as the lead state agency for emergency management in the state. Cal EMA coordinates the state response to major emergencies in support of local government. The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as they are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the state through the statewide mutual aid system.

### **Assembly Bill 9**

Passed in September of 2021, AB 9 establishes in the Department of Conservation the Regional Forest and Fire Capacity Program to support regional leadership to build local and regional capacity and develop, prioritize, and implement strategies and projects that create fire adapted communities and landscapes by improving ecosystem health, community wildfire preparedness, and fire resilience. The bill requires, among other things, the department, upon an appropriation by the Legislature, to provide block grants to

regional entities, as defined, to develop regional strategies that develop governance structures, identify wildfire risks, foster collaboration, and prioritize and implement projects within the region to achieve the goals of the program. The bill also requires the department, upon an appropriation by the Legislature, to provide block grants to eligible coordinating organizations, as defined, to support the statewide implementation of the program through coordination of and technical assistance to regional entities, as well as to support forest health and resilience efforts across regions and throughout the state. Finally, the bill requires the department to publish and update information on program implementation, as specified, on its internet website.<sup>5</sup>

## *Local*

### **City of Vernon General Plan**

The State of California requires every county and city to adopt a General Plan, which must contain a Safety Element. The following policies included in the City's Safety Element of the General Plan guide the City in reducing the risk of fire to life and property:

- Goal S-1:** Minimize the risk to public health, safety, and welfare associated with the presence of natural and human-caused hazards.
- Policy S-1.1:** Periodically update and maintain the Multi-hazard Functional Plan in an effort to identify potential contingencies and emergency conditions and define the necessary response by public safety and other personnel.
- Policy S-1.2:** Cooperate with other jurisdictions in the southeast area of Los Angeles County to maintain an up-to-date emergency response system for the region.
- Policy S-1.3:** Prepare and disseminate information to residents and businesses on preparing for and responding to a major earthquake or potential terrorist threat.

---

<sup>5</sup> California State Legislature. Assembly Bill No. 9. September 24, 2021. Available online at: [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=202120220AB9](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB9), accessed on September 7, 2022.



**Policy S-1.4:** Maintain the public water distribution and supply system facilities to provide adequate capacity to meet both every day and emergency fire-flow needs.

**Policy S-1.5:** Coordinate with the Los Angeles Unified School District for protection and or evacuation of school children in the event of an emergency condition, which could affect the schools in or near Vernon.

**Goal S-2** Provide a high degree of protection for all residents and workers from hazardous materials and the hazards associated with transport of such materials.

**Policy S-2.1:** Continue to support and encourage State efforts to identify existing or previously existing hazardous waste generators or disposal sites in the City of Vernon.

**Policy S-2.2:** Continue to require every business to maintain a list of the chemicals and other hazardous materials used or stored on site in accordance with appropriate material safety data sheets and otherwise in accordance with law, and to provide that list to the Fire Department and Environmental Health Department. Require that the Fire Department and Environmental Health Department to maintain a list of such materials and the location where they are stored or used to permit emergency personnel to respond appropriately, if required.

**Goal S-3** Maintain high standards for the provision of City emergency services.

**Policy S-3.1:** Establish and implement plans for continuity of government for Vernon in the event of a catastrophe.

**Policy S-3.2:** Require businesses handling, transporting, or producing materials considered acutely hazardous to prepare contingency plans for accidents involving these chemicals.

**Policy S-3.3:** Support the development and continued updating of public safety education programs.

**Policy S-3.4:** Undertake steps to inform all residents and businesses of the importance of visible and clearly legible signs and street numbers in shortening the response time of emergency personnel.

**Policy S-3.5:** Periodically review the City's emergency service equipment to determine if it is adequate to meet the needs of changing land uses and development types.

**Policy S-3.6:** Require new development projects that necessitate the purchase of public safety equipment to underwrite or share in purchase costs.

**Policy S-3.7:** Develop a new Emergency Operations Center (EOC) with adequate space and facilities to respond to any emergency situation which may arise.

**Goal S-4** Provide a high degree of protection for all workers and residents in the event of any disaster.

**Policy S-4.2:** Review the design of new development projects to consider public safety and issues such as emergency access, defensible space, and overall safety.

### 3.10.1.3 Impacts and Mitigation Measures

#### *Thresholds of Significance*

The following thresholds for determining the significance of impacts related to public services and recreation are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts due to the use of fire services, if any of the following would occur:

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

#### *Methodology*

The need for, or deficiency in, adequate fire and emergency response services in and of itself is not a CEQA impact, but a social or economic impact. (*City of Hayward v. B'd of Trustees* (2015) 242 Cal.App. 4th 833, 843.) To the extent that the Project causes a need for additional fire and emergency response services that result in the construction of new facilities or additions to existing facilities and the impact from that construction results in a potential impact to the environment, that is a CEQA impact that needs to be

assessed in this EIR. Any discussion in this EIR that relates solely to the level of fire and life safety services provided to the residents or users within the Project Area and its surrounding community, including any existing or future needs and deficiencies, is for informational purposes only. The ultimate determination of whether there is a significant impact related to fire and emergency response services is based on whether a significant impact will result from the construction of new or expanded fire and emergency response facilities.

### 3.10.1.4 Environmental Impacts

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

Development associated with the Project would increase the City's population and, therefore, increase demand for fire protection services. The addition of 874 multi-family units anticipated with the implementation of the Project could result in approximately 2,486 additional residents by 2040. Non-residential square footage would also increase by 157,960, resulting in approximately 127 additional jobs in the Project Area.

#### *Construction*

Project implementation would facilitate development and construction of retail, office, and residential uses. Construction activities associated with the future implementation of the Project have the potential to increase fire hazards. These activities could require large amounts of flammable construction materials (including wood framing) and the installation of electrical, plumbing, and mechanical systems. Although rare, fires do occur at construction sites, thus, all future projects would be subject to LACoFD codes and inspection by fire personnel. In addition, all future projects would be subject to City requirements relative to water availability and accessibility to firefighting equipment, as well as comply with City, County, and state fire protection regulations. Construction activities could also result in traffic delays in the Project Area and increase emergency response times and the potential for vehicle traffic accidents.

Per Chapters 8.04 (Fire Code) and 15.08 (Building Code) of the City's Municipal Code, future development projects associated with the Project would be required to comply with the California Fire Code and California Building Code. All future development under the Project would need to undergo review and approval by the City of Vernon's Building Division or Engineering Division, as applicable, to receive permits for construction and operation. The development review process would ensure that

future development projects would comply with the Los Angeles County Fire Code (Title 32 of the Los Angeles County Code). Pursuant to the County's Fire Prevention Fees, individual projects would be required to pay all necessary fees to offset impacts on fire prevention and life safety services. Revenue generated from the Fire Prevention Fee Program, as well as a percentage of property taxes would go towards improvement and maintenance of existing facilities, construction of new facilities, and the hiring of additional personnel as needed. Therefore, impacts to new or physically altered facilities would be less than significant.

As stated above, all new development within the Project Area would be evaluated and approved by the City of Vernon's Building Division or Engineering Division and LACoFD before receiving permits for construction and/or operation. The installation of fire protection systems and automatic sprinkler systems will be required prior to project approval and certification. As discussed in **Section 3.5, Hazards and Hazardous Materials**, and **Section 3.11, Transportation**, construction activities related to the implementation of the Project is not expected to result in significant impacts to emergency services or response times. Construction activities would not result in the need for expansion of existing fire stations or construction of new fire stations due to the temporary nature of construction.

### *Operation*

The Project would result in future development opportunities in the Project Area. As such, it is not possible to specify the exact location, size, or timing of future development that may contribute to an increase in the need for staff and/or facilities. As discussed above, with implementation of the Project, the number of residents in the Project Area is projected to grow by approximately 2,486 residents.

Implementation of the Project would likely increase emergency calls a demand for fire protection services. As residential population and commercial development increases in the Project Area, the City would continue to monitor fire protection resources to ensure adequate facilities, staffing, and equipment are available. As future development projects are contemplated, they would be required to comply with all City and County codes and regulations regarding access requirements for commercial and residential areas and design standards for fire prevention (e.g., emergency plans and evacuation routes).

The ability of Emergency Medical Services (EMS) and fire protection services to respond to calls in a timely manner depends primarily on the distance of the station to the incident and the speed at which the emergency vehicles are able to navigate intervening roadways. While growth anticipated under the Project would result in higher overall traffic volumes in the Project Area, this would not impede emergency response, since California State law requires that drivers yield the right-of-way to emergency

vehicles and remain stopped until the emergency vehicles have passed. Therefore, EMS and fire protection services response times generally would not change substantially as the population of the Project Area increases.

While much of the future development within the Project Area will take the form of adaptive reuse, the proposed zoning regulations within the MU-CC Zone would permit buildings over 75 feet, which are considered high-rise under the California Building Code and are subject to specific requirements regarding materials and features. The California Fire Code includes requirements related to fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings in the Project Area. The California Fire Code contains specialized technical regulations related to fire and life safety. All new buildings proposed under the Project would be designed to meet minimum fire and emergency safety requirements identified in the California Building Code and California Fire Code and would include appropriate fire safety measures and equipment, including but not limited to, use of fire retardant building materials, inclusion of emergency water infrastructure (fire hydrants and sprinkler systems), installation of smoke detectors and fire extinguishers, emergency response notification systems and provision of adequate emergency access ways for emergency vehicles.

Although there are no current plans to construct a new fire station or expand existing fire stations, and the City does not foresee that new fire stations will be needed, it is possible that providing fire services to increased population in the Project Area may result in the need for new or expanded fire facilities over the 20-year horizon. Implementation of the Project is anticipated to result in population growth of 2,486 residents by 2040. These increases would take place over time, and the totals are not anticipated to be reached until 2040 or beyond. The Project does not constitute a commitment to any project-specific construction.

For CEQA purposes, the determination of impacts is not based on response times themselves, but response times can be one indication of a need for new facilities that should be considered by the City. If new facilities are needed, the primary concern is if the construction of those facilities would have a significant effect on the environment.

Construction of new fire stations or expansion of an existing fire station to serve the Project Area would occur in an urban area and would be limited in size. Any new facility would also be required to comply with applicable federal, State, and local regulations and policies discussed in this EIR, such as NPDES

permit requirements, the City's Noise Ordinance, and the California Building Code, including CALGreen requirements.

Potential environmental impacts of construction and operation of any new facility, as an allowed land use, have been evaluated throughout this EIR. Construction and operational impacts to air, noise, traffic, as well as other impacts of new developments are discussed throughout this EIR, and they would not be any different for a fire station. It is not foreseeable that impacts from building any other station in the Project Area would have greater or different impacts than those identified in this EIR for construction or operations. Similar to other types of development, the construction of new or expanded fire protection facilities could contribute to construction noise impacts identified in **Section 4.11, Noise and Vibration**, of this EIR and would be subject to applicable mitigation measures.

In addition, should new facilities be needed, such facilities would be located on parcels that are infill opportunities on lots approximately less than five acres in size. For reference, the Los Angeles Bureau of Engineering (BOE) determined that the typical standard fire/paramedic station would consist of a 15,250-square foot building on a parcel that is approximately one acre. Based on the urban location and the relatively small size of typical facilities, the construction of a new fire facility or expansion of an existing facility would likely qualify for an infill exemption or result in less than significant impacts with standard compliance measures and design features. To the extent that any significant impacts could result from the unique characteristics of a specific site, those impacts would be speculative at this time. Therefore, impacts related to the need for new or expanded fire facilities would be less than significant.

### ***Significance Before Mitigation***

This impact would be less than significant.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

Less than significant.

#### **3.10.1.5 Cumulative Impacts**

Implementation of the Project and related projects ongoing and planned in the City, would increase the demand for fire protection services in the City. The City would continue to monitor impacts to fire services and facilities and review each future development project on a project-by-project basis to

determine the need for additional resources. Increased sales tax revenues from leased commercial spaces on the ground floor of future developments and property taxes from the related projects could be used to fund increases in staffing and equipment. Furthermore, all cumulative development projects would be required to submit site design plans to the City and LACoFD during the planning and building permit check process. In conformance with standard City and County procedures, these plans shall be reviewed by the Building and Engineering Divisions with respect to access and building design. Incorporation of such reviews would avoid any significant cumulative impacts to fire resources and services. The potential for new fire facility construction is speculative at the present time and is, therefore, not analyzed in this document. It is assumed that if new facilities are determined to be necessary at some point in the future, such facilities would occur where allowed under the designated land use. Therefore, the incremental effect of the Project with respect to fire protection would not be cumulatively considerable.

### 3.10.2 LAW ENFORCEMENT SERVICES

#### 3.10.2.1 Environmental Setting

Law enforcement protection services for the City of Vernon are provided by the Vernon Police Department. The Vernon Police Department includes a Patrol Division, Professional Standards Division, Communications Center, Record Division, and Detective Bureau. The Patrol Division handles all calls from the public and includes a Bicycle Patrol Team, a Motor Unit, a Canine Team, and a D.A.R.E Program for the local Vernon Elementary School.<sup>6</sup> The Professional Standards Division is responsible for the Business Labor Relations, Crime Prevention, citizen personnel complaints, training, recruitment, and for the coordination and release of information to the public and news media.<sup>7</sup>

The Vernon Police Department operates a Temporary Holding Facility (THF). This allows police officers to process, and temporary house arrested individuals at the police department for a period less than 12-hours. Individuals who have been arrested on felony charges or have been ordered to remain in-custody by a judge are transported to the Huntington Park Police Department for housing.<sup>8</sup>

---

<sup>6</sup> City of Vernon. Patrol Division. Available online at: <https://www.cityofvernon.org/government/police-department/department-divisions/patrol-division>, August 25, 2022.

<sup>7</sup> City of Vernon. Professional Standards. Available online at: <https://www.cityofvernon.org/government/police-department/department-divisions/professional-standards>, August 25, 2022.

<sup>8</sup> City of Vernon. Vernon Jail Facility. Available online at: <https://www.cityofvernon.org/government/police-department/vernon-jail-facility>, accessed August 25, 2022.

The Vernon Police Department is located within City Hall at 4305 South Santa Fe Avenue, in the Project Area. **Figure 3.10-2, Vernon Police Department**, shows the location of the Police Department offices in the Project Area.





### 3.10.2.2 Regulatory Framework

#### *State*

All law enforcement agencies within the State of California are organized and operate in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under state law, all sworn municipal and County officers are state peace officers.

#### *Local*

##### **City of Vernon General Plan**

The following policies included in the City’s Safety Element of the General Plan guide the City in reducing the risk of fire to life and property:

**Goal S-1**                      Minimize the risk to public health, safety, and welfare associated with the presence of natural and human-caused hazards.

**Policy S-1.1:**                      Periodically update and maintain the Multi-hazard Functional Plan in an effort to identify potential contingencies and emergency conditions and define the necessary response by public safety and other personnel.

**Policy S-1.2:**                      Cooperate with other jurisdictions in the southeast area of Los Angeles County to maintain an up-to-date emergency response system for the region.

**Policy S-1.3:**                      Prepare and disseminate information to residents and businesses on preparing for and responding to a major earthquake or potential terrorist threat.

**Policy S-1.5:**                      Coordinate with the Los Angeles Unified School District for protection and or evacuation of school children in the event of an emergency condition, which could affect the schools in or near Vernon.

**Goal S-3**                      Maintain high standards for the provision of City emergency services.

**Policy S-3.1:**                      Establish and implement plans for continuity of government for Vernon in the event of a catastrophe.

- Policy S-3.3:** Support the development and continued updating of public safety education programs.
- Policy S-3.4:** Undertake steps to inform all residents and businesses of the importance of visible and clearly legible signs and street numbers in shortening the response time of emergency personnel.
- Policy S-3.5:** Periodically review the City's emergency service equipment to determine if it is adequate to meet the needs of changing land uses and development types.
- Policy S-3.6:** Require new development projects that necessitate the purchase of public safety equipment to underwrite or share in purchase costs.
- Policy S-3.7:** Develop a new Emergency Operations Center (EOC) with adequate space and facilities to respond to any emergency situation which may arise.
- Goal S-4** Provide a high degree of protection for all workers and residents in the event of any disaster.
- Policy S-4.2:** Review the design of new development projects to consider public safety and issues such as emergency access, defensible space, and overall safety.

### 3.10.2.3 Impacts and Mitigation Measures

#### *Thresholds of Significance*

The following thresholds for determining the significance of impacts related to police services are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts related to police services, if any of the following would occur:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.

## *Methodology*

The need for or deficiency in adequate police services in and of itself is not a CEQA impact, but a social or economic impact. (*City of Hayward v. B'd of Trustees* (2015) 242 Cal.App. 4th 833, 843). To the extent that the Project causes a need for additional police services and that results in the construction of new facilities or additions to existing facilities and the impact from that construction results in a potential impact to the environment which is a CEQA impact that needs to be assessed in this EIR. Any discussion in this EIR that relates solely to the level of police protection services provided to the residents or users of the Project Area and its surrounding community, including any existing or future needs and deficiencies, is for informational purposes only. The ultimate determination of whether there is a significant impact related to police protection services is based on whether a significant impact will result from the construction of new or expanded police facilities.

Police protection service needs are dependent on the size of the service population and the geographic area served, the number and types of calls for service, and the characteristics of a project and its surrounding community. Impacts on police protection services are considered significant if the demand for services exceeds the capacity of existing facilities, or if a station area is located outside of specified distances from a project area.

To the extent that the Project results in the need for new police services that would cause the need for new or altered police facilities, the analysis below evaluates the potential need for new facilities and associated potential impacts from the construction of new police protection facilities or the expansion of existing police protection facilities if they could be required. Police protection impacts are also evaluated for the Project within the context of applicable local policies and codes described in the Regulatory Framework.

This discussion of impacts to police protection services addresses impacts for the Project Area.

### **3.10.2.4 Environmental Impacts**

**Impact PS-2**                      **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?**

### *Construction*

The Project would allow for increased development potential in the Project Area but would not constitute a commitment to any project-specific construction. Site development and construction would not normally require services from the Police Department, except in the cases of trespassing, theft, or vandalism. Such activities at a construction site occur, but do not typically place undue demands on law enforcement services. Construction activity would increase traffic both on and adjacent to the Project Area during working hours because commuting construction workers, trucks, and other large construction vehicles would be added to normal traffic during the buildout period. Slow-moving, construction-related traffic along local roadways may reduce optimal traffic flows and could conceivably delay emergency vehicles or contribute to a vehicle accident. However, this potential is considered less than significant given the periodic and temporary nature of construction-related traffic. Implementation of standard construction traffic control procedures, such as the use of flagmen, and signage showing traffic detour plans, haul routes, hours of operation, protective devices, warning signs, and access to abutting properties would further reduce any potential impact. Construction activities for anticipated development would not result in the need for expansion of existing police facilities or construction of new police facilities due to the temporary nature of construction.

### *Operation*

The Vernon Police Department is responsible for providing police protection services to the Project Area. A significant impact may occur if the Vernon Police Department could not adequately serve a project, necessitating a new or physically altered station.

The Project would include zone changes that would increase the development potential in the Project Area. Future development associated with the Project is expected to generate approximately 2,486 new residents (see **Section 3.9, Population and Housing**). Daytime population could also increase due to additional retail employees and patrons within the Project Area. An increase in population would increase demand for police protection services. However, future development associated with the Project is not anticipated to directly or indirectly induce substantial unplanned population growth.

A larger population could increase demand for Police Department services by increasing the opportunities for crime, though an increase in development intensity and residential density would not necessarily result in a directly proportional increase in crime. An area's crime rate is influenced by many factors, such as police presence, implementation of crime prevention measures, presence of abandoned, poorly lit or low-visibility areas, and socioeconomic factors. To ensure that necessary police services, facilities, and equipment are provided for the public safety needs of all

neighborhoods, demand for existing and projected police services and facilities is monitored and forecasted by Vernon Police Department in order to maintain standards. Accordingly, as development occurs over time, police protection service levels would continue to be evaluated and maintained by Vernon Police Department in accordance with existing policies, procedures and practices. Future individual developments in the Project Area would be required to incorporate design features to deter crime. Each individual development project in the Project Area would be required to have adequate exterior lighting security and visibility, particularly along walkways, driveways, and within outdoor surface parking spaces.

The City does not foresee a need for additional police facilities, and there are no planned police facilities to be constructed in the Project Area at this time. However, the potential for construction or expansion of police facilities over the Project horizon may be possible. Such facilities would more likely be small neighborhood facilities and could be accommodated in existing buildings or small new structures. New facilities would be required to comply with applicable federal, State, and local regulations and policies discussed in this EIR, such as NPDES permit requirements, the City's Noise Ordinance, and the California Building Code, including CALGreen requirements. Construction of such development would likely not result in new significant impacts and would likely qualify for infill exemptions. To the extent there are site specific conditions that would result in impacts, such impacts would be speculative at this time. To the extent construction would result in any impacts those would not be different from other infill development analyzed throughout the EIR. Therefore, impacts related to the need for new or expanded police protection facilities would be less than significant.

***Significance Before Mitigation***

This impact would be less than significant.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

Less than significant.

**3.10.2.5 Cumulative Impacts**

Future needs for police protection are reviewed regularly, including during the budgeting process. As described above, cumulative development projects within the City, including the Project Area, would be

subject to review upon project submittal of the development application and may be required to provide security features, such as security cameras, private security services, and/or on-site police drop-in facilities that reduce the demand for police service.

The Project and other planned and approved developments throughout the City would cumulatively increase the need for services from the police department. Cumulative projects outside of the Project Area would also increase the need for police services and would require additional police staffing. Similar to potential future development under the Project, development projects located in other areas of the City would be required to submit site designs and comply with City regulations. As discussed, there are no planned facilities at this time. However, the potential for construction or expansion of new facilities over the Project horizon due to increased growth in the Project Area and surrounding areas is possible. Such facilities would more likely be small neighborhood facilities and could be accommodated in existing buildings or small new structures. Construction of such development would likely not result in new significant impacts and would likely qualify for infill exemptions. To the extent there are site specific conditions that would result in impacts, such impacts would be speculative at this time. Based on the above information, implementation of the Project and other related projects would not result in cumulatively considerable impacts resulting in the need for new or expanded police facilities.

### 3.10.3 PUBLIC SCHOOLS

#### 3.10.3.1 Environmental Setting

The City of Vernon is served by the Los Angeles Unified School District (LAUSD), the nation's second largest school district. LAUSD serves the City of Los Angeles, and all or portions of 26 incorporated cities and unincorporated areas of Los Angeles County. LAUSD provides education services to an area of 710 square miles with a total of 1,424 educational schools and centers, including 436 elementary schools, 77 middle schools, 86 senior high schools, and 227 independent charter schools.<sup>9</sup> Further, through LAUSD's eChoices program, there are 255 Magnet Programs located throughout LAUSD. LAUSD operates only one school in the City of Vernon: Vernon City Elementary School, which serves grades kindergarten through sixth grade. The location of Vernon City Elementary School is shown in **Figure 3.10-3, Public Schools in the Project Area**. Enrollment during the 2021-2022 school year was 174.<sup>10</sup> Enrollment has decreased by 20 percent since the 2019-2020 school year. Vernon City Elementary is not currently

---

<sup>9</sup> Los Angeles Unified School District. *Fingertip Facts 2021-2022*, Available online at: [https://achieve.lausd.net/site/handlers/filedownload.ashx?moduleinstanceid=66505&dataid=109597&FileName=Fingertip\\_Facts\\_2021\\_2022\\_FINAL\\_ENG.pdf](https://achieve.lausd.net/site/handlers/filedownload.ashx?moduleinstanceid=66505&dataid=109597&FileName=Fingertip_Facts_2021_2022_FINAL_ENG.pdf), accessed August 25, 2022.

<sup>10</sup> Los Angeles Unified School District Open Data. "Vernon City Elementary." Available online at: <https://my.lausd.net/opendata/dashboard?language=en>. Accessed August 25, 2022.

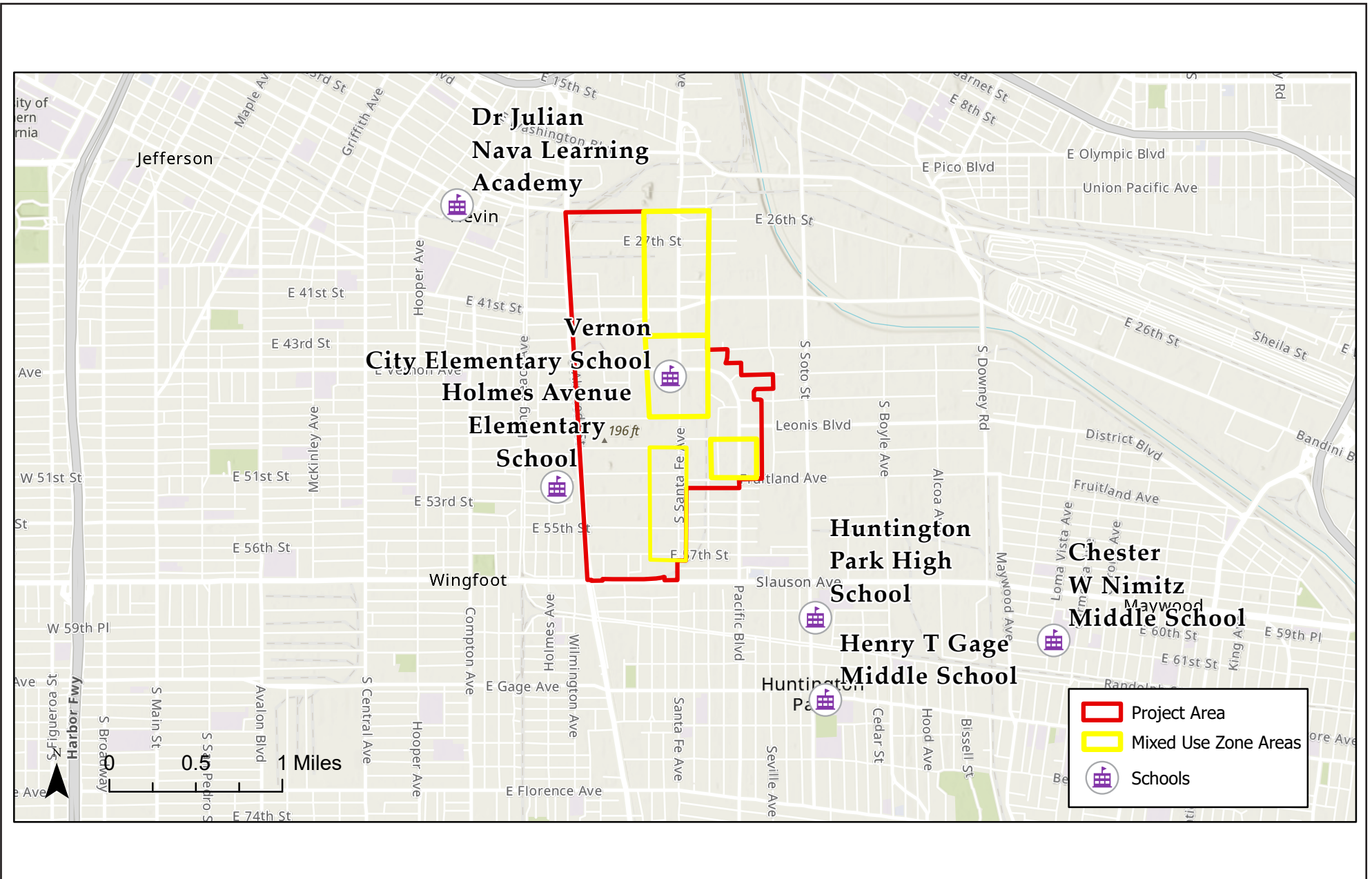
experiencing overcrowding. Another kindergarten through sixth grade LAUSD elementary school is located just outside of Vernon, called Holmes Avenue Elementary. There are three middle schools within close proximity o the Project Area: Dr. Julian Nava Learning Academy in Los Angeles, and Henry T. Gage Middle School and Chester W. Nimitz Middle School in Huntington Park. The closest high school is Huntington Park Senior High School.

As discussed in the Regulatory Framework, the School Facilities Act (Government Code Section 65995) was enacted to allow school districts to assess developer fees to help cover the cost of constructing or reconstructing school facilities necessary to accommodate increases in student population. The School Facilities Act limits the amount that local agencies could require of developers to mitigate the impact of development on school facilities. Developer fees within Los Angeles Unified School District are collected by the Developer Fee Program Office (DFPO). Current developer fees are calculated at the rate of \$4.79 per square foot of assessable space for residential construction, and \$0.78 for commercial/industrial development.<sup>11</sup>

---

<sup>11</sup> Los Angeles Unified School District. "Developer Fee Program Office." Available online at: <https://achieve.lausd.net/domain/921>, accessed on August 25, 2022.





SOURCE: Esri, 2022

FIGURE 3.10-3

Public Schools Serving The Project Area

### 3.10.3.2 Regulatory Framework

#### *State*

##### **California Government Code Section 65995**

California Government Code Section 65995 is found in Title 7, Chapter 4.9 of the California Government Code. California Government Code Section 65995 authorizes school districts to collect impact fees from developers of new residential and commercial/industrial building space. Senate Bill 50 (SB 50) amended Government Code Section 65995 in 1998. Under the provisions of SB 50 schools can collect fees to offset costs associated with increasing school capacity as a result of development. The local school districts determine fees in accordance with California Government Code Section 65995 which can be adjusted every two years. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits and subdivisions. The provisions of SB 50 are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other State or local laws.

##### **California Education Code**

School facilities and services are subject to the rules and regulations of the California Education Code and governance of the State Board of Education (SBE). The SBE is the 11-member governing and policymaking body of the California Department of Education (CDE) that sets K-12 education policy in the areas of standards, instructional materials, assessment, and accountability. The CDE and the State Superintendent of Public Instruction are responsible for enforcing education law and regulations; and for continuing to reform and improve public elementary school, secondary school, and childcare programs, as well as adult education and some preschool programs. The CDE's mission is to provide leadership, assistance, oversight, and resources so that every Californian has access to an education that meets world-class standards. The core purpose of the CDE is to lead and support the continuous improvement of student achievement, with a specific focus on closing achievement gaps.

##### **California Department of Education**

The CDE is the government agency responsible for public education throughout the state. The department oversees funding, and student testing and achievement levels for all state schools. A sector of the CDE, the California State Board of Education is the governing and policy making sector responsible for education policies regarding standards, instructional materials, assessment, and accountability.

### **Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998**

Proposition 1A, the Class Size Reduction Kindergarten-University Public Education Facilities Bond Act of 1998 (Ed. Code, §§ 100400–100405) is a school construction funding measure that was approved by the voters on the November 3, 1998, ballot. The Act created the School Facility Program where eligible school districts may obtain state bond funds.

### **Leroy Greene School Facilities Act of 1998/ Senate Bill 50**

The Leroy Greene School Facilities Act of 1998, or Senate Bill 50 (SB 50) (Ed. Code, §§ 17070.10-17079.30), eliminated the ability of cities and counties to require full mitigation of school impacts and replaced it with the ability for school districts to assess fees directly to offset the costs associated with increasing school capacity as a result of new development. The Act states that payment of developer fees is “deemed to be complete and full mitigation” of the impacts of new development. Current developer fees are calculated at the rate of \$4.79 per square foot of assessable space for residential construction, and \$0.78 for commercial/industrial development.<sup>12</sup>

Additional mechanisms available to school districts to fund school construction include community assessment districts and general obligation bonds. CUSD has an active bond for funding necessary improvements.

## ***Local***

### **City of Vernon Housing Element**

The City is in process of approving the 2021-2029 Housing Element. The current 2014-2021 Housing Element includes the following goals and policies related to schools:

**Goal H-3:** Create opportunities for the development of new housing in areas of the City that have the least potential for adverse impacts associated with established industrial uses and truck routes. Locate such new housing nearby community services.

**Policy 3.3** Encourage development of residential uses in strategic proximity to schools, recreational facilities, commercial areas, parks and other public spaces, and transit routes.

---

<sup>12</sup> Los Angeles Unified School District. Developer Fee Program Office. Available online at: <https://achieve.lausd.net/domain/921>, accessed on August 25, 2022.

### 3.10.3.3 Impacts and Mitigation Measures

#### *Thresholds of Significance*

The following thresholds for determining the significance of impacts related to schools are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts due to the use of schools, if any of the following would occur:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered schools, need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools.

#### *Methodology*

In *Goleta Union Sch. Dist. v Regents of Univ. of Cal.* (1995) 37 CA 4th 1025, the court held that school overcrowding is a social impact and does not require analysis in an EIR and mitigation, unless the overcrowding is linked to physical environmental effects (such as new school construction).

However, the law is somewhat unclear on how to analyze impacts from school facilities. The treatise, CEB, Practice under CEQA, provides the following discussion on impacts to schools:

*State and local agencies may not deny either legislative or adjudicative approvals on the basis of a refusal to pay fees in excess of those limits. Govt C §65995.*

*The statutes also significantly limit the application of CEQA to school facilities impact issues. The fees set forth in Govt C §65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects. Govt C §5996(a).*

Because the statute states that the statutory fees are the exclusive means of considering, as well as mitigating, school impacts, it limits not only the mitigation that may be required but also the scope of impact review in the EIR and the findings for school impacts. In *Chawanakee Unified Sch. Dist. v County of Madera* (2011) 196 CA 4th 1016, the court held that because the methods in the statute are the exclusive

means of "considering" impacts on schools, an EIR need not describe and analyze a development's impacts on schools.<sup>13</sup> Consistent with this view:

- Once the statutory fee is imposed, the impact should be determined to be mitigated because of the provision that the statutory fees constitute full and complete mitigation (Government Code Section 65995(b)); and
- It should not be necessary to adopt a statement of overriding considerations for school facilities impacts when the statutory fee is assessed, because the impact is deemed as a matter of law to be adequately mitigated (Government Code Section 65995(b)).

The Chawanakee court also ruled that the reach of the statute is limited to impacts "on" schools and does not extend to impacts on the nonschool physical environment, even though they may be "related" to schools in some way. The implications of this ruling are uncertain, however, because the court did not consider the effect of *Govt C §65995(b)*, which states that the statute provides full school facilities mitigation notwithstanding CEQA, or of *Govt C §65995(c)*, which defines a school facility as "any school-related consideration relating to a school district's ability to accommodate enrollment."

Based on the above, and the uncertainty created by the *Chawanakee* decision related to impacts to non-school property, from the construction of school facilities, for purposes of this EIR, an impact on schools would occur if the Project promotes growth patterns resulting in the need for and/or the provision of new or physically altered public school facilities (including charter schools), the construction of which would cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives. To the extent that future development associated with the Project causes impacts to classroom sizes or school service impacts that results in the construction of new facilities or alterations to existing facilities and the impact from that construction results in a potential impact to the environment, that is a CEQA impact that needs to be assessed in this EIR. Any discussion in this EIR that relates solely to the level of school services provided to the residents of the Project Area, including any existing or future needs and deficiencies, is for informational purposes only. The ultimate determination of whether there is a significant impact related to schools is based on whether a significant impact will result from the construction of new or expanded school facilities to non-school property.

---

<sup>13</sup> Casetext. *Chawanakee Unified School District v. County of Madera*. 2011. Available online at: [https://casetext.com/case/chawanakee-unified-sch-dist-v-cty-of-madera/?PHONE\\_NUMBER\\_GROUP=P](https://casetext.com/case/chawanakee-unified-sch-dist-v-cty-of-madera/?PHONE_NUMBER_GROUP=P), accessed September 7, 2022.

The discussion of impacts to public schools addresses impacts for the entire Project Area. Public school service needs are dependent on the size of the service population and the geographic area served. This analysis estimates the number of students that would be generated by reasonably anticipated development with the Project using LAUSD student generation rates and assesses whether existing and planned LAUSD school facilities expected to serve the Project Area would have sufficient available capacity to accommodate the students. If there would not be sufficient available capacity, the EIR will consider whether new school facilities will be needed and if foreseeable, whether the construction of the school facilities will result in a significant impact.

### 3.10.3.4 Environmental Impacts

**Impact PS-3**                    **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives of the school district?**

#### *Construction*

Construction activities associated with implementation of the Project would not impact LAUSD school facilities as construction activities would not directly increase the student population. Thus, no impacts to the existing educational facilities would occur.

#### *Operation*

The Project Area is located within the boundaries of the LAUSD. A significant impact would occur if the Project would include substantial employment or population growth, which could generate a demand for school facilities that would exceed the capacity of the schools in the area. The Project is anticipated to result in a net increase of 874 residential units, or approximately 2,486 persons by 2040, which has the potential to increase enrollment at schools that serve the Project Area.

It is reasonable to assume that a portion of the 2,486 residents would include school aged children, although many of the units are targets for urban professionals and not families. The student generation factor identifies the number of students per housing unit and provides a link between residential construction projects and projections of enrollment. The State-wide factor used by the Office of Public

School Construction is 0.37 for grades K-12.<sup>14</sup> Based on these metrics, student generation factors for the addition of 874 residential units would result in an additional 171 elementary school students at 0.1953 student per household, 47 junior high school students at 0.0538 student per household, 94 high school students at 0.1071 student per household, and 13 special day class students at 0.0148 student per household; a total of 325 students.<sup>15</sup> The schools in and around the Project Area have experienced declining enrollment and are operating below design capacity. Additionally, future development associated with the Project would occur over a 20-year period; thus, the projected student growth would be gradual. As students may attend any LAUSD school with available capacity, the projected number of students would not result in LAUSD schools operating above design capacity, and thus project related impacts would be less than significant.

Further, development of individual projects associated with the Project would be subject to California Government Code Section 65995, which would allow LAUSD to collect impact fees from developers of new residential and commercial space. Conformance to California Government Code Section 65995 is deemed to provide full and complete mitigation of impacts to school facilities. Therefore, the Project would result in a less than significant impact to public schools.

### ***Significance Before Mitigation***

This impact would be less than significant.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

Less than significant.

### **3.10.3.5 Cumulative Impacts**

The Project along with cumulative projects in the surrounding area would increase student enrollment possibly causing the need for new or expanded facilities, the construction of which could result in

---

<sup>14</sup> Los Angeles Unified School District, *2022 Developer Fee Justification Study*, March 2022. Available online at: <https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/921/2022%20Developer%20Fee%20Justification%20Study%20for%20Los%20Angeles%20Unified%20School%20District.pdf>, accessed on September 7, 2022.

<sup>15</sup> Los Angeles Unified School District, *2022 Developer Fee Justification Study*, March 2022. Available online at: <https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/921/2022%20Developer%20Fee%20Justification%20Study%20for%20Los%20Angeles%20Unified%20School%20District.pdf>, accessed on September 7, 2022.

significant adverse impacts. However, such impacts would be dependent on site-specific conditions that are too speculative to determine without site-specific information. The payment of school fees in compliance with the California Government Code Section 65995 is considered full mitigation for school impacts; therefore, the cumulative impact of past, present, and future development would be less than significant. Appropriate school fees would be paid for future development. LAUSD's Facilities Services Division monitors growth and school capacity and determines future school needs. Depending on the location of new schools, if they are determined to be needed, construction and operational impacts (such as traffic, noise, and lighting) could occur and would be generally consistent with other allowed development analyzed in this EIR. However, impacts related to specific locations would be speculative at this time. Therefore, the Project would not make a cumulatively considerable contribution to impacts related to school capacity and new school construction. Impacts would be less than significant.

### **3.10.4 LIBRARIES**

#### **3.10.4.1 Environmental Setting**

The City of Vernon does not include any public library facilities. A Little Free Library, a community book exchange, was implemented in 2020 as a temporary library solution while the City continues work to find a permanent library for residents of Vernon. Little Free Library stands can be found at: Vernon City School at 2360 East Vernon Avenue, Vernon Village Apartments at 4675 East 52nd Drive, and the Whole Foods Market Distribution Center at 5000 East Pacific Boulevard. Additionally, Vernon residents have access to public library facilities within the surrounding communities. The Los Angeles County Public Library System (LA County Library) operates two branches within the surrounding area: the Huntington Park Library branch is located approximately one mile southeast of the Project Area, and the Maywood Cesar Chavez Library branch is located approximately 1.7 miles east of the Project Area. Additionally, the Vernon-Leon H. Washington Jr. Memorial Branch of the Los Angeles Public Library (LAPL) system is located approximately one mile west of the Project Area.

LA County Library is funded under the jurisdiction of the County Board of Supervisors, which is a 20-member Library Commission that acts as an advisory board to the LA County Library. The LA County Library is financed primarily by a dedicated share of property tax from the service area, with other revenues including a general fund contribution, a parcel tax, grants, and fees. The LA County Library



includes 85 regional and community libraries, one institutional library, and three bookmobiles, and serves a population of 3,338,382.<sup>16</sup>

The LAPL System provides library services for the City of Los Angeles. The LAPL System includes the Central Library, 8 regional branch libraries, 72 community branches, and 4 bookmobiles. The LAPL collection includes more than 6.5 million items, including digital and print items that are borrowed more than 15 million times a year.<sup>17</sup>

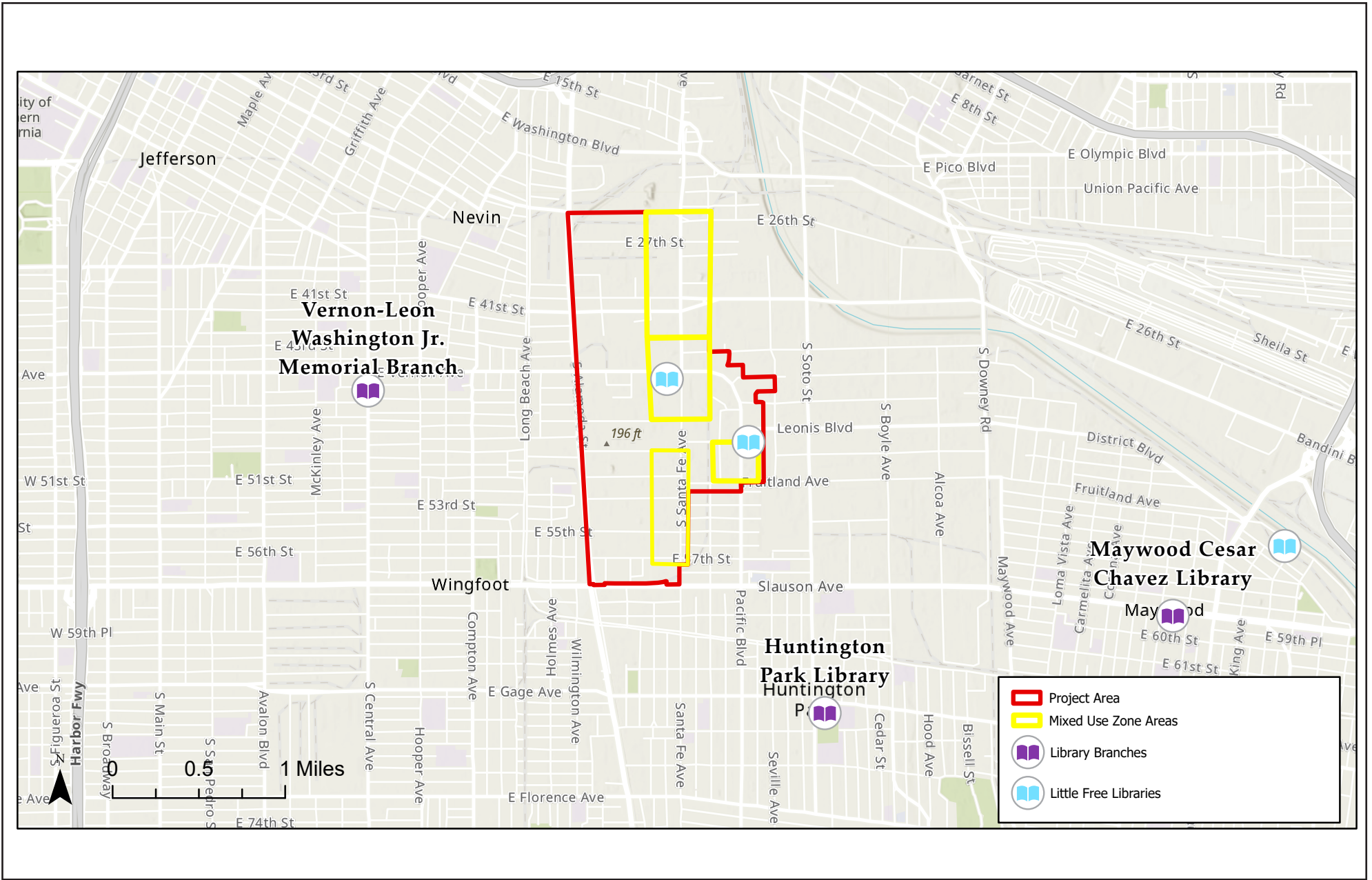
The Huntington Park Library is located at 6518 Miles Avenue, approximately one mile south of the Project Area in Huntington Park. The library was first established in 1913 and has relocated three times in the years 1924, 1931, and finally in 1970 to its current location in the Civic Center. The library is approximately 33,482 square feet and has a meeting room with a maximum capacity of 84 persons. The May Maywood Cesar Chavez Library branch located at 4323 Slauson Ave, approximately 2.3 miles east of the Project Area in Maywood. It was established in 1921 and moved to its current site in 1961. The library is approximately 3,362 square feet and offers children, teens, and online services. The Vernon - Leon H. Washington Jr. Memorial Branch Library is located at 4504 S Central Ave in Los Angeles. The current location opened in 1975 and was remodeled in 2007. There are no current plans for the construction of new library facilities or expansion of existing library facilities near the Project Area.<sup>18</sup>

---

<sup>16</sup> Los Angeles County Public Libraries." Statistical Information." Available online at: <https://lacountylibrary.org/aboutus-info/>, accessed September 7, 2022.

<sup>17</sup> Los Angeles Public Library (LAPL). *2015-2020 Los Angeles Public Library Strategic Plan*. 2015.

<sup>18</sup> County of Los Angeles Public Libraries. Available online at: <https://lacountylibrary.org/>, accessed September 7, 2022.



SOURCE: Esri, 2022

FIGURE 3.10-4

Public Libraries Serving the Project Area

### 3.10.4.2 Regulatory Framework

#### *Regional*

##### **Los Angeles County Municipal Code**

Chapter 22.246.060 of the Los Angeles County Code is meant to mitigate any significant adverse impacts of increased residential development upon public library facilities as required by the CEQA and outlines the County's Library Facilities Mitigation Fee.<sup>19</sup> Table 22.246.060A is the facilities mitigation fee per dwelling unit as described by planning area. The Project Area is not located within a Library Planning Area, but the Huntington Park branch and the May Maywood Cesar Chavez is located in Planning Area 5 – Southeast, which would entail \$970 per planning unit.<sup>20</sup>

### 3.10.4.3 Impacts and Mitigation Measures

#### *Thresholds of Significance*

The following thresholds for determining the significance of impacts related to libraries are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts due to the use of library services, if any of the following would occur:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, need for new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

#### *Methodology*

The following analysis focuses on determining whether the Project would result in adverse physical impacts to the environment due to the expansion or construction of new library facilities. Whether additional facilities would be required is determined primarily by considering the adequacy of existing

---

<sup>19</sup> Los Angeles Municipal Code, *Section 22.246.060 - Library Facilities Mitigation Fee*. Available online at: [https://library.municode.com/ca/los\\_angeles\\_county/codes/code\\_of\\_ordinances/354460?nodeId=TIT22PLZO\\_DI\\_V9AD\\_CH22.246ADRE\\_22.246.060LIFAMIFE](https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances/354460?nodeId=TIT22PLZO_DI_V9AD_CH22.246ADRE_22.246.060LIFAMIFE), accessed on March 16, 2022.

<sup>20</sup> City of Los Angeles Hub. Public Library Planning Areas. Available online at: <https://geohub.lacity.org/datasets/70689d14abf64f9ca4fce5ca38a49a4d/explore?location=33.920464%2C-118.289503%2C11.14>, accessed August 26, 2022.

library services, impacts of the Project on demand for library services, and input provided by LAPL or LA County Library staff.

The need for or deficiency in adequate library facilities to serve the residents or users of the Project Area is not in and of itself a CEQA impact, but a social or economic impact. (*City of Hayward v. B'd of Trustees* (2015) 242 Cal.App. 4th 833, 843). To the extent that the Project causes a need for additional recreational or library services and facilities and that results in the construction of new facilities or additions to existing facilities and the impact from that construction results in a potential impact to the environment, that is a CEQA impact that needs to be assessed in this EIR. Additionally, the deterioration of existing libraries caused by the Project is a CEQA impact that needs to be assessed in the EIR. Any discussion in this EIR that relates solely to the level of library services provided to the residents or users of the Project Area and its surrounding community, including any existing or future needs and deficiencies, is for informational purposes only. The ultimate determination of whether there is a significant impact related to library services is based on whether a significant impact will result from the construction of new or altered library facilities as a result of the implementation of the Project.

This analysis estimates the number of residents that would be generated by implementation of the Project and assesses whether existing and planned public libraries expected to serve the Project Area would have sufficient available capacity to accommodate additional users and whether new facilities would need to be constructed, the construction of which would cause significant environmental impacts.

#### 3.10.4.4 Environmental Impacts

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

A significant impact would occur if the Project would result in substantial employment or population growth that could generate a demand for libraries, which exceed the capacity available to serve the Project Area, necessitating new or physically altered libraries, the construction of which would cause significant environmental impacts.

The need for public library services is generally calculated based on permanent population in a given area. The City of Vernon does not have a brick-and-mortar library building to serve its current population, and the Project is anticipated to result in an increase of approximately 2,486 people through 2040. The City's new residents would increase the demand for library services in the Project Area. The

existing Little Free Library program would alleviate some of this demand, it is not sufficient to serve the projected growth. While there are no libraries in the Project Area, there are several libraries in proximity to the Project Area in the surrounding community that are operated both by LAPL and LA County Library systems. Therefore, although implementation of the Project has the potential to increase demand for library services and resources of the Los Angeles County Public Library System over its lifetime, there are other libraries nearby to accommodate Vernon's incremental growth.

Additionally, in 2020, the City of Vernon established a Library Temporary Advisory Committee to create a plan for a future Vernon Public Library. At this time the Committee has not created a plan or identified a location for a future public library. However, a future public library within the City would alleviate potential library service burdens as a result of the Project. Due to the availability of other public libraries in close proximity to the Project Area, the Project would not create substantial capacity or service level problems that would require the provision of new or expanded public facilities in order to maintain an acceptable level of service for libraries. Therefore, the Project would result in a less than significant impact on libraries.

### ***Significance Before Mitigation***

This impact would be less than significant.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

Less than significant.

#### **3.10.4.5 Cumulative Impacts**

Growth under the Project is anticipated to increase the population of the Project Area incrementally over the next 20 years by 2,486 persons, which would increase use of the LAPL and LA County Library systems. The libraries in the surrounding communities (Huntington Park Library branch, Maywood Cesar Chavez Library branch, and the Vernon-Leon H. Washington Jr. Memorial Branch), would serve new residents generated by implementation of the Project and other projects in the City. The City of Vernon is exploring the creation of a Vernon Public Library, which could be facilitated by the implementation of the Project. In addition, the trend toward libraries providing increased electronic and downloadable library resources (e.g., e-books, audio books) could reduce the need for additional physical library resources in the future. Additionally, for projects located just south of the

Project Area within Public Library Area 5, any future residential projects would be required to pay the County's Library Facilities Mitigation Fee pursuant to Chapter 22.246.060 of the Los Angeles County Municipal Code, which would mitigate potential impacts of increased residential development on library services. Therefore, the Project's contribution to cumulative impacts associated with libraries would not be cumulatively considerable and would be less than significant.

### **3.10.5 PARKS AND RECREATION**

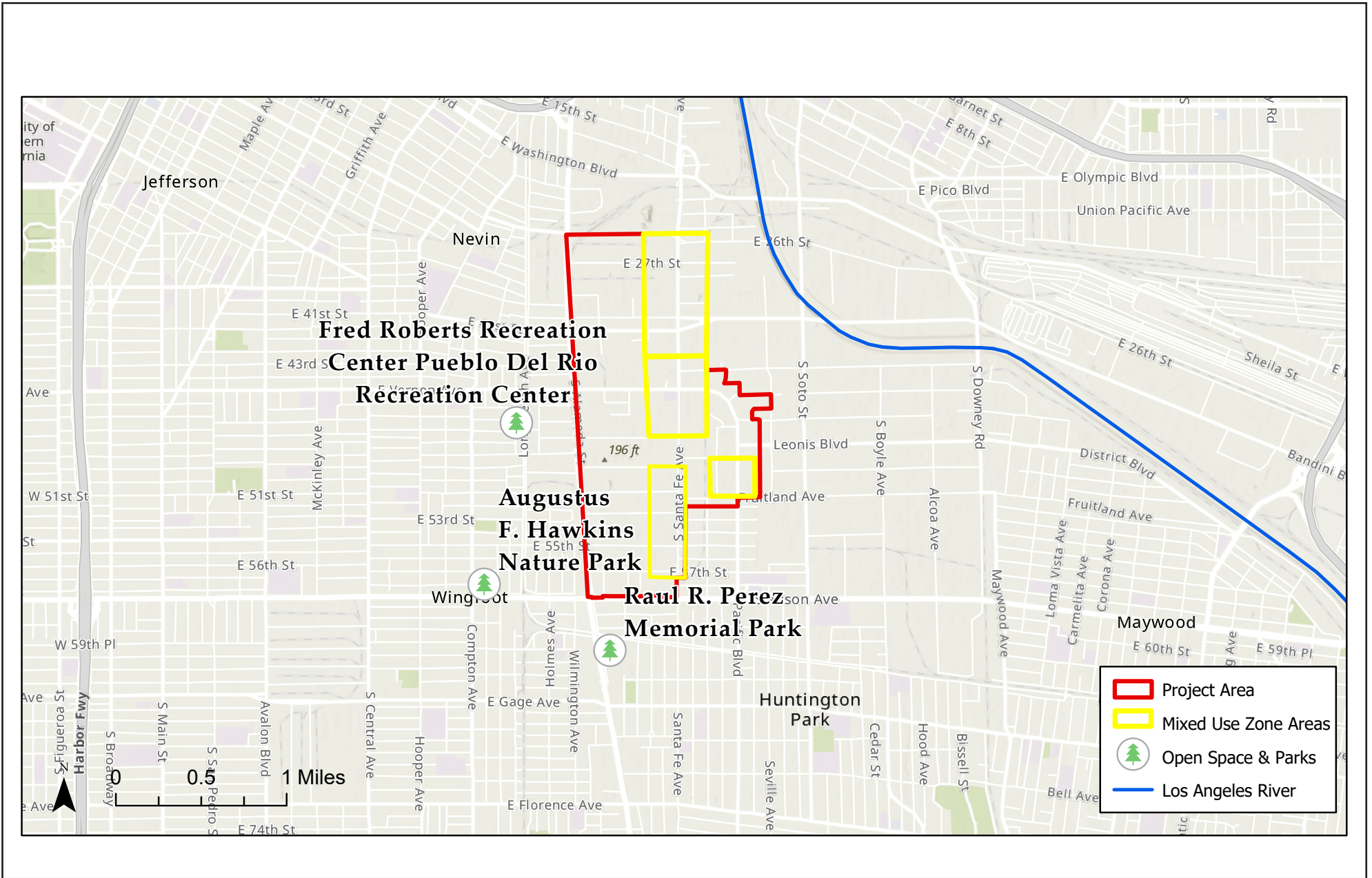
#### **3.10.5.1 Environmental Setting**

In the State of California, the primary avenue by which local jurisdictions set parkland and recreation standards and requirements for new development or obtain funds for the development of parks and recreation, is via the Quimby Act. The Quimby Act was established by the California Legislature in 1965 in response to California's increased rate of urbanization and the need to preserve open space and parkland for growing communities. Prior to subdividing a parcel of land, the developer must dedicate a portion of land and/or pay a fee for the purpose of providing park and recreational facilities to serve future residents of the property being subdivided.

The major open space resources in City of Vernon consist of the Los Angeles River Channel and utility easements. Given the City's industrial character, it has not needed residential services such as parks. Most buildings are built to the sidewalk line, leaving limited room for landscaping. The Project Area itself does not have any parks or recreational facilities. There are several parks in the surrounding communities adjacent to the Project Area. Fred Roberts Recreation Center and Pueblo Del Rio Recreation Center are located one block west of the Project Area on Long Beach Avenue. Augustus F. Hawkins Nature Park, which includes a nature museum and 8.5 acres of native plants and wetlands, is located approximately one-half mile west of the Project Area, and the Raul R. Perez Memorial Park is located approximately one quarter mile south of the Project Area. One of the closest regional parks is Elysian Park in Los Angeles, located approximately 3.8 miles north of the Project Area. It is an expansive park totaling 600 acres that offers a variety of recreational amenities. Hollydale Regional Park is located approximately seven miles to the southeast of the Project Area in South Gate and serves as a local recreation spot with athletic fields, basketball and tennis courts.

The National Recreation and Parks Association recommends five acres of parkland for every 1,000 residents. However, the Quimby Ordinance enable cities in California with standards of three acres per 1,000 residents to assess new developments an impact fee for park development. Given that the City's population is approximately 222 residents in 2022, that would mean the City needs to provide 1.11 acres

of park space per the Quimby Act. However, as noted the City does not have any existing public park space.



SOURCE: Esri, 2022

FIGURE 3.10-5

Parks Surrounding the Project Area



### 3.10.5.2 Regulatory Framework

#### *State*

##### **Quimby Act of 1965**

The Quimby Act was established by the California State Legislature in 1965 and codified as California Government Code Section 66477. The Quimby Act allows the legislative body of a city or county, by ordinance, to require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative tract map or parcel map. Under the Quimby Act, requirements for parkland dedications are not to exceed three acres of parkland per 1,000 persons residing within a subdivision, and in-lieu fee payments shall not exceed the proportionate amount necessary to provide three acres of parkland, unless the amount of existing neighborhood and community parkland exceeds that limit.

##### **California Public Park Preservation Act of 1971**

The primary instrument for protecting and preserving parkland is the State Public Park Preservation Act of 1971 (Pub. Resources Code, §§ 5400–5409). Under the Act, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the parkland acquired. This provides no net loss of parkland and facilities.

##### **State Open Space Standards**

State planning law (Government Code Section 65560) provides a structure for the preservation of open space by requiring every city and county in the State to prepare, adopt, and submit to the Secretary of the Resources Agency a “local open-space plan for the comprehensive and long-range preservation and conservation of open space land within its jurisdiction.” The following open space categories are identified for preservation:

- **Open space for public health and safety**, including, but not limited to, areas that require special management or regulation due to hazardous or special conditions.
- **Open space for the preservation of natural resources**, including, but not limited to, natural vegetation, fish and wildlife, and water resources.
- **Open space for resource management and production**, including, but not limited to, agricultural and mineral resources, forests, rangeland, and areas required for the recharge of groundwater basins.

- **Open space for outdoor recreation**, including, but not limited to, parks and recreational facilities, areas that serve as links between major recreation and open space reservations (such as trails, easements, and scenic roadways), and areas of outstanding scenic and cultural value.
- **Open space for the protection of Native American sites**, including, but not limited to, places, features, and objects of historical, cultural, or sacred significance such as Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines located on public property (further defined in California Public Resources Code Sections 5097.9 and 5097.993).

### **Mitigation Fee Act**

The California Mitigation Fee Act, Government Code sections 66000, *et seq.*, allows cities to establish fees to be imposed on development projects for the purpose of mitigating the impact of development on a city's ability to provide specified public facilities. In order to comply with the Mitigation Fee Act a City must follow the following primary requirements: (1) Make certain determinations regarding the purpose and use of a fee and establish a nexus or connection between a development project or class of project and the public improvement being financed with the fee; (2) Segregate fee revenue from the General Fund in order to avoid commingling of capital facilities fees and general funds; (3) For fees that have been in the possession of a City for five years or more and for which the dollars have not been spent or committed to a project, the City must make findings each fiscal year.

### **Local**

#### **City of Vernon General Plan**

The City of Vernon General Plan states the following goals and policies within its Resource Element related to Parks and Open Space:

**Goal R-3:** Preserve established open spaces and look for opportunities to create new open space areas that can benefit the health and welfare of workers and residents in Vernon.

**Policy R-3.1:** Continue to maintain landscaped areas at City facilities as appropriate.

**Policy R-3.2:** Cooperate with regional efforts to upgrade the appearance and open space value of the Los Angeles River Channel.

**Policy R-3.3:** Encourage private property owners and industries to establish and maintain private landscaped areas for the benefit of employees.

**Policy R-3.4:** Continue the City's street tree planting and tree maintenance programs.

### **City of Vernon Housing Element**

The City of Vernon Draft Housing Element states the following goals and policies related to Parks and Open Space:

**Goal 2:** Attractive, livable and healthy environments for residential uses

**Policy 2.2:** Encourage development of mixed-use districts which provide adequate amenities for targeted population(s).

**Policy 2.3:** Promote street design adjacent to residential development which ameliorates noise, vibration and other impacts of freight travel and increases shade canopy.

### **Los Angeles River Revitalization**

The City of Los Angeles' Los Angeles River Revitalization Master Plan, completed in 2007, aims to provide public access to the river and significant recreation space, open space, new trails, and improve natural habitats to support wildlife. As part of that initiative, Metro is implementing the LA River Path Project, a new bicycle and pedestrian path along an approximately eight-mile stretch of the Los Angeles River between Elysian Valley and Vernon. This project will close the gap in the LA River Path, creating a safe, efficient active transportation travel option connecting the San Fernando Valley and Long Beach. Construction is projected to begin in 2023.<sup>21</sup>

### **3.10.5.3 Impacts and Mitigation Measures**

#### *Thresholds of Significance*

The following thresholds for determining the significance of impacts related to recreational facilities are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts due to the use of recreational facilities, if any of the following would occur:

---

<sup>21</sup> Los Angeles County Metropolitan Transportation Authority. "LA River Path Project." Available online at: <https://www.metro.net/projects/lariverpath/#status>, accessed September 7, 2022.

- Result in substantial adverse physical impacts associated with the provision of new or physically altered recreational facilities, need for new or physically altered recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. (This threshold is addressed within the two thresholds below)
- 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.
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

### ***Methodology***

The need for or deficiency in adequate park and recreation facilities to serve the residents or users of the Project Area or the City is not in and of itself a CEQA impact, but a social or economic impact. (*City of Hayward v. B'd of Trustees* (2015) 242 Cal.App. 4th 833, 843). To the extent that the Project causes a need for additional recreational services and facilities and that results in the construction of new facilities or additions to existing facilities and the impact from that construction results in a potential impact to the environment, that is a CEQA impact that needs to be assessed in this EIR. Additionally, the deterioration of existing recreational facilities and parks caused by the Project is a CEQA impact that needs to be assessed in the EIR. Any discussion in this EIR that relates solely to the level of park services provided to the residents or users within the Project Area and its surrounding community, including any existing or future needs and deficiencies, is for informational purposes only. The ultimate determination of whether there is a significant impact related to park and recreational services is based on whether a significant impact will result from the construction of new or altered park and recreational facilities or where existing park and recreational facilities will be substantially physically deteriorated as a result of the implementation of the Project.

This analysis estimates the number of residents that would be generated by implementation of the Project and assesses whether existing and planned public parks and recreational facilities expected to serve the Project Area would have sufficient available capacity to accommodate additional users and whether new facilities would need to be constructed, the construction of which would cause significant environmental impacts; and whether the Project will result in substantial physical deterioration to park and recreational facilities.

### 3.10.5.4 Environmental Impacts

**Impact REC-1 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.**

Neither the Project Area, nor City of Vernon currently contain any public open space. The National Recreation and Parks Association recommends five acres of parkland for every 1,000 residents. Given that the City's population is approximately 222 residents in 2022, that would mean the City needs to provide 1.11 acres of park space per the Quimby Act. Therefore, the City is experiencing a park deficit.

#### *Construction*

Given that no recreational facilities or open space exist in the Project Area, construction activities associated with implementation of the Project would not impact the existing parks and recreation facilities or increase the permanent population in the Project Area. Thus, no impacts to existing parks and recreation facilities would occur during construction.

#### *Operation*

Implementation of the Project would allow for the potential future construction of 874 residential units. With the addition of these residential units, the residential population is expected to grow by 2,486 residents. The City of Vernon currently has a park deficit of 1.11 acres of park land with 222 residents. The Quimby Act has a standard of five acres of parkland for every 1,000 residents. With build out of the Project, the park deficit would grow to 12.43 acres based on the Quimby Act standards.

With implementation of the Project, development standards would require common open space in residential developments that would offset the impacts to existing park facilities. These standards dictate the ratio of open space per residential unit in different zones. For common open space, the Project requires 75 feet per residential unit within the MU-CC Zone and the MU-S Zone , and 100 feet per residential unit in the MU-N Zone . Within t MU-PH Zone , five percent of the lot minimum is required to be set aside for ground/podium level open space. Under the Project, open space will be added according to these standards as projects are constructed, increasing the amount of open space available and decreasing demand for offsite open space. Private open space can be used to satisfy a portion of the common open space requirement. Therefore, the future development projects would not create capacity or service level problems or result in substantial physical impacts associated with the provision or new or altered parks facilities. Impacts would be less than significant.

*Significance Before Mitigation*

This impact would be less than significant.

*Mitigation Measures*

No mitigation measures are required.

*Significance After Mitigation*

Less than significant.

---

**Impact REC-2            Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**

Construction and operation of additional park and recreation facilities could impact aesthetics (including night lighting), air quality, cultural resources, geology, land use, noise, transportation, utilities, and other environmental issues. It is anticipated that the Project would result in the demand for new park and recreation facilities and that such facilities would have the potential to physically affect the surrounding environment. However, the Project includes development standards and requirements for Open Spaces within the zone change areas, which in turn could be used for recreational purposes. The environmental effects that could result from the construction of the proposed recreational facilities (including impacts to adjacent properties and exposure of sensitive receptors to pollutant concentrations) would be reduced to less than significant levels through construction-related mitigation measures identified throughout this EIR in **Section 3.2, Air Quality**, and **Section 3.8, Noise**, and measures identified in the Project. Therefore, the Project would not result in adverse physical effects on the environment from construction or expansion of additional recreational facilities. Impacts would be less than significant.

*Significance Before Mitigation*

This impact would be less than significant.

*Mitigation Measures*

No mitigation measures are required.

### *Significance After Mitigation*

Less than significant.

#### **3.10.5.5 Cumulative Impacts**

Implementation of the Project and related development projects could result in population growth in the Project Area that would result in increased demand for parks and recreation facilities. Future developments would be subject to further CEQA evaluation and may include mitigation measures to reduce significant impacts to a less than significant level when possible. Given that the City does not currently contain any public open space and the Project would add open space amenities, implementation of the Project would not result in cumulatively considerable impacts to the City's park and recreation facilities. No mitigation is required.

#### **3.10.6 REFERENCES**

- California State Legislature. Assembly Bill No. 9. September 24, 2021. Available online at: [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=202120220AB9](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB9), accessed on September 7, 2022.
- Casetext. *Chawanakee Unified School District v. County of Madera*. 2011. Available online at: [https://casetext.com/case/chawanakee-unified-sch-dist-v-cty-of-madera/?PHONE\\_NUMBER\\_GROUP=P](https://casetext.com/case/chawanakee-unified-sch-dist-v-cty-of-madera/?PHONE_NUMBER_GROUP=P), accessed September 7, 2022.
- City of Los Angeles GeoHub. "Public Library Planning Areas." Available online at: <https://geohub.lacity.org/datasets/70689d14abf64f9ca4fce5ca38a49a4d/explore?location=33.920464%2C-118.289503%2C11.14>, accessed August 26, 2022.
- City of Vernon Police Department. Patrol Division. Available online at: <https://www.cityofvernon.org/government/police-department/department-divisions/patrol-division>, August 25, 2022.
- City of Vernon Police Department. Professional Standards. Available online at: <https://www.cityofvernon.org/government/police-department/department-divisions/professional-standards>, August 25, 2022.
- City of Vernon Police Department. Vernon Jail Facility. Available online at: <https://www.cityofvernon.org/government/police-department/vernon-jail-facility>, accessed August 25, 2022.
- County of Los Angeles Public Libraries. Available online at: <https://lacountylibrary.org/>, accessed September 7, 2022.

- Fire Wiki. Vernon Fire Department (California). Available online at: [https://fire.fandom.com/wiki/Vernon\\_Fire\\_Department\\_\(California\)#:~:text=As%20of%20October%202021%2C%202020,Los%20Angeles%20County%20Fire%20Department.](https://fire.fandom.com/wiki/Vernon_Fire_Department_(California)#:~:text=As%20of%20October%202021%2C%202020,Los%20Angeles%20County%20Fire%20Department.), accessed August 18, 2022.
- Los Angeles County Fire Department (LACoFD). *2017-2021 Strategic Plan*. 2017. Available online at: <https://fire.lacounty.gov/wp-content/uploads/2019/09/LACoFD-Strategic-Plan-2017-2021.pdf>, accessed August 18, 2022.
- LACoFD. *2021 Statistical Summary*. 2021. Available online at: <https://fire.lacounty.gov/wp-content/uploads/2022/06/2021-Statistical-Summary.pdf>, accessed August 18, 2022.
- LACoFD. Emergency Operations. Available online at: <https://fire.lacounty.gov/emergency-operations/>, accessed August 18, 2022.
- Los Angeles County Public Libraries. Statistical Information. Available online at: <https://lacountylibrary.org/about-us-info/>, accessed September 7, 2022.
- Los Angeles County Metropolitan Transportation Authority. LA River Path Project. Available online at: <https://www.metro.net/projects/lariverpath/#status>, accessed September 7, 2022.
- Los Angeles Municipal Code, Section 22.246.060 - Library Facilities Mitigation Fee. Available online at: [https://library.municode.com/ca/los\\_angeles\\_county/codes/code\\_of\\_ordinances/354460?nodeId=TIT22PLZO\\_DIV9AD\\_CH22.246ADRE\\_22.246.060LIFAMIFE](https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances/354460?nodeId=TIT22PLZO_DIV9AD_CH22.246ADRE_22.246.060LIFAMIFE), accessed on March 16, 2022.
- Los Angeles Public Library (LAPL). *2015-2020 Los Angeles Public Library Strategic Plan*. 2015.
- Los Angeles Unified School District Open Data. Vernon City Elementary. Available online at: <https://my.lausd.net/opendata/dashboard?language=en>. Accessed August 25, 2022.
- Los Angeles Unified School District. *2022 Developer Fee Justification Study*. March 2022. Available online at: <https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/921/2022%20Developer%20Fee%20Justification%20Study%20for%20Los%20Angeles%20Unified%20School%20District.pdf>, accessed on September 7, 2022.
- Los Angeles Unified School District. "Developer Fee Program Office." Available online at: <https://achieve.lausd.net/domain/921>, accessed on August 25, 2022.
- Los Angeles Unified School District. *Fingertip Facts 2021-2022*, Available online at: [https://achieve.lausd.net/site/handlers/filedownload.ashx?moduleinstanceid=66505&dataid=109597&FileName=Fingertip\\_Facts\\_2021\\_2022\\_FINAL\\_ENG.pdf](https://achieve.lausd.net/site/handlers/filedownload.ashx?moduleinstanceid=66505&dataid=109597&FileName=Fingertip_Facts_2021_2022_FINAL_ENG.pdf), accessed August 25, 2022.



## 3.11 TRANSPORTATION

---

### INTRODUCTION

*The purpose of this section is to address the potential transportation impacts associated with the Project.*

*On September 27, 2013, Governor Edmund G. "Jerry" Brown signed Senate Bill (SB) 743, which went into effect in January 2014 and directed the Governor's Office of Planning and Research (OPR) to develop revisions to the California Environmental Quality Act (CEQA) Guidelines by July 1, 2014, to establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic level of service (LOS). This started a process that has changed the requirements for transportation impact analyses under CEQA. These changes include elimination of auto delay, LOS, and similar measures of vehicular capacity or traffic congestion as a basis for determining significant transportation impacts resulting from land use projects and plans in California.*

*On January 20, 2016, OPR released the Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, which was an update to Updating Transportation Impacts Analysis in the CEQA Guidelines, Preliminary Discussion Draft of Updates to the CEQA Guidelines Implementing Senate Bill 743, which had been released on August 6, 2014. Of particular relevance was the updated text of State CEQA Guidelines Section 15064.3, which as discussed further below establishes vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts. VMT is an area-wide performance measure which helps compare the overall performance of a project or project alternatives. VMT analysis shifts the focus towards impacts caused by the distance traveled by vehicles rather than the localized congestion created by vehicles. Comparative scenarios of VMT are used to demonstrate the effect of land use or transportation projects by calculating total auto VMT divided by population and/or employment to determine the "efficiency" of the transportation system in moving persons with the fewest VMT. Even when new projects result in additional VMT, due to growth and population and employment, they could result in lower VMT efficiency as the numerator (VMT) would be relatively lower than the denominator (persons). This would occur if persons drove shorter distances, carpooled more, or switched trips to non-auto modes such as walking, biking and transit.*

*The Guidelines became effective on July 1, 2020. As such, automobile delay as measured by LOS or similar metrics is no longer to be considered a significant environmental impact. Further, Section 21099(a)(2) of the Public Resources Code states "Upon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any." Therefore, as LOS is no longer an environmental impact under CEQA.*

*The contents of this section represent a summary of the Focused VMT Analysis memorandum prepared for the Project (VMT Memo). In accordance with SB 743 and the CEQA Guidelines, the VMT Memo identified the*

changes in vehicles miles traveled (VMT) associated with the Project. The VMT Memo is provided in **Appendix 3.11** in this Draft EIR.

### 3.11.1 ENVIRONMENTAL SETTING

#### 3.11.1.1 Current Conditions

This section describes the existing conditions within the Project Area in terms of roadways, transit, pedestrian and bicycle circulation, and site access.

#### *Street Classification*

Vernon's General Plan provides traditional classifications for its street network based on roadway size and purpose. The study area network is shown by roadway classification in the map on the next page, including the following classifications:

- **Arterials** – Arterials are tasked with creating a network of streets that carry higher volumes of traffic, typically at higher speeds, across longer distances, fostering connectivity within Vernon and beyond. Critical arterials in the Project Area include Alameda Street, Santa Fe Avenue, 37th Street, and Vernon Avenue/Pacific Boulevard. The general plan identifies a total right-of-way ranging from 80-120 feet, including sidewalks.
- **Collectors** – Collector streets are designed to move traffic within Vernon and to provide access to destinations from arterials. Within the Project Area, 25<sup>th</sup>/26<sup>th</sup> Streets, 37<sup>th</sup>/38<sup>th</sup> Streets, 51<sup>st</sup> Street, Fruitland Avenue, and Vernon Avenue (East of Santa Fe Avenue). are identified as collectors. The general plan identifies a total right-of-way of 80 feet, with up to 16 feet allocated for sidewalks or other uses beyond the curbs.
- **Local Streets** – Most streets within the study area are identified as local streets, which provide access only to specific properties, and are not intended to facilitate through traffic. The general plan identifies a total right-of-way ranging from 60-65 feet, with up to 18 feet allocated for sidewalks or other uses beyond the curbs.

#### *Roadway Descriptions*

**Santa Fe Avenue** is a north-south arterial street with two travel lanes in each direction and a central turn lane. The speed limit is 35 miles per hour in the Project Area, and it sees an average annual daily trips of over 30,000 north of Vernon Avenue, and volumes between 25,000 and 30,000 south of Vernon Avenue.

**Vernon Avenue** is an east-west arterial street with two travel lanes in each direction. It turns into Pacific Boulevard to the east of Santa Fe Avenue. It has a speed limit of 40 miles per hour in the Project Area. A discontinuous segment of the street one block north of Pacific Boulevard is classified as a collector street.

**Pacific Boulevard** begins to the east of Santa Fe Avenue and travels east-west for approximately 640 feet, and then begins curving to the south after the Atchison Topeka & Santa Fe railroad tracks. It is a six-lane arterial street with three lanes in each direction and a central turn lane. It has a speed limit of 40 miles per hour in the Project Area and carries approximately an average annual daily trip volume range of between 15,000 and 18,000 vehicles. It connects Vernon to the neighboring jurisdiction of Huntington Park.

**Alameda Street** is a north-south arterial street that forms the western boundary of the City and the Project Area. It is bifurcated by the Alameda Freight Corridor, which is the dividing line between Los Angeles and the City of Vernon. To the east of the rail corridor, located within the City of Vernon, Alameda Street is a two-way street with one lane in each direction. It has a speed limit of 35 miles per hour and an average annual daily trip volume of approximately 4,000 vehicles.

### ***Vehicular Circulation***

The City's street network reflects a grid pattern. However, many of the streets in the Project Area, particularly those running east/west, extend only a few blocks to serve specific properties and/or are offset as T-intersections where they meet major arterials. Critical arterials in the Project Area include Alameda East, Santa Fe Avenue, and 37th Street, and Vernon Avenue. Within the Project Area, only 51st Street, Fruitland Avenue, Vernon Avenue (East of Santa Fe Avenue), and 25<sup>th</sup>/26th Street are identified as collectors. Most streets within the Project Area are identified as local streets, which provide access only to specific properties, and are not intended to facilitate through traffic.

The Alameda Freight Corridor, located on the western boundary of the Project Area, creates a physical division at the boundary between Los Angeles and Vernon. The rail freight corridor limits direct access from Vernon to Alameda Street, but it allows for Alameda East to serve freight traffic within the city without the conflicts or congestion that come with the Alameda Street. Additionally, local traffic maintains access to Alameda Street at 25th Street, 38th Street, Vernon Avenue, 55th Street, and Slauson Avenue. Alameda East is largely underused today by freight, despite being specifically designed for that purpose, due to the very short green time that is allocated to signals along Alameda East.

North/south direction travel within the Project Area primarily relies on Santa Fe Avenue, as Pacific Boulevard converts into Vernon Avenue, and Alameda East primarily provides access to properties on the western edge of Vernon. The limited options for north/south travel brings congestion challenges along with limited connectivity. Santa Fe Avenue is an important connector between Vernon and Los

Angeles's industrial land uses and the Arts District, to the north, and connects Huntington Park and other communities south of Vernon.

The closest freeways to the Project Area are Interstate-10, located approximately one half-mile north from the northwest corner of the Project Area. Interstate-710 runs through the eastern edge of the City, approximately 2.6 miles from the Project Area boundary.

### ***Freight Truck Travel***

The City of Vernon does not currently define specific streets as truck routes. Given the concentration of industrial land uses, all streets are open to trucks to serve local businesses as needed. However, the City of Los Angeles identifies Alameda Street and 26<sup>th</sup> Street as truck routes. Santa Fe Avenue is also used as a key corridor for many trucks.

### ***Transit Service***

The City of Vernon is primarily served by the Los Angeles County Metropolitan Transportation Authority (Metro) bus network. Five local lines and three Metro Rapid lines serve or are within a half mile of the Project Area, forming a grid comprised of north-south transit travel corridors along Pacific Boulevard, Santa Fe Avenue, and Soto Street, and east-west transit travel corridors along Vernon Avenue, Leonis Boulevard, and Slauson Avenue. The Local 105 travels along Vernon Avenue and connects the City of Vernon to West Hollywood. The Local 251 Route primarily runs on Soto Street and provides connections to Cypress Park, Lincoln Heights, Downtown LA, Huntington Park, and South Gate, as well as connections to the Metro C (Green) and L (Gold) Lines. The Local 60 Route provides connections to Downtown LA, Huntington Park, Southgate, and Long Beach and runs primarily on Santa Fe Pacific Boulevard in the City of Vernon. The Local 108, which operates along Slauson Avenue, provides connections to Pico Rivera, the City of Commerce, Culver City, Venice, and Marina Del Rey. The Local 611 or Huntington Park Shuttle is a local circulator route that connects Vernon to neighboring cities including Huntington Park, Maywood, Bell, and South Gate. The route primarily runs on Vernon Avenue, Leonis Boulevard, and District Avenue within city limits.

The Metro A (Blue) Line train also runs along Long Beach, approximately one quarter mile west of the City boundary, with stations located on Washington Avenue, Vernon Avenue, and Slauson Avenue. The A Line stations nearest the northern and southern edges of the Project Area are beyond walking distance to most Vernon locations with no clear routes or direct connections. The Vernon Station on Vernon Avenue and Long Beach Boulevard is the most accessible station. The station is an approximately 5-minute walk along Vernon Avenue and located west of the Project Area at Alameda Street, and 0.75 miles from the Vernon Avenue and Santa Fe Avenue intersection.

### *Pedestrian Circulation*

The sidewalk network within the City and the Project Area is fairly complete, with most streets containing sidewalks in good condition. Santa Fe Avenue sidewalks have a width of approximately 10 feet. However, there are limited intersections, which creates a prevalence of long uninterrupted blocks. That, in addition to noise pollution from high truck volume and surface parking lots abutting sidewalks create an unwelcoming pedestrian environment.

### *Bicycle Circulation*

There are few existing bicycle facilities within city limits. There is a three-quarter mile stretch of the Los Angeles River bicycle path that extends from Atlantic Boulevard to Slauson Avenue, a Class I bicycle path that provides an exclusive right-of-way for non-motorized uses. There are Class III facilities (shared mixed-flow travel lanes) on Lorena Street and 51st Street which connect to Vernon.

#### **3.11.1.2 Baseline Vehicle Miles Traveled (VMT)**

The City of Vernon has not adopted a local VMT threshold, but the County of Los Angeles has adopted guidance in accordance with OPR that suggests the minimum reduction standard threshold land use plans is 16.8 percent below existing VMT per service population. The total VMT per service population for the South County Area is 31.1.<sup>1</sup> VMT is calculated by travel demand models, which use similar methodologies and inputs of socioeconomic data, transportation networks, and travel pattern surveys to calculate weekday VMT. While the specific values of VMT may vary from model to model and model year to model year, generally the models are consistent in their magnitude of comparison between different geographic units and in their assessment of the VMT characteristics of projects.

The baseline VMT per service population for the Project Area and City of Vernon were calculated using the 2018 base year from the Southern California of Government's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) travel demand model divided by the service populations (residents and employees).

---

<sup>1</sup> Los Angeles County Public Works, *Transportation Impact Analysis Guidelines*, July 23, 2020. Available online at: <https://pw.lacounty.gov/traffic/docs/Transportation-Impact-Analysis-Guidelines-July-2020-v1.1.pdf>, accessed March 14, 2023.

## 3.11.2 REGULATORY FRAMEWORK

### 3.11.2.1 State and Regional

#### *Senate Bill 743*

Senate Bill 743 (SB 743) was enacted in 2013 and became effective in July 2014. It requires OPR and the Natural Resources Agency to amend the *CEQA Guidelines* through developing criteria for determining the way transportation impacts are measured in California for new development projects, making sure they are built in a way that allows Californians more options to drive less (Pub. Res. Code § 21099(b)). Starting on July 1, 2020, agencies analyzing the transportation impacts of new projects must now look at a metric known as vehicle miles traveled (VMT) instead of LOS. VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact. This change is intended to help the State achieve climate commitments, preserve the environment, improve health and safety and boost the economy by prioritizing co-located jobs, services, and housing. It would also reduce the time spent in cars to get places and provide more choices for how people travel, which would help to promote business, provide access to opportunity, and improve the quality of life across California.

#### *Senate Bill 375*

Senate Bill 375 (SB 375) requires metropolitan planning organizations (MPOs) to prepare a SCS that demonstrates how the region would meet its greenhouse gas (GHG) reduction targets through integrated land use, housing and transportation planning. Specifically, the SCS must identify a transportation network that is integrated with the forecasted development pattern for the plan area and would reduce GHG emissions from automobiles and light trucks in accordance with targets set by the California Air Resources Board. The targets for the Southern California Association of Governments are an 8 percent reduction in per capita transportation by 2020 and between 13 to 16 percent by 2035.

#### *California Vehicle Code (CVC)*

The CVC provides requirements for ensuring emergency vehicle access regardless of traffic conditions. Sections 21806(a)(1), 21806(a)(2), and 21806(c) define how motorists and pedestrians are required to yield the right-of-way to emergency vehicles.

### 3.11.2.2 Local and Regional

#### *Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*

The Southern California Association of Governments (SCAG) is an association of local governments and agencies that serves as a Metropolitan Planning Organization, a Regional Transportation Planning Agency, and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities. SCAG is responsible for developing long-range regional transportation plans, including the regional Sustainable Communities Strategy and associated growth forecasts, regional transportation improvement programs, regional housing needs allocations and a portion of the South Coast Air Quality management plans (SCAG 2018).

SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), Connect SoCal, is a long-range regional transportation and land use network plan that looks ahead 20+ years and provides a vision of the region's future mobility and housing needs with economic, environmental and public health goals. Connect SoCal builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. SCAG adopted its current RTP/SCS in September 2020.

As part of the state's mandate to reduce per-capita GHG emissions from automobiles and light trucks, Connect SoCal presents strategies and tools to achieve reductions in GHG emissions at the regional level through reduced per-capita VMT. The goals included in Connect SoCal are as follows:

- Focus Growth Near Destinations & Mobility Options
- Promote Diverse Housing Choices
- Leverage Technology Innovations
- Support Implementation of Sustainability Policies
- Promote a Green Region

The RTP/SCS also aims to increase the number of High-Quality Transit Areas (HQTAs) within the Southern California region. SCAG defines HQTAs areas along transit corridors or near major transit stations that have, or will have, 15 minute service, or better, during peak commuting hours.<sup>2</sup> Due to the

---

<sup>2</sup> Southern California Association of Governments. *HQTA Toolkit: High-Quality Transit Area Pilot Project*. Available online at: [https://scag.ca.gov/sites/main/files/file-attachments/final\\_report\\_hqta\\_toolkit.pdf?1621458208](https://scag.ca.gov/sites/main/files/file-attachments/final_report_hqta_toolkit.pdf?1621458208). Accessed February 28, 2023.

close proximity to a Metro Blue Line Station (an approximately 5-minute walk/ 0.75 miles), the Project Area is located within an HQTAs.

### ***Los Angeles County OurCounty 2020 Climate Action Plan***

Los Angeles County’s Climate Action Plan, “OurCounty,” was adopted in 2015 and called to reduce the impacts of climate change by reducing greenhouse gas (GHG) emissions from community activities. The Climate Action Plan promotes transit-oriented communities, the reduction of single occupancy vehicle trips, and dramatically increasing the number of trips by taken by transit, biking, walking, or micro-mobility. The following goals and policies are specific to transportation impacts of developments:

**Goal 8:** Circulation System. A convenient, safe, clean, and affordable transportation system that enhances mobility and quality of life while reducing car dependency

**Strategy 8A** Reduce VMT by prioritizing alternatives to single-occupancy vehicles

**Strategy 8B** Improve transportation health and safety outcomes

#### **VMT Targets**

- **2025 Target** – Reduce VMT per capita to 20 miles by increasing new housing built within ½ mile of high frequency transit to 50%
- **2035 Target** – Reduce VMT per capita to 15 miles by increasing new housing built within ½ mile of high frequency transit to 65%
- **2045 Target** – Reduce VMT per capita to 10 miles by increasing new housing built within ½ mile of high frequency transit to 75%

The Climate Action Plan is currently in the process of being updated.

### ***LA River Feasibility Study***

The LA River Feasibility Study develops preliminary pathway alignments and design alternatives for the three-mile segment of the Los Angeles River in Vernon that extends from 26<sup>th</sup> Street to Atlantic Boulevard, a key regional connection for people bicycling. Once completed, the path would provide access to not only destinations and employment opportunities in Vernon but would connect users to the 17 miles of existing path between Vernon and Long Beach. The Vernon Bicycle Plan identifies 37<sup>th</sup> Street and Vernon Avenue as key connections from the Project Area to this regional bicycle facility. The study



also synthesizes community input and identifies opportunities, constraints, and implementation strategies for the path alternatives.

### ***City of Vernon General Plan***

Approved in 2007, the *General Plan* outlines the strategies to support and manage long term growth within the City's limits. In addition to providing guidance for topics including but not limited to public safety, housing, infrastructure, and land use, the circulation plan addresses Vernon's transportation needs. Vernon's circulation and infrastructure element frames the need for the transportation network to support Truck traffic, critical to the function of local industry as businesses have continued to increasingly look to freight trucks instead of rail to meet their demands. The *Circulation Plan* also provides classifications to organize Vernon's street system based on capacity and function, identifies metrics to measure performance, lists strategies to improve management of the network, and briefly addresses alternative transportation modes.

### ***Vernon Vision Plan***

The Vernon Vision Plan was developed to guide coordination between the City of Vernon, neighboring cities, and other agencies involved with the development of the West Santa Ana Branch (WSAB) Transit Corridor – which would connect Downtown Los Angeles to Southeast LA County. The *Vernon Vision Plan* outlines Vernon's goals, opportunities, and concerns associated with the transit corridor projects as they relate to land uses, mobility, and economic growth. Most pertinent to mobility are goals associated with improving connectivity to passenger rail stations and encouraging commuters to use alternative modes of transportation. The *Vernon Vision Plan* largely highlighted the potential WSAB station on Pacific Boulevard and Vernon Avenue, which was not selected as the preferred alternative. Although the *Vernon Vision Plan* was not adopted, the Project provides an opportunity to realize some of the visions of the plan – a direct response to action 4.2.2.B calling for opportunities to redevelop properties and facilitate improvements to the public realm.

### ***Vernon Transit Service Study***

The Vernon Transit Service Study provides a profile of current transit services in Vernon as well as insight into future transit and mobility needs, presents conceptual alternatives to meet future mobility needs, and provides recommendations for future service options. The goal of this study is to design service options that help to improve connectivity to existing and planned economic hubs, existing transit service, and other trip attractors and generators in the City. The study also assesses potential last-mile connections between existing transit services and workplaces.

### ***Vernon Bicycle Master Plan***

The City of Vernon's *Bicycle Master Plan* serves as a guiding document for the planning, development, and management of a safe and comfortable network of bicycle facilities connecting employment centers and community destinations within the City as well as the larger regional network. The *Bicycle Master Plan* also identifies strategies, policies, tools, and funding sources to facilitate the implementation of future facilities. Due to the prevalence of truck and bus traffic within the City, the *Bicycle Master Plan* prioritizes separated bicycle facilities, such as Class I and Class IV bikeways, over shared-use facilities as part of the recommendations for creating a safe, bicycle-friendly environment. Additionally, the *Bicycle Master Plan* recommends supplementing infrastructure improvements with bicycle education and encouragement programs to promote active transportation and healthy living for communities.

The *Vernon Bicycle Plan* identifies a few key bicycle connections within the Project Area, including:

- Separated bicycle lanes along Vernon Avenue (East and West of Santa Fe Avenue), providing access to future facilities along the LA River.
- Separated bicycle lanes on Pacific Boulevard within city limits.
- Separated bicycle lanes on 37<sup>th</sup> Street/Bandini Boulevard to provide access to future facilities along the LA River.
- Shared-use path (separated from vehicular traffic) along the Malabar Railyard right-of-way through the City limits, an effort that would require significant collaboration with BNSF, but could be a transformational project. However, an ongoing study by Metro for repurposing this railyard may disrupt plans for a shared-use path.

### **3.11.3 IMPACTS AND MITIGATION MEASURES**

#### **3.11.3.1 Thresholds of Significance**

The following thresholds for determining the significance of impacts related to transportation are contained in the environmental checklist form contained in Appendix G of the most recent update of the *CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts, if any of the following would occur:

- Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

- Conflict or be inconsistent with *CEQA Guidelines* section 15064.3, subdivision (b).
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.

### 3.11.3.2 Methodology

*CEQA Guidelines* Section 15064.3(b) provides considerations for evaluating a project's transportation impacts. Land Use Projects (b)(1) are evaluated through vehicle miles traveled (VMT). Generally, projects within one-half miles of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact.<sup>3</sup> Projects that decrease VMT in a project area compared to existing conditions should be presumed to have a less than significant transportation impact.

Los Angeles County guidelines state daily vehicle trips, daily VMT, and daily total VMT per service population for land use plans should be estimated using the SCAG RTP/SCS Travel Demand Forecast Model. Transportation demand management strategies to be included as project design features should be considered in the estimation of a project's daily vehicle trips and VMT.

The SCAG RTP/SCS travel demand model with a base year of 2018 was used to calculate the baseline Project Area and City of Vernon area VMT which was divided by the service populations (residents and employees) to obtain a value of VMT per service population. It should be noted that the traffic analysis zone (TAZ) structure of the travel demand model for the City of Vernon includes some adjacent unincorporated areas; therefore, the population and employment values for the group of TAZs for the City of Vernon area differ from the totals for the City proper and may, therefore, vary slightly from the U.S. Census or other data sources provided within this PEIR. However, since the metric of analysis is the indexed VMT per service population rather than the absolute VMT values, the slight differences in analysis boundaries as compared to City values are indistinguishable from each other and do not affect the analysis.

---

<sup>3</sup> California Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. 2018. Available online at: [https://opr.ca.gov/docs/20190122-743\\_Technical\\_Advisory.pdf](https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf), accessed March 17, 2022.

### 3.11.4 ENVIRONMENTAL IMPACTS

**Impact TRA-1                    Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.**

As described in **Section 2.0, Project Description**, the Project would implement zone changes and general plan amendments at four specific areas within the Project Area that would allow for mixed-use development to the neighborhoods along Santa Fe Avenue and Hampton Street. Future development associated with the Project would not conflict with or interfere with any adopted policies, plans or programs related to public transit, bicycle, or pedestrian facilities. The Project would support future multimodal opportunities within the City. Specifically, the Project proposes to “create a physical environment that is supportive of diversified land uses”. Accordingly, permitted uses under the Project would all for the development of pedestrian and bicycle friendly uses, such as Live/Work uses and Open Spaces. Overall, the Project supports a multi-modal transportation network within the Project Area.

Connect SoCal identifies Priority Growth Areas (PGAs) to follow the principles of center focused placemaking. This approach focuses growth and investment in areas such as Transit Priority Areas (TPAs), that are pedestrian oriented, low-to-medium-density, and contain a mix of uses and housing types. Center focused placemaking attempts to create places where people want to live, work, and play in locations that support multimodal mobility. These are locations where many Connect SoCal strategies can be fully realized. Connect SoCal’s PGAs include job centers, transit priority areas, HQTAs, neighborhood mobility areas, livable corridors, and spheres of influence. The Project Area is located in a Connect SoCal PGA which supports focusing regional growth in areas with planned or existing transit stops, which is key to achieving equity, economic, and environmental goals. It is located within an HQTA and conforms with the aligned transportation and housing planning used to develop the RHNA allocation. The Project would result in the development of residential uses within ½ mile of high frequency transit, which includes several LA Metro bus lines. This would contribute greatly to Connect SoCal’s land use and transportation strategies targeted towards increasing mobility options and a more sustainable growth pattern to reach greenhouse gas reduction targets. Additionally, the Project furthers the OurCounty 2020 Climate Action Plan goals and targets to reduce VMT and GHG emissions and create a fossil fuel-free Los Angeles County.

Future development projects would be reviewed by the City, as well as LA Metro and the Los Angeles County Department of Regional Planning (LADWRP), as applicable. As such, the City would ensure that future development accommodated through the Project would coordinate with LA Metro and the LADWRP for bicycle facilities and transit routes that are maintained and regulated at the county/regional level. Nevertheless, impacts would be less than significant.

### **Significance Before Mitigation**

This impact would be less than significant.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

Less than significant.

### **Impact TRA-2                      Conflict or be inconsistent with CEQA Guidelines section 15064.3(b).**

The purpose of the transportation analysis is to identify potential transportation system deficiencies resulting from vehicle trips generated by the employment and population growth anticipated from implementation of the Project. The Project's effects on VMT are evaluated based on the Los Angeles County guidelines. The Los Angeles County guidelines state daily vehicle trips, daily VMT, and daily total VMT per service population for land use plans should be estimated using the SCAG RTP/SCS Travel Demand Forecast Model. Transportation demand management strategies to be included as project design features should be considered in the estimation of a project's daily vehicle trips and VMT.

For land use projects, the intent of this threshold is to assess whether a land use or plan causes substantial VMT. Pursuant to the December 2018 *OPR Technical Advisory*, lead agencies have the discretion to choose the most appropriate methodology for evaluating project VMT. For this Project, the analysis uses thresholds from the County of Los Angeles. The Los Angeles County Traffic Analysis Guidelines includes screening criteria that is used to determine compliance with *CEQA Guidelines* Section 15064.3(b) and whether the Project adequately reduces total VMT. The screening criteria include:

- Is the project located within a one-half mile radius of a major transit stop or an existing stop along a high-quality transit corridor?
- Does the project have a Floor Area Ratio less than 0.75?
- Does the project provide more parking than required by the County Code?
- Is the project inconsistent with the SCAG RTP/SCS?

- Does the project replace residential units set aside for lower income households with a smaller number of market-rate residential units?

The Project Area is within one half mile of several high frequency LA Metro bus lines. The Project includes development standards for a Floor Area Ratio (FAR) of greater than 0.75 and the parking requirements would be below what is required by the County code through tools such as shared parking facilities. The Project is consistent with the SCAG RTP/SCS by facilitating infill development in a HQTA, and it increases the number of housing units in the Project Area and does not replace any lower income households. As a result, the Project is presumed to have a less than significant impact. Nonetheless, the following VMT analysis was prepared for the Project.

Iteris, Inc., conducted a VMT Analysis based on implementation of the Project. Based on the Los Angeles County Traffic Analysis Guidelines, a significant impact would occur if the Project conditions (i.e., the With Project Conditions) result in an average daily citywide VMT per service population that is above the existing conditions average daily citywide VMT per service population. Further, a significant impact would occur if the Project-only VMT per service population of a Project is greater than 16.8 percent below the existing/baseline VMT per service population (17.3 VMT/Service Population).

As shown in **Table 3.11-1, Baseline VMT Per Service Population**, the baseline Project Area daily VMT per service population is 20.9, which is lower than the City area's VMT per service population of 21.2.

**Table 3.11-1  
Baseline VMT Per Service Population**

Area	Total Home-based VMT per day	Total Work-based VMT / day	Total VMT / day	Residents	Employees	Service Population	VMT/Service Population
Project Area	2,611	758,303	760,914	209	36,196	36,405	20.9
City of Vernon	2,611	941,769	944,380	209	44,285	44,494	21.2

**Table 3.11-2, Future Year 2040 No Project VMT Per Service Population**, shows the future year 2040 No Project scenario, which includes cumulative development and transportation infrastructure and services outside of the Project Area. This scenario demonstrates how the Project Area would grow without implementation of the Project and its resulting new residents and employees.

**Table 3.11-2  
Future Year 2040 No Project VMT Per Service Population**

Area	Total Home-based VMT	Total Work-based VMT	Total VMT	Residents	Employees	Service Population	VMT/Service Population
Project Area	1,379	778,048	779,427	117	37,560	37,677	20.7
City of Vernon	1,379	986,526	987,905	117	46,752	46,869	21.1

Future year 2040 with Project scenario is shown in **Table 3.11-3, Future Year 2040 With Project VMT Per Service Population**, which includes the Project as well as cumulative development, transportation infrastructure, and services outside of the Project Area. Under the Future Year 2040 No Project scenario, VMT per service population would be reduced by approximately 0.1 percent in the Project Area to 20.7, and 0.5 percent in the City of Vernon to 21.1 when compared to the existing conditions. These reductions would be from future planned development and transportation improvements that would change travel patterns to reduce vehicle travel distance and use of non-vehicle modes throughout the southern California region.

The Future with Project scenario decreases VMT per service population even further to 20.0 within the Project Area and 20.4 in the City since it would add residences within proximity to transit and employment and increase the feasibility of non-vehicle modes of travel and active transportation. Implementation of the Project is forecasted to reduce VMT per service population in the Project Area by approximately 0.7 percent and by 0.7 percent in the City, when compared to the Future No Project scenario. This is due to the increase in the forecasted population and employment in the Project Area, which is located within proximity to transit, increasing the potential for transit ridership, as well as an increase in active modes of transportation such as walking and biking.

**Table 3.11-3  
Future Year 2040 with Project VMT Per Service Population**

Area	Total Home-based VMT	Total Work-based VMT	Total VMT	Residents	Employees	Service Population	VMT/Service Population
Project Area	19,315	774,072	793,387	1,780	37,967	39,747	20.0
City of Vernon	19,315	979,501	998,816	1,780	47,159	48,939	20.4

**Table 3.11-4  
Future Year 2040 Project Only VMT Per Service Population**

Area	Total Home-based VMT	Total Work-based VMT	Total VMT	Residents	Employees	Service Population	VMT/Service Population
Project Area	17,936	-3,976	13,960	1,663	407	2,070	6.7

**Table 3.11-4, Future Year 2040 Project Only VMT Per Service Population**, shows the VMT per service population that would result from implementation of the Project. The VMT per service population of the Project is forecasted to be 6.7 which is approximately 68 percent below the existing condition in the Project Area as shown in **Table 3.11-1** and 66 percent below the future No Project condition for the Project Area shown in **Table 3.11-2**. Therefore, the VMT per service population reduction from the Project would be greater than the Los Angeles County's minimum reduction of 16.8 percent. The Project's VMT per service population would also be more than 78 percent below the County's 31.1 VMT per service population for the South County Area.

Therefore, implementation of the Project would not exceed average daily citywide VMT per service population and impacts would be less than significant.

### **Significance Before Mitigation**

This impact would be less than significant.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

Less than significant.



**Impact TRA-3                    Substantially increase hazards due to geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

Future developments under the Project are not anticipated to result in inadequate design features or incompatible uses. Through the City's development review process, future developments would be evaluated to determine the appropriate land use permit for authorizing their use and the conditions for their establishment and operation. Future development projects would be evaluated on a case-by-case basis to ensure that adequate access and circulation to and within the Project Area would be provided. Access to development sites would be required to comply with all applicable Municipal Code and City design standards may be reviewed by the Los Angeles County Fire Department (LACFD) to ensure that inadequate design features or incompatible uses do not occur. The development review by City and LACFD would also ensure that structures are designed to meet the current local and regional standards and that adequate emergency access is provided. Therefore, implementation of the Project would not result in significant impacts involving inadequate design features or incompatible uses.

### **Significance Before Mitigation**

This impact would be less than significant.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

Less than significant.

---

**Impact TRA-4                    Result in inadequate emergency access.**

The Project does not include elements that would impede emergency vehicle access. Future development projects associated with the Project would be required to comply with the City's development review process.

The LACFD adopted the California Fire Code (CFC) which requires standards for access by fire apparatus. A fire apparatus access road is a road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane,

public street, private street, parking lot lane and access roadway. Standards related to fire apparatus access roads under the CFC include:

- Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds.
- Roads 20 to 26 Feet in width shall have fire lane signs posted on both sides of fire apparatus access.
- Buildings or facilities exceeding 30 feet or three stories in height, more than 62,000 feet of gross building area or projects having more than 100 dwelling units shall have at least two means of fire apparatus access for each structure.

Each of the standards would be applied to future development under the Project.

The City's current disaster evacuation routes are along Alameda Street, Santa Fe Avenue north of Vernon Avenue, and along Pacific Boulevard.<sup>4</sup> The Project is not anticipated to directly impact these existing disaster evacuation routes. Future development projects associated with the Project would undergo the City's environmental review process, in which the City would determine project-level impacts to these roadways. As such the Project would have a less than significant impact on evacuation routes.

Project implementation would increase population and construction within the Project Area. Construction activities associated with Project implementation may require temporary lane closures. Development projects resulting from the Project would be subject to the Vernon Municipal Code, which requires approval for any road closures and a permit issued by the City Council. The City's approval process would ensure that emergency access would be maintained during project construction. Further, development projects would also be required to comply with all applicable state building codes outlined by the CBC for construction and access to the site during both construction and operational phases. As a result, the Project would not result in inadequate emergency access, resulting in a less than significant impact.

### ***Significance Before Mitigation***

This impact would be less than significant.

---

<sup>4</sup> Los Angeles County Department of Public Works. "Disaster Route Maps." Available online at: <http://dpw.lacounty.gov/dsg/disasterroutes/map/Vernon.pdf>, accessed October 18, 2022.

### *Mitigation Measures*

No mitigation measures are required.

### *Significance After Mitigation*

Less than significant.

### **3.11.5 CUMULATIVE IMPACTS**

Los Angeles County Traffic Analysis Guidelines includes methodologies for evaluating cumulative impacts. Short-term effects are evaluated through project-level VMT analysis. Long-term, or cumulative impacts are evaluated through a project's consistency with the SCAG RTP/SCS. The Connect SoCal RTP/SCS is the regional plan that demonstrates compliance with air quality conformity requirements and GHG reduction targets. As such, projects that are consistent with the RTP/SCS in terms of development location, density, and intensity, are part of the regional solution for meeting air pollution and GHG goals. Projects that are deemed to be consistent would have a less than significant cumulative impact on VMT. As stated under **Threshold TRA-1**, the Project is consistent with the SCAG RTP/SCS and therefore would have a less than significant cumulative impact on VMT and the transportation system.

### **3.11.6 REFERENCES**

California Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. 2018. Available online at: [https://opr.ca.gov/docs/20190122-743\\_Technical\\_Advisory.pdf](https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf), accessed September 8, 2022.

Federal Highway Administration. *Fixing America's Surface Transportation Act*. Available at: <https://www.fhwa.dot.gov/fastact/>, accessed September 8, 2022.

Los Angeles County Department of Public Works. "Disaster Route Maps." Available online at: <http://dpw.lacounty.gov/dsg/disasterroutes/map/Vernon.pdf>, accessed October 18, 2022.

Southern California Association of Governments. *HQTA Toolkit: High-Quality Transit Area Pilot Project*. Available online at: [https://scag.ca.gov/sites/main/files/file-attachments/final\\_report\\_hqta\\_toolkit.pdf?1621458208](https://scag.ca.gov/sites/main/files/file-attachments/final_report_hqta_toolkit.pdf?1621458208). Accessed February 28, 2023.

## 3.12 UTILITIES AND SERVICE SYSTEMS AND ENERGY

---

### INTRODUCTION

*This section analyzes the environmental effects related to utilities and service systems associated with implementation of the Project. It discusses water and wastewater infrastructure as well as solid waste facilities. Issues related to water quality, drainage and infiltration patterns, and flood hazards are discussed in Section 3.6, Hydrology and Water Quality.*

#### 3.12.1 ENVIRONMENTAL SETTING

##### 3.12.1.1 Water Supply

The City of Vernon is served by three water agencies. The majority of the City's water is provided by the City of Vernon's Water Department. The area north of the Los Angeles River and just west of Indiana Street is supplied by the California Water Service Company (Cal Water), East Los Angeles District. The small portion of Vernon south of the Los Angeles River and east of Atlantic Boulevard is serviced by Maywood Mutual Water Company Number 3. The Project Area is served by the City of Vernon's Water Department.

The City's water distribution system consists of 250,000 linear feet of pipe, nine wells, seven ground-level reservoirs, one elevated tank, and a belowground reservoir. The total storage capacity is 16 million gallons. In addition, Vernon has a direct connection to the Metropolitan Water District (MWD). The MWD connection provides both a supplemental water source and an emergency supply in the event of a major power outage. The average pressure in the distribution systems is about 75 pounds per square inch (psi). The Water Service Division serves more than 800 customers and distributes approximately 2.2 billion gallons of water annually.<sup>1</sup>The majority of the water used in the City is supplied from the Water Service Division and is used by industrial businesses. There is currently very little residential or landscaping demand for water. The City of Vernon's water rates are amongst the lowest in the Los Angeles region,<sup>2</sup> which provides the City a competitive advantage for industrial uses.

The water in Vernon is imported from the Central Basin Municipal Water District (CBMWD), and includes groundwater from the Central Basin, and recycled water for power generation from CBMWD.

---

<sup>1</sup> City of Vernon. "Water Services." Available online at: <https://www.cityofvernon.org/government/public-utilities/water-division>, accessed October 13, 2022.

<sup>2</sup> IGService. *Water Rate Study for City of Vernon*. September 26, 2019. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/650/637635907686230000>, accessed November 3, 2022.

CBMWD provides recycled water from Los Angeles County Sanitation District's (LACSD) wastewater.<sup>3</sup> The City pumps groundwater from the Central Groundwater Basin, which is one of five adjudicated groundwater sub-basins in the Los Angeles Basin. As an adjudicated groundwater basin, the courts have assigned specific water rights to water users within the Central Basin via an Adjudication Judgement, which likewise compels the cooperation of groundwater users who might otherwise refuse to limit their pumping. Adjudication is in place for 22 groundwater basins in California, where development pressures have overwhelmed limited aquifers and Adjudication Judgements are imposed to achieve and maintain groundwater sustainability. Adjudicated groundwater basins are exempt from the requirements of Senate Bill (SB) 610, as discussed below under State regulations, because the Adjudication Judgement essentially achieves the same goals as a Water Supply Assessment.

The Central Basin is located in central Los Angeles County and spans an area that underlies the entire City of Vernon and beyond. The Central Basin has a surface area of 277 square miles of mostly flat to hilly terrain. Water-bearing deposits of the Central Basin include unconsolidated marine and alluvial sediments deposited over time. Percolation from precipitation, subsurface inflows from the San Gabriel Basin through the Whittier Narrows, and surface flows from local rivers and streams naturally replenish groundwater. The Central Basin is mostly urbanized and soil surfaces have been paved, limiting percolation to a small portion of the basin's soils. However, the Central Basin receives additional replenishment from the San Gabriel and Rio Hondo Spreading Basins, which receive a blend of imported water and recycled water. The Central Basin was adjudicated in 1965 and the California Department of Water Resources (DWR) was appointed Watermaster.

The total allotted pumping right from the Central Basin from all wells is 233,894 acre-feet per year (AFY), while the total allotted pumping rights for the City of Vernon is 7,539 AFY.<sup>4</sup> In 2020, Current potable usage is 6,290 AFY, including 6 AFY for single-family residential, 2 AFY for multi-family residential, 5,045 AFY for commercial, 1,234 AFY for industrial, and 11 AFY for other uses. **Table 3.12-1, Vernon Water Department Water Demand and Supply**, shows the projected water demand and supplies of the Water Service Division through 2045.

---

<sup>3</sup> City of Vernon. *2020 Urban Water Management Plan*. June 15, 2021. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/654/637619845748600000>, accessed October 13, 2022.

<sup>4</sup> City of Vernon. *2020 Urban Water Management Plan*. June 15, 2021. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/654/637619845748600000>, accessed October 13, 2022.

**Table 3.12-1  
Vernon Water Department Water Demand and Supply**

	2025	2030	2035	2040	2045
<b>Average Year</b>					
Projected Supply (AFY)	10,860	10,860	10,860	10,860	10,860
Projected Demand (AFY)	10,860	10,860	10,860	10,860	10,860
Surplus (Supply – Demand) AFY)	0	0	0	0	0
<b>Single Dry Year</b>					
Water Demand (AFY)	10,860	10,860	10,860	10,860	10,860
Water Supply (AFY)	10,860	10,860	10,860	10,860	10,860
Surplus (Supply – Demand) AFY)	0	0	0	0	0
<b>Multiple-dry year first year supply</b>					
Water Demand (AFY)	10,860	10,860	10,860	10,860	10,860
Water Supply (AFY)	10,860	10,860	10,860	10,860	10,860
Surplus (Supply – Demand) AFY)	0	0	0	0	0
<b>Multiple-dry year second year supply</b>					
Water Demand (AFY)	10,860	10,860	10,860	10,860	10,860
Water Supply (AFY)	10,860	10,860	10,860	10,860	10,860
Surplus (Supply – Demand) AFY)	0	0	0	0	0
<b>Multiple-dry year third year supply</b>					
Water Demand (AFY)	10,860	10,860	10,860	10,860	10,860
Water Supply (AFY)	10,860	10,860	10,860	10,860	10,860
Surplus (Supply – Demand) AFY)	0	0	0	0	0
<b>Multiple-dry year fourth year supply</b>					
Water Demand (AFY)	10,643	10,643	10,643	10,643	10,643
Water Supply (AFY)	10,643	10,643	10,643	10,643	10,643
Surplus (Supply – Demand) AFY)	0	0	0	0	0
<b>Multiple-dry year fifth year supply</b>					
Water Demand (AFY)	10,643	10,643	10,643	10,643	10,643
Water Supply (AFY)	10,643	10,643	10,643	10,643	10,643
Surplus (Supply – Demand) AFY)	0	0	0	0	0

AFY= Acre-feet per year

Source: City of Vernon. 2020. 2020 Urban Water Management Plan. Available at:

<https://www.cityofvernon.org/home/showpublisheddocument/654/637619845748600000>, accessed October 13, 2022.

**Table 3.12-1** shows that the City projects sufficient water supply available during all scenarios to meet future demands. However, the demand for potable water is higher than the City’s Allowable Pumping 7,539 AFY. This means that the City will acquire only as much additional supply as needed to meet demand during those years when potable water demand exceeds groundwater rights. Sources for the additional supply include imported water from the Central Basin Municipal Water District (CBMWD)

and excess pumping from the Central Basin (the Central Basin Adjudication allows members to pump up to 140% of their Allowable Pumping Rights).

Water demand for the Project Area based on existing land uses is shown in **Table 3.12-2, Project Area Estimated Existing Annual Waster Demand**. As shown in the table, the amount of water used for industrial uses is far higher than any of the other categories (retail or residential). A key competitive advantage of the City is having its own water department that can supply large volumes of water to industrial uses for lower cost than nearby service providers.

**3.12-2  
Project Area Estimated Existing Annual Water Demand**

Land Use	Jobs <sup>1</sup> or dwelling units	Daily Water Use Rate (gpd/unit)	Daily Water Demand (GPD)	Water Generation (AFY)
Retail	6 employees	75	450	0.50
Industrial	10,456 employees	133	1,390,648	1,557.7
Single-Family Residential	12 du	324	3,888	4.3
Multi-Family Residential	1 du	191	191	0.21
<b>Total</b>			<b>1,395,177</b>	<b>1,562.71</b>

*Note:*

1. Jobs for commercial, industrial, and public facilities based on the existing land use square footage and calculated based on square feet per employee (See Section 3.9 Population and Housing). Numbers are rounded to the nearest whole number.

Source: Water demand rates were obtained from the LADWP's 2020 Urban Water Management Plan (UWMP), Exhibit 2F – Base Year Water Unit Factors (2014). Available at:

<https://www.ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzyy/~edisp/opladwpcb762836.pdf>

As shown above, existing development in the Project Area has an annual water demand of approximately 1,395,177 gallons of water day, or 1,567.71 AFY.

### 3.12.1.2 Wastewater

The City of Vernon owns its own sewage collection system, which discharges into system managed by LACSD. LACSD is a public agency created under State law to manage wastewater and solid waste on a regional scale. LACSD consists of 24 independent special districts across the County of Los Angeles. Vernon is located primarily in LACSD Districts No. 23, with small portions in Districts No. 1 and No. 2. These Districts are participants of a Joint Outfall Agreement, which provides for the operations and maintenance of an interconnected Joint Outfall System (JOS). The JOS utilizes seven treatment plants and

over 1,200 miles of trunk sewers that provides regional wastewater treatment for Los Angeles County, covering an extensive area that includes 73 cities and unincorporated county territory.<sup>5</sup> The City of Vernon is served by Joint Water Pollution Control Plant (JWPCP) in Carson, CA.<sup>6</sup> The JWPCP is the hub of the JOS. It is the largest facility on the system. It provides centralized processing of solids removed during wastewater treatment for all of the JOS plants, producing electricity and reusable biosolids in the process.

Wastewater Generation associated with the existing land uses in the Project Area are shown in **Table 3.12-3, Existing Wastewater Generation in Project Area.**

**3.12-3  
Project Area Existing Wastewater Generation**

Land Use	Size (sf) or dwelling units	Generation Rates (GPD per 1,000 sf or du)	Wastewater Generation (GPD)
Retail	6,930 sf	50	346.5
Industrial	14,942,363 sf	50	747,118
Residential	13 du	150	1,950
<b>Total</b>			<b>749,415</b>

*Source: City of Los Angeles. Sewage Generation Factors Chart. Available at: <https://engpermitmanual.lacity.org/sewer-s-permits/technical-procedures/sewage-generation-factors-chart>, accessed October 14, 2022.*

### 3.12.1.3 Solid Waste

The City and its businesses have contracts with various different waste haulers. These haulers utilize several different waste transfer stations within the region, which transport the waste to two different landfills. **Table 3.12-4, Waste Transfer Stations and Capacity**, show the various transfer stations and their respective daily permitted capacities. The total daily capacity for the transfer stations serving the City of Vernon is 41,963 tons per day.

<sup>5</sup> Los Angeles County Sanitation District. “Wastewater Treatment Process at JWPCP.” Available at: <https://www.lacsd.org/services/wastewater-sewage/facilities/joint-water-pollution-control-plant/wastewater-treatment-process-at-jwpcp>, accessed October 19, 2022.

<sup>6</sup> Los Angeles County Sanitation District. JOS Districts and Treatment Facilities which Provide Service To Local Jurisdictions.



**Table 3.12-4  
Waste Transfer Stations and Capacity**

<b>Transfer Station</b>	<b>Maximum Permitted Capacity (Tons/Day)</b>
American Industrial Services	163
Innovative Waste Control TS	1,250
Compton Recycling & Transfer Station	1,500
Central LA Recycling & TS (CLARTS)	4,025
Athens Services	5,000
Universal Waste System, Inc. DTF	1,500
Strategic Materials	900
Sun Valley Paper Stock MRF and TS	750
Puente Hills MRF	4,400
City Terrace Recycling and Waste T/S	1,000
Southeast Resource Recovery Facility	2,240
Carson transfer station & MRF	5,300
South Gate Transfer Station	1,000
Mission Road Recycling & Transfer Station	1,785
Looney Bins/Downtown Diversion	1,500
Paramount Resource Recycling Facility	2,450
Downey Area Recycling & Transfer	5,000
Bel-Art Waste Transfer Station	1,500
East Los Angeles Recycling And Transfer	700
<b>Total</b>	<b>41,963</b>

Source: CalRecycle. Solid Waste Information System (SWIS). Available online at: <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>, accessed November, 2022.

Additionally, green waste, wood waste, compost, and mulch within the City are processed at Green Wise Soil Technologies. After solid waste and recycling are processed at the various waste transfer stations. They are generally hauled to two landfills in the region: Sunshine Canyon Landfill in Sylmar, and the Simi Valley Landfill in Simi Valley. Additionally, a portion of green waste, wood waste, and compost in the City are processed at Green Wise Soil Technologies. Solid waste currently generated by existing uses in the Project Area are shown in **Table 3.12-5, Project Area Existing Solid Waste Generation**.

**3.12-5  
Project Area Existing Solid Waste Generation**

Land Use	Quantity	Generation Rate	Solid Waste Generation		
			Pounds per day	Tons per day	Cubic yards per day <sup>1</sup>
Retail	6,930 sf	0.005 lbs//sf/day	34.65	0.017325	0.03465
Industrial	14,942,363 sf	0.006 lbs/sf/day	89,654	44.827	89.65
Residential	13 du	12.23 lbs/unit/day	159	0.079495	0.15899
<b>Total</b>			<b>89,847.7</b>	<b>44.9</b>	<b>89.8</b>

<sup>1</sup>Conversion factor assumed to be 1,000 pounds per cubic yard.

Note: Totals are rounded to the nearest tenth

Source for generation rates based on CalRecycle. Available at <https://www2.calrecycle.ca.gov/wastecharacterization/general/rates>

#### 3.12.1.4 Electrical Service

The City of Vernon operates its own electrical service through the Vernon Public Utilities (VPU) Department. VPU Department serves approximately 2,000 mainly commercial and industrial customers and has a peak load of approximately 184 MW in the summer and 174 MW in the winter. Vernon system peak load is served in part by two generation facilities that are located within the VPU Department service territory: the Malburg Generating Station (MGS), a 134 MW natural gas-fired plant and two H. Gonzales units, a combined 10 MW natural gas plant. In addition to local generation, the VPU Department purchases energy to supply its 184 MW system demand from long-term agreements including the Palo Verde Nuclear Generating Station, Hoover Dam, solar generating facilities, landfill gas facilities, and from short-term power purchases.<sup>7</sup> The VPU Department provides comparatively low-cost electrical power, giving industrial and commercial uses in the City a competitive advantage.

#### 3.12.1.5 Natural Gas

The Natural Gas Division of the City of Vernon's Public Utilities Department provides natural gas service to the businesses and residents of Vernon, along with SoCalGas. SoCalGas provides natural gas service to

<sup>7</sup> Vernon Public Utilities. 2018 *Integrated Resource Plan*. 2018. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/1312/637635900221570000>, accessed November 3, 2022.

approximately 21.8 million customers across a 24,000 square mile service area.<sup>8</sup> Vernon, including the Project Area, is located in SoCalGas' North Los Angeles Basin Zone.

Vernon's gas distribution system is comprised of a six-inch in diameter pipeline and is located under every street in the City. It serves approximately 125 service laterals that provide gas service to Vernon gas customers. In addition, Vernon operates a 10-inch steel high-pressure gas transmission pipeline. The pipeline is seven miles long and delivers natural gas to the Malburg Generating Station Power Plant from the two distribution regulator stations.<sup>9</sup>

### 3.12.1.6 Telecommunications

The City of Vernon Public Utilities has established a network of fiber-optic cables in the City, which provides high speed fiber internet connection to businesses and residents.

## 3.12.2 REGULATORY FRAMEWORK

Federal, State, and local regulations applicable to utilities and service systems are presented below. This setting addresses issue areas relevant to utilities and service systems, including water supply, wastewater, and solid waste.

### 3.12.2.1 Federal

#### *Clean Water Act of 1972, as amended (CWA)*

The law was originally enacted as the Federal Water Pollution Control Act (FWPCA; Public Law 92-500) in 1948 but took on its modern form when completely rewritten in 1972 in an act entitled the Federal Water Pollution Control Act Amendments of 1972, now commonly known as the Clean Water Act. Major changes have subsequently been introduced via amendatory legislation including the Clean Water Act of 1977 and the Water Quality Act of 1987.

The Clean Water Act (CWA) is the primary federal law in the United States governing water pollution. Its objective is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands. It is one of the United States' first and most influential modern environmental laws. As with many other major

---

<sup>8</sup> SoCalGas. Company Profile. Available at: <https://www.socalgas.com/about-us/company-profile>, accessed October 19, 2022.

<sup>9</sup> City of Vernon. Natural Gas Division. Available online at: <https://www.cityofvernon.org/government/public-utilities/natural-gas-division>, accessed October 14, 2022.

U.S. federal environmental statutes, it is administered by the U.S. Environmental Protection Agency (U.S. EPA), in coordination with state governments. Its implementing regulations are codified at 40 C.F.R. Subchapters D, N, and O (Parts 100-140, 401-471, and 501-503).

#### **Section 303(d)**

Section 303(d) of the Federal CWA requires the SWRCB to list impaired water bodies and determine TMDLs of pollutants or other stressors that are contributing excessively to these impaired waters.

#### **Section 401 – Water Quality Certification**

Section 401 establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. and regulating quality standards for surface waters. Under the CWA, the U.S. EPA has implemented pollution control programs such as setting wastewater standards for industries and surface waters.

#### **Section 402**

Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit process. In California, NPDES permitting authority is delegated to, and administered by the nine RWQCBs. Pursuant to Section 402, a discharge of any pollutant from a point source into navigable waters, are prohibited unless an NPDES permit is obtained. Point sources are discrete conveyances such as pipes or manmade ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

Section 402(p) establishes that storm water permits are required for discharges from a municipal separate storm sewer system (MS4) serving a population of 100,000 or more. U.S. EPA defines an MS4 as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned or operated by a State (40 CFR 122.26(b)(8)).

The California Department of Transportation (Caltrans) is responsible for the design, construction, management, and maintenance of the State highway system, including freeways, bridges, tunnels, Caltrans' facilities, and related properties, and is subject to the permitting requirements of CWA Section 402(p). Caltrans' discharges consist of storm water and non-storm water discharges from state-owned rights-of-way.

Before July 1999, discharges from Caltrans' MS4 were regulated by individual NPDES permits issued by the RWQCBs. On July 15, 1999, the SWRCB issued a statewide permit (Order No. 99-06-DWQ) that

regulated all discharges from Caltrans MS4s, maintenance facilities, and construction activities. On September 19, 2012, Caltrans' permit was reissued (Order No. 2012-0011-DWQ), and it became effective on July 1, 2013.

Caltrans' Storm Water Management Plan (SWMP) describes the procedures and practices used to reduce or eliminate the discharge of pollutants to storm drainage systems and receiving waters. The SWMP was most recently updated in July of 2016.

#### **Section 404 – Discharge of Dredge or Fill Material**

Section 404 of the federal CWA is administered and enforced by the U.S. Army Corps of Engineers (USACE). Section 404 of the CWA establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. USACE administers the day-to-day program, including the determination of eligibility of project for use of Categorical Exclusions and Nationwide Permits, and review and consideration of individual permit decisions and jurisdictional determinations. USACE also develops policy and guidance; and enforces Section 404 provisions.

#### **3.12.2.2 State**

#### **Water Supply**

##### ***Urban Water Management Planning Act***

California State Assembly Bill 797 (California Water Code Section 10610, et seq.), adopted in 1983, requires every urban water supplier providing water for municipal purposes to more than 3,000 customers or more than 3,000 acre-feet of water on an annual basis to prepare an Urban Water Management Plan (UWMP). The intent of the UWMP is to assist water supply agencies in water resource planning given their existing and anticipated future demands. UWMPs must be updated every five years, in years ending in zero and five.

##### ***Senate Bills 610 and 221***

SB 221 (Kuehl) amended the Subdivision Map Act, and SB 610 (Costa) amended Part 2.10 of the *California Water Code* regarding water supply availability. These amendments took effect on January 1, 2002, and require generally that water retail providers demonstrate that sufficient and reliable sources are available in order for local agencies to evaluate large-scale developments and complete the environmental review process.

SB 610 requires cities and counties that determine a project is subject to the California Environmental Quality Act (CEQA) to identify any public water system that may supply water for the project, and to require those public water systems to prepare a specified water supply assessment to be included in any environmental document prepared for the project. The assessment includes an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years, pursuant to those entitlements, rights, and contracts. If the assessment concludes that water supplies are or will be insufficient, the public water system shall also submit plans for acquiring additional water supplies.

SB 221 requires written verification from the applicable public water system that sufficient water supply is available for a subdivision of property of more than 500 dwelling units prior to approval of a tentative or parcel map.

### ***Water Conservation Act of 2009 (SBX7-7)***

The Water Conservation Act of 2009 (also known as Senate Bill X7-7) established a statewide water conservation target of 20 percent reduction in water use by 2020 compared to the State's 2005 baseline use. The Act requires that retail water suppliers define in their 2010 urban water management plans the gallons per capita per day (gpcd) targets for 2020, with an interim 2015 target. The legislation also requires the California Department of Water Resources, in consultation with other state agencies, to develop a single standardized water use reporting form, which would be used by both urban and agricultural water agencies. EID's 2015 UWMP, adopted in May 2016, complied with these requirements.

## **Wastewater**

### ***California Code of Regulations Title 22***

The California Code of Regulations Title 22, Division 4, Chapter 3, Sections 60301 through 60355 are used to regulate recycled wastewater and are administered jointly by the CDPH and the RWQCBs. Title 22 contains effluent requirements for four levels of wastewater treatment, from undisinfected secondary recycled water to disinfected tertiary recycled water. Higher levels of treatment have higher effluent standards, allowing for a greater number of uses under Title 22, including irrigation of freeway landscaping, pasture for milk animals, parks and playgrounds, and vineyards and orchards for disinfected tertiary recycled water.

Salt concentrations (such as chloride, nitrogen, sodium, etc.) in the effluent are regulated based on the Water Quality Control Plan (Basin Plan) for the Los Angeles Region, which also considers local groundwater quality. Recycled water quality goals for salts and other constituents would vary depending

on the intended irrigation recipients. The RWQCB will develop waste discharge requirements based on the Basin Plan, designed to protect beneficial uses of the State waters. The RWQCB Basin Plan contains an antidegradation policy so that existing quality shall be maintained.<sup>10</sup>

## **Solid Waste**

### ***Assembly Bill 939 and Senate Bill 1016***

The California Integrated Waste Management Act of 1989, or Assembly Bill 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of all solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures to assist in reducing these impacts to less-than-significant levels. With the passage of Senate Bill 1016 (the Per Capita Disposal Measurement System) in 2006, only per capita disposal rates are measured to determine if a jurisdiction's efforts are meeting the intent of Assembly Bill 939. Therefore, the 50 percent diversion requirement should be measured in terms of per-capita disposal expressed as pounds per person per day.

### ***Assembly Bill 341 and Senate Bill 1383***

The purpose of AB 341 of 2011 (Chapter 476, Statutes of 2011) is to reduce greenhouse gas (GHG) emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California. In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

SB 1383 of 2016 (Chapter 395, Statutes of 2016) established the following goals: a 50 percent reduction in the level of the statewide disposal of organic waste from 2014 levels by 2020, and a 75-percent reduction in the level of the statewide disposal of organic waste from 2014 levels by 2025. This bill also authorized CalRecycle to adopt regulations, to take effect on or after January 1, 2022, to achieve these targets.

### ***Assembly Bill 1826***

AB 1826 of 2014 (Chapter 727, Statutes of 2014) requires businesses that generate a specified amount of organic waste per week to arrange for recycling services for that waste, and for jurisdictions to implement

---

<sup>10</sup> California Water Boards. Plans and Policies – Antidegradation. 2022. Available online at: [https://www.waterboards.ca.gov/plans\\_policies/antidegradation.html](https://www.waterboards.ca.gov/plans_policies/antidegradation.html), accessed on October 19, 2022.

a recycling program to divert organic waste from businesses subject to the law, as well as report to CalRecycle on their progress in implementing an organic waste recycling program. As of January 1, 2017, businesses that generate four cubic yards or more of organic waste per week shall arrange for organic waste recycling services.

## Electrical and Natural Gas Service

### *Senate Bill 100*

Titled “The 100 Percent Clean Energy Act of 2018,” SB 100 sets a 2045 goal of powering all retail electricity sold in California and state agency electricity needs with renewable and zero-carbon resources, such as solar and wind energy that do not emit climate-altering greenhouse gases. The Bill also updates the state’s Renewables Portfolio Standard to ensure that by 2030 at least 60 percent of California’s electricity is renewable, and it requires the Energy Commission, Public Utilities Commission and the California Air Resources Board to use programs under existing laws to achieve 100 percent clean electricity and issue a joint policy report on SB 100 by 2021 and every four years thereafter.

### 3.12.2.3 Regional and Local

## Water Supply

### *City of Vernon General Plan*

Applicable goals and policies from the Circulation and Infrastructure Element of the *City of Vernon General Plan* related to water are provided below:

**Goal CI-3: Maintain the water supply system to meet both normal demand and emergency needs.**

**Policy CI-3.1:** Periodically evaluate the entire water supply and distribution systems to determine their continued adequacy and to attempt to eliminate deficiencies or enhance service.

**Policy CI-3.2:** Require all new developments and expansions of existing facilities bear the cost of providing adequate water service to meet the increased demand which they generate.

**Policy CI-3.3:** Implement the programs and policies contain in the City’s Urban Water Management Plan, including particularly those related to reliability planning and conservation and reuse.



### *Urban Water Management Plan*

The 2020 UWMP serves as a long-range planning document for the City of Vernon service area. The UWMP contains the same types of water supply and demand projections that would be included in a WSA, and this document is therefore an appropriate resource to use in developing the impact analysis provided below.

### *Municipal Code*

The City has established a water conservation and supply shortage program as described in Chapter 13.20 of the Vernon Municipal Code. Per Section 13.20.050, a Phase I Water Supply Shortage can be declared if City Council determines it is likely that the City of Vernon will suffer a shortage in City water supplies up to 20%, which becomes mandatory when the City Council determines that the City will suffer a water shortage in excess of 20% of its normal water supplies. These conservation requirements include:

- Limits on Watering Days. Watering is limited to three days per week and is prohibited between the hours of 6:00am and 6:00pm.
- Obligation to Fix Leaks. All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within 72 hours.

A Phase II Water Supply Shortage shall become mandatory when the City Council determines that the City will suffer a water shortage in excess of 30% of its normal water supplies. These conservation requirements include:

- Limits on Watering Days. Watering is limited to two days per week. Between November through March, watering is limited to one day per week.
- Obligation to Fix Leaks. All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within 48 hours.
- Limits on Filling Ornamental Lakes or Ponds.
- Limits on Washing Vehicles
- Limits on Filling Residential Swimming Pools and Spas.
- Commercial Nurseries Watering Limitations. No customer shall make, cause, use or permit the use of City water for any purpose in excess of 85% of the amount used the same corresponding monthly billing period two years preceding the City Council declaring a Phase I Water Supply Shortage.

A Phase III Water Supply Shortage Emergency will occur when the City Council determines that the City will suffer a shortage of more than 50% of its normal water supplies.

## Wastewater

### *City of Vernon General Plan*

**Goal CI-4: Maintain the sewer system to assure the health and safety of all residents and businesses.**

**Policy CI-4.1:** Periodically evaluate the sewage disposal system to determine its adequacy to meet changes in demand and changes in types of waste.

**Policy CI-4.2:** Ensure that all new developments bear the cost of expanding the sewage disposal system to handle any increase in load that they generate.

**Policy CI-4.3:** Investigate and implement means of financing maintenance and improvements to the sewer system.

**Goal CI-5: Maintain the storm drainage system to assure the protection of lives and property of in Vernon.**

**Policy CI-5.1:** Periodically evaluate the size and condition of the storm drainage system to determine its ability to handle expected storm runoff.

**Policy CI-5.2:** Evaluate the impact of all new developments and expansion of existing facilities on storm runoff and require that the cost of upgrading existing drainage facilities to handle the additional runoff is paid for by the development which generates the need to improve a facility.

**Policy CI-5.3:** Monitor the use and storage of hazardous materials to prevent accidental discharge into the storm drainage system.

**Policy CI-5.4:** Allow new development projects to creatively implement NPDES standards and requirements.

## Solid Waste

### *County Los Angeles Integrated Waste Management Plan*

The County of Los Angeles Integrated Waste Management Plan (IWMP) sets forth a regional approach for the management of solid waste through source reduction, recycling and composting, and environmentally safe transformation and disposal. The IWMP ensures that the waste management practices of cities and other jurisdictions in the County are consistent with the solid waste diversion goals of AB 939 through source reduction, recycling and composting programs, household hazardous waste management programs, and public education awareness programs. The IWMP calls for the establishment of 50 years of in-County permitted landfill capacity, as well as the County's support for the development of disposal facilities out of the County. Assessment of potential impacts to utilities and service systems is based on review of the Project, and site conditions, analysis provided in the City of Vernon's current UWMP and City and County information regarding utility-related issues, including water supply and facilities, wastewater facilities, and solid waste.

The County continually evaluates landfill needs and capacity through the preparation of the IWMP annual reports. Within each annual report, future landfill disposal needs over the next 15- year planning horizon are addressed, in part, by determining the available landfill capacity. The most recent annual report is the 2019 report.<sup>11</sup>

### *City of Vernon Sustainability Action Plan*

This Sustainability Action Plan is a document to guide the City in developing and maintaining its sustainable infrastructure. The Sustainability Action Plan includes several policy targets to manage waste resources within the City:

- Achieve zero waste sent to landfills by 2020.
- Develop and implement mandatory recycling ordinance to ensure that all businesses participate in recycling.
- Implement mandatory commercial recycling ordinance (finalize after adoption of regulations by CalRecycle).

---

<sup>11</sup> County of Los Angeles Department of Public Works. *Countywide Integrated Waste Management Plan – 2019 Annual Report*. 2020. Available at: <https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=14372&hp=yes&type=PDF>, accessed October 19, 2022.

- Develop documentation needed for demonstration of compliance with the State mandatory commercial recycling law.
- Develop Environmental Preferred Purchasing Policy that incorporates incentives for extended manufacturers' responsibility.
- Research product certifications (e.g., Green Seal, etc.) and other product and packaging evaluation protocols to determine which environmentally preferred products the City should purchase.
- Work with franchised haulers to implement additional recycling programs targeted to non-traditional materials.
- Develop sustainability product design purchasing preference policy and program as part of the Environmental Purchasing Plan.
- Work with existing haulers and recyclers to site and/or expand recycling facilities in the City.
- Expand the waste reduction and recycling technical assistance resources provided to businesses.
- Identify "best management practices" to serve as examples to other Vernon businesses.
- Reduce the City's use of office paper.
- Minimize disposal of universal waste and electronic wastes and maximize recovery of recyclables portions of these specific streams.

## Electrical and Natural Gas Service

### *City of Vernon General Plan*

**Goal CI-6:**                    **Improve the City's capability to generate and supply electric power to achieve energy self-sufficiency.**

**Policy CI-6.1:**                Expand, operate, and maintain an electrical utility system in an effort to provide an adequate level of service to businesses and other uses in the City.

**Policy CI-6.2:**                Improve the electrical utility system in an effort to allow the City to meet any changes in demand over time.

- Policy CI-6.3:** Cooperate and/or participate with other agencies or parties in the expansion or development of power generation.
- Policy CI-6.4:** Evaluate the impact of all new development on the electrical energy system and require that the cost of upgrading existing facilities is paid by the development, which necessitates the upgrade.
- Policy CI-6.4:** Expand the City’s capability to generate and provide natural gas to enhance the power/energy supply system.

## Telecommunications

### *City of Vernon General Plan*

**Goal CI-7:** Provide the highest quality communications and information technology services throughout the City.

- Policy CI-7.1:** Work with communication and technology service providers to provide for state-of-the-art internet, phone, and wireless communications equipment and services.

## 3.12.3 IMPACTS AND MITIGATION MEASURES

### 3.12.3.1 Thresholds of Significance

The following thresholds for determining the significance of impacts related to utilities and service systems and energy are contained in the environmental checklist form contained in Appendix G of the most recent update of the *State CEQA Guidelines*. Adoption and/or implementation of the Project could result in significant impacts regarding utilities and services systems and energy if any of the following would occur:

- 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.
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

- 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.
- 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.
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.
- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

### 3.12.3.2 Methodology

The analysis in this section focuses on the potential physical environmental effects of any relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities. If the Project would not require the relocation or construction of such facilities, it follows that there would not be a significant environmental impact. The analysis would also evaluate the Project's potential to exceed available water supplies, wastewater capacity, and the generation of solid waste in excess of capacity or applicable solid waste reduction goals.

The energy impact analysis focuses on the nature and magnitude of change in energy resources due to construction and operation of the Project. To address the significance thresholds, the focus of this analysis is related to energy efficiency within the context of the existing regulatory environment. The methodology used to estimate the construction phase energy use is described in **Impact EN-1** below.

With respect to energy consumption during occupancy/operation, the increased electricity and natural gas demand due to operation/occupancy of the Project were estimated using the CalEEMod emissions model. In addition, as the Project would result in daily vehicle trips due to typical residential commutes, the increase in the consumption of petroleum-based fuel was calculated based on vehicle miles traveled (VMT).

### 3.12.4 ENVIRONMENTAL IMPACTS

**Impact USS-1**      **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**

#### Water Supply

The Project Area is located within the Vernon Water Services Division jurisdiction and receives water supplies from the City of Vernon’s Water Department, which provides water pumped from municipal groundwater wells in the adjudicated Central Basin and imported surface water purchased through MWD. The local groundwater basin is adjudicated, meaning that all groundwater use is managed per a court-ordered Adjudication Judgement to ensure long-term groundwater supply sustainability.

The Project would introduce new uses into the Project Area, including additional residential, retail, and research and development, while potentially reducing the amount of industrial space. However, due to the increase in the variety of uses, total water demand is expected to increase beyond existing demand.

**Table 3.12-6, Estimated Annual Project Area Water Demand**, shows the total estimated water demand for the Project Area upon implementation of the Project Area.

**Table 3.12-6  
Estimated Annual Project Area Water Demand**

Land Use	Jobs <sup>1</sup> or dwelling units	Daily Water Use Rate (gpd/unit)	Daily Water Demand (GPD)	Water Generation (AFY)
Retail	100 employees	75	7,500	8.4
Production Retail	177 employees	133 <sup>2</sup>	23,541	26.4
Research and Development	252 employees	133 <sup>2</sup>	33,516	37.5
Industrial	10,053 employees	133	1,337,049	1,497.7
Single-Family Residential	12 du	324	3,888	4.3
Multi-Family Residential	875 du	191	167,125	187.2
<b>Total</b>			<b>1,572,619</b>	<b>1,761.50</b>

Land Use	Jobs <sup>1</sup> or dwelling units	Daily Water Use Rate (gpd/unit)	Daily Water Demand (GPD)	Water Generation (AFY)
----------	-------------------------------------	---------------------------------	--------------------------	------------------------

<sup>1</sup> Jobs for commercial, industrial, and public facilities based on the existing land use square footage and calculated based on square feet per employee (See Section 3.9 Population and Housing). Numbers are rounded to the nearest whole number.

<sup>2</sup> Production Retail and Research and Development utilize industrial water generation rates, as these uses are primarily comprised of industrial space.

Source: Water demand rates were obtained from the LADWP’s 2020 Urban Water Management Plan (UWMP), Exhibit 2F – Base Year Water Unit Factors (2014). Available at:

<https://www.ladwp.com/cs/groups/ladwp/documents/pdf/mdaw/nzyy/~edisp/opladwpcb762836.pdf>

As shown above, development under the Project would result in approximately 1,761.50 AFY of water annually. This would be an increase of approximately 198.79 AFY over the existing annual water demand of 1,562.71 AFY in the Project Area. The City’s water supply is obtained from the Central Basin Municipal Water District (CBMWD), groundwater from the Central Basin, and recycled water for power generation from CBMWD. The City has a yearly allocation of 7,539 AFY of groundwater from the Central Basin. CBMWD provides recycled water from LACSD wastewater. Additionally, the MWD connection provides both a supplemental water source and an emergency supply in the event of a major power outage. MWD determines its yearly water supply capability based on the hydrologic history of the State Water Project and the Colorado River Aqueduct regions.

According to the City’s 2020 UWMP, the City concluded that there would be sufficient water supplies during the “worst-case” effects of a multiple dry year drought. Given that the City of Vernon’s water supply is generated by the City Water Department as well as MWD, the remaining capacity of both of these water suppliers would be sufficient for implementation of the Project. Further, utilities such as water, wastewater and power are generally population driven. The Project would increase the population in the Project Area by 2,486. Per capita water demand for the residential uses would decrease from 110.24 GPD to 67.78 GPD as future uses would be multi-family units which are a more efficient building type. Further, implementation of the Project will occur over time allowing the City time to adjust for anticipated increases in water demand. As such, the Project would not require or result in the construction of new water treatment facilities or expansion of existing facilities. Impacts would be less than significant.

### Wastewater

Wastewater in the Project Area would be collected by the City’s local system of sewer lines and conveyed through regional trunk lines operated by LACSD. All of Vernon’s wastewater is treated by the JWPCP, located at 24501 S Figueroa Street in the City of Carson. The JWPCP provides both primary and secondary treatment for approximately 260 million gallons of wastewater per day (MGD) and has a total



permitted capacity of 400 MGD. Treated effluent is then discharged from JWPCP through an ocean outfall.

The Project would potentially reduce the amount of industrial uses while introducing new uses into the Project Area, including additional residential, retail, and research and development uses. The increased presence of these new uses would result in total wastewater generation to increase beyond the existing conditions. **Table 3.12-7, Project Wastewater Generation**, shows the estimated wastewater generation from the Project at buildout.

**Table 3.12-7  
Project Wastewater Generation**

Land Use	Size (sf) or dwelling units	Generation Rates (GPD per 1,000 sf or du)	Wastewater Generation (GPD)
Retail	126,989 sf	50	6,349.5
Production Retail	253,021 sf	50 <sup>1</sup>	12,651
Research and Development	360,429 sf	50 <sup>1</sup>	18,021.5
Industrial	14,366,814 sf	50	718,340.7
Residential	887 du	150	133,050
<b>Total</b>			<b>888,262.7</b>

<sup>1</sup>. Production Retail and Research and Development utilize industrial water generation rates, as these uses primarily comprised of industrial space.

Source: City of Los Angeles. Sewage Generation Factors Chart. Available at: <https://engpermitmanual.lacity.org/sewer-s-permits/technical-procedures/sewage-generation-factors-chart>, accessed March 29, 2022.

Further, utilities such as water, wastewater, and power are generally population driven. The Project would increase the population in the Project Area by 2,486, resulting in an increase of wastewater generation. As indicated above, development under the Project is expected to generate approximately 888,262.7 gallons per day. However, existing development in the Project Area currently generates an estimated 749,415 GPD of wastewater; therefore, development under the Project would generate a net increase of 138,847.7 GPD. This amount accounts for approximately 0.09 percent of JWPCP's remaining treatment capacity of 143 million gallons per day. Flow projections of the Joint Outfall System through the year 2050 determined that the capacity of the JWPCP would remain at 400 MGD average flow in the year 2050 with upstream Water Reclamation Plant expansions. The existing wastewater treatment capacity are therefore anticipated to be sufficient to accommodate projected development. Buildout will occur over time, spanning across 20 years or more. This will provide the City with time to adjust for anticipated increases in water demand. Additionally, with adherence to applicable regulations and

*General Plan* policies, implementation of the Project would have adequate wastewater conveyance systems and impacts related to wastewater conveyance would be less than significant.

### **Electric Power**

Electricity services in the Project Area are provided by the City of Vernon Light and Power, as well as electricity purchased through third-party supplies connected to Southern California Edison (SCE). The Project is expected to increase annual electricity consumption, as housing, population, and employment increase in the Project Area. Future development anticipated to occur with the implementation of the Project would be subject to Title 24, Part 6 of the California Administrative Code, the Energy Efficiency Standards for Residential and Nonresidential Buildings, which requires local jurisdictions to use energy efficient appliances, weatherization techniques, and efficient cooling and heating systems to reduce energy demand stemming from new development.

Future development associated with the Project may require site-specific modifications to some existing electrical distribution systems. This service would be provided in accordance with the rules and regulations on file with and approved by California Public Utilities Commission (CPUC). It is not anticipated that existing transmission lines would need to be modified as a result of the development under the Project. Potential impacts would be less than significant.

### **Natural Gas**

Natural gas services in the Project Area are provided by City of Vernon's Public Utilities Department and SoCalGas, which is regulated by the CPUC. Existing natural gas infrastructure (transmission lines and high distribution lines) are provided throughout the City and is typically located underground and along roadways to convey flows to residential and commercial users. Per the 2020 California Gas Report, it is anticipated SoCalGas will meet projected demand for natural gas resources through 2026 based on modeled forecasts.<sup>12</sup> Development under the Project would increase the demand for natural gas and may potentially require new natural gas pipelines or expansion of existing pipelines to supply areas with natural gas.

For future development associated with the Project, the exact locations of natural gas infrastructure would be confirmed during the design and review process. Any need for infrastructure upgrades would be accomplished through the required design review and approval of natural gas plans. Development under the Project may necessitate the construction of new or expansion of existing natural gas

---

<sup>12</sup> California Gas and Electric Utilities. *2020 California Gas Report*. 2020. Available online: [https://www.socalgas.com/sites/default/files/2020-10/2020\\_California\\_Gas\\_Report\\_Joint\\_UTILITY\\_Biennial\\_Comprehensive\\_Filing.pdf](https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_UTILITY_Biennial_Comprehensive_Filing.pdf), accessed November 4, 2022.

distribution facilities, including new service connections or gas lines to serve housing development projects. Impacts from such construction or relocation work would be anticipated to be less than significant based on their construction and installation in existing right of way and other public easements that have been previously disturbed and based on existing regulatory compliance measures and review and oversight by relevant local and state agencies. Any unusual site-specific conditions that would result in significant impact would be speculative. Additionally, any project to install or relocate facilities would be subject to future environmental review and necessary mitigation to address site specific conditions. Furthermore, the 2022 Building Energy Efficiency Standards of the California Building Code, effective January 2023, include a requirement for new residential to be electric-ready, so electric appliances can eventually replace installed gas appliances. This requirement will reduce dependency on natural gas and impacts would be less than significant.

### **Telecommunications Facilities**

Implementation of the Project requires provision of new and upgraded utility infrastructure to meet the needs of site residents and tenants. Improvements include telephone and cable lines, which are typically co-located with existing energy lines. Telephone and cable utility plans would be submitted concurrent with the final plans for each proposed project. When needed, construction of telecommunications lines would occur in the Project Area to serve anticipated development. Construction of additional telecommunications facilities or upgrades to existing facilities to meet Project Area demands would be undertaken by the City of Vernon Public Utilities Department or private telecommunication service providers in accordance with applicable federal, state, and local regulations. No restrictions on the ability to provide adequate telecommunication service are anticipated, but new or expanded facilities may be needed to meet increased demand in the Project Area. Such expansions would result in temporary construction-related impacts pertaining to such issues as transportation, air quality, and noise. These impacts are anticipated to be within the parameters of what is described in this EIR and any new or expanded facilities, any impacts from unique parcel or project specific conditions would be speculative. Impacts would be less than significant.

### ***Significance Before Mitigation***

Less than Significant Impact.

### ***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

Less than Significant Impact.

---

**Impact USS-2                    Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.**

The City's 2020 UWMP assesses the reliability of identified water supplies during normal, single-dry, and multiple-dry water years. As shown in **Table 3.12-5, Estimated Annual Project Area Water Demand**, the Project would require approximately 1,193.9 AFY of water. However, existing development currently requires approximately 1,007 AFY of water. Therefore, development under the Project would demand a net increase of 186.8 AFY of water.

As shown under **Table 3.12-1, Vernon Water Department Water Demand and Supply**, during a single dry year under the worst-case scenario, the City projects sufficient water supply available during all scenarios to meet future demands. However, the City will acquire only as much additional supply as needed to meet demand during those years when potable water demand exceeds groundwater rights. Sources for the additional supply include imported water from CBMWD and excess pumping from the Central Basin (the Central Basin Adjudication allows members to pump up to 140% of their Allowable Pumping Rights). Furthermore, the 2020 UWMP outlines a Water Shortage Contingency Plan which would reduce demand and prevent the need for the use of additional surplus. Similar measures would also be taken during the event of a worst-case multiple dry year scenario. As such, the City's 2020 UWMP concludes that there would be sufficient water supplies during the "worst-case" effects of a single and multiple dry year drought. The remaining capacity of the water supplies would be sufficient for implementation of the Project and impacts would be less than significant.

***Significance Before Mitigation***

Less than Significant Impact.

***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

Less than Significant Impact.

---

**Impact USS-3                      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.**

All of the sewerage generated in the City of Vernon is treated by the Joint Water Pollution Control agency. The Joint Operating System includes the following treatment plants: Joint Water Pollution Control Plant in Carson; Whittier Narrows Water Reclamation Plant (WRP) near South El Monte; Los Coyotes WRP in Cerritos; San Jose Creek WRP near Industry; Long Beach WRP in Long Beach; and Pomona WRP in Pomona. The Joint Water Pollution Control Plant currently treats approximately 260 million gallons of wastewater per day (MGD) and has a total permitted capacity of 400 MGD, therefore the existing wastewater treatment capacity are therefore anticipated to be sufficient to accommodate projected development. With adherence to applicable regulations, *General Plan* policies, and the Municipal Code, implementation of the Project would have adequate wastewater conveyance systems and impacts would be less than significant.

### ***Significance Before Mitigation***

Less than Significant Impact.

### ***Mitigation Measures***

No mitigation measures are required.

### ***Significance After Mitigation***

Less than Significant Impact.

---

**Impact USS-4**      **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.**

Solid waste generated in the Project Area would be transported to Sunshine Canyon Landfill in Sylmar or the Simi Valley Landfill for disposal. The Sunshine Canyon Landfill has a has a max throughput capacity of 12,100 tons per day. The Sunshine Canyon Landfill has a permitted capacity of 140,900,000 cubic yards, with a remaining capacity of approximately 77,900,000 cubic yards. It is anticipated to be in operation until 2037.<sup>13</sup> The Simi Valley Landfill a has a max throughput capacity of 64,750 tons per week. The Simi Valley Landfill has a permitted capacity of 119,600,000 cubic yards, with a remaining capacity of approximately 82,954,873 cubic yards. It is anticipated to be in operation until 2063.<sup>14</sup> **Table 3.12-8, Project Projected Solid Waste Generation**, shows the projected solid waste generation for the Project Area with implementation of the Project.

**Table 3.12-8**  
**Project Projected Solid Waste Generation**

Land Use	Quantity	Generation Rate	Solid Waste Generation		
			Pounds per day	Tons per day	Cubic yards per day <sup>1</sup>
Retail	126,989 sf	0.005 lbs/sf/day	635	0.3175	0.635
Production Retail	253,021 sf	0.006 lbs/sf/day <sup>2</sup>	1,518	0.759	1.518
Research and Development	360,429 sf	0.006 lbs/sf/day <sup>2</sup>	2,163	1.0815	2.163
Industrial	14,366,814 sf	0.006 lbs/sf/day	86,201	43.1005	86.201
Residential	887 du	12.23 lbs/unit/day	10,848	5.424	10.848
<b>Total</b>			<b>101,365</b>	<b>50.68</b>	<b>101.37</b>
Existing Uses <sup>3</sup>			<b>89,848</b>	<b>44.9</b>	<b>89.8</b>
		<b>Net Total</b>	<b>11,517</b>	<b>5.78</b>	<b>11.57</b>

<sup>1</sup> Conversion factor assumed to be 1,000 pounds per cubic yard.

<sup>2</sup> Production Retail and Research and Development utilize industrial water generation rates, as these uses primarily comprised of industrial space.

<sup>3</sup> See **Table 3.12-5**, which provides solid waste generation for existing uses in the Project Area.

Source for generation rates based on CalRecycle. Available at <https://www2.calrecycle.ca.gov/wastecharacterization/general/rates>

<sup>13</sup> CalRecycle. SWIS Facility/Site Activity Details: Sunshine Canyon City/County Landfill (19-AA-2000). Available online at: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/259?siteID=4702>, accessed November 7, 2022.

<sup>14</sup> CalRecycle. SWIS Facility/Site Activity Details: Simi Valley Landfill & Recycling Center (56-AA-0007). Available online at: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/608?siteID=3954>, accessed November 7, 2022

The Project would introduce new uses into the Project Area, including additional residential, retail, and research and development. While potentially reducing the amount of industrial uses the increase in other land uses would result in an increase to solid waste generation beyond existing generation rates. Implementation of the Project, the Project Area is estimated to generate 101,365 pounds of solid waste per day, or 50.67 tons of solid waste per day. However, as calculated in **Table 3.12-7**, the existing land uses in the Project Area generate 89,848 pounds per day, or 44.9 tons per day. Therefore, the net increase in solid waste generation under the Project would be an increase of 11,517 pounds per day, 5.78 tons per day, or 11.57 cubic yards per day. This increase would account for approximately 0.014 percent of the maximum daily throughput of approximately 41,963 tons per day at the various waste transfer stations serving the City of Vernon. Annually, the implementation of the Project would generate 4,199 cubic yards per year. This would account for approximately 0.0026 percent of the Sunshine Canyon and Simi Valley Landfills' combined remaining capacity of 160,854,873 cubic yards. Further, buildout will occur over 20 years or more allowing the City time to adjust for anticipated increases in solid waste generation. Therefore, solid waste generated under the Project would not exceed available capacity. Impacts would be less than significant.

***Significance Before Mitigation***

Less than Significant Impact.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

Less than Significant Impact.

---

**Impact USS-5                      Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.**

The City is required by AB 939 to divert 75 percent of solid waste from landfills. The City of Vernon also has a Mandatory Commercial Recycling Policy. Future development under the Project would be required to demonstrate compliance with all applicable regulations including AB 939. Vernon's Health Department oversees the collection of materials. Vernon's Health Department hosts periodic 'e-waste' recycling events to properly dispose of electronic devices – computer monitors, televisions, dry cell

batteries, fluorescent tubes and printer cartridges – that cannot be sent to landfills. The Project would not interfere with any federal, state, or local management and reduction statutes and regulations related to solid waste. Impacts would be less than significant.

***Significance Before Mitigation***

Less than Significant Impact.

***Mitigation Measures***

No mitigation measures are required.

***Significance After Mitigation***

Less than Significant Impact.

---

**Impact EN-1                      Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.**

***Construction***

**Construction Energy Demand**

Construction activity would use energy in the form of petroleum-based fuels to power off-road construction vehicles and equipment throughout the Project Area, construction worker travel to and from project sites, and vehicles used to deliver materials to the Project Area. Forecasted development under the Project would require demolition, site preparation, and grading, including hauling material off-site; pavement and asphalt installation; building construction; paving; and architectural coating.

Construction equipment would be maintained to applicable standards, and construction activity and associated fuel consumption and energy use would be temporary and typical of construction sites. It is also reasonable to assume contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during construction to reduce construction costs. Therefore, the Project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and the construction-phase impact related to energy consumption would be less than significant.



## *Operation*

Forecasted growth under the Project includes approximately 874 residential units, 120,059 square feet of retail, 253,021 square feet of production retail, 360,429 square feet of research and development space, and a reduction of 575,549 square feet of industrial space. The demand for residential energy use would increase, while industrial energy use would decrease. Natural gas and electricity would be used for heating and cooling systems, lighting, appliances, water use, and the overall operation of the buildings. Gasoline consumption would be attributed to the trips generated from development in the Project Area. However, as shown in **Section 3.4, Greenhouse Gas; Table 3.4-3;** and **Table 3.4-4**, while the Project would result in a net increase of 4,204 CO<sub>2e</sub>, per capita GHG emissions would be lower with the Project than without the Project.

The majority of GHG emissions would result from mobile sources (as shown in **Table 3.4-3** and **Table 3.4-4**). As the Project would focus development within proximity to transit, it increases the potential for transit ridership, as well as an increase in active modes of transportation such as walking and biking. As discussed in **Section 3.11, Transportation**, VMT per capita is projected to decrease under the Project. This would reduce total fuel consumption.

Future development associated with the Project would be required to implement more stringent energy efficiency measures required pursuant to updated CALGreen requirements, reducing energy demand of buildings constructed in the Project Area. Therefore, VPU would have sufficient supplies for development under the Project and would not place a significant demand on the electrical supply. Developments under the Project would be required to confirm the availability of electricity and natural gas service in conjunction with individual project review.

The forecasted development under the Project would comply with all standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California's Green Building Standards Code (CALGreen; California Code of Regulations, Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects.

Furthermore, the 2022 Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the Energy Commission. As the name implies, these standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. The standards are updated every three years and each iteration is more energy efficient than the

previous standards. Furthermore, the Project would further reduce its use of nonrenewable energy resources as the electricity generated by renewable resources becomes more widely available.

In conclusion, energy demand associated with implementation of the Project would be temporary and typical of construction projects and would not result in wasteful use of energy resources. Operation of the anticipated development would increase the use of energy in the Project Area due to the intensification of land uses. However, the increase would be in conformance with the latest version of California's Green Building Standards Code and Building Energy Efficiency Standards. In addition, VPU and SoCalGas have sufficient supplies to serve the development forecasted under the Project. Therefore, the Project would not result in wasteful, inefficient, or unnecessary energy consumption. This impact would be less than significant.

### ***Significance Before Mitigation***

Less than Significant Impact.

### ***Mitigation Measures***

No mitigation measures required.

### ***Significance After Mitigation***

Less than Significant Impact.

---

**Impact EN-2                      Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.**

***Less than Significant Impact.***

As discussed in **Section 3.12.2.2 in Regulatory Setting**, SB 100 mandates 100 percent clean electricity for California by 2045. Vernon Public Utilities receives its power from a variety of sources including the natural gas-powered Malburg Generating Station and long-term contracts. In 2017, Vernon added three renewable sources to its portfolio. In addition, Vernon has 18,000 acres of land in Kern County suitable for additional solar and wind projects. To comply with SB 100, renewable sources of energy will be required.

The City of Vernon adopted a Sustainability Action Plan that includes emission reduction measures such as maximizing energy efficiency efforts, achieving a 33 percent renewable energy mix, an installing 3,00 MW of solar-electric capacity. Additionally, as demonstrated under **Impact GHG-2**, the Project would be consistent with existing local policies contained in the City's *General Plan* intended to promote energy efficiency through renewable energy use and energy conservation measures and future development constructed under the Project would be subject to more stringent energy efficiency standards pursuant to updated CALGreen requirements. Therefore, the Project would not conflict with or obstruct a state plan or policies contained in the City's *General Plan* for renewable energy or energy efficiency; impacts would be less than significant.

### ***Mitigation Measures***

No mitigation measures required.

### ***Significance After Mitigation***

Less than Significant Impact.

## **3.12.5 CUMULATIVE ANALYSIS**

In development of its 2020 UWMP, the City coordinated with the County of Los Angeles CBMWD, and the MWD. As discussed in **Section 3.12.1.1**, the courts have assigned specific water rights to water users within the Central Basin via an Adjudication Judgement. As discussed under **Impact USS-1**, the Central Basin is adjudicated, meaning that all groundwater use is managed per a court-ordered Adjudication Judgement to ensure long-term groundwater supply sustainability. As shown under **Table 3.12-1, Vernon Water Department Water Demand and Supply**, during single and multiple dry year worst-case scenarios, the City projects a sufficient water supply. Furthermore, the 2020 UWMP outlines a Water Shortage Contingency Plan which would reduce demand and prevent the need for the use of additional surplus. According to the CBMWD and MWD most recent UWMPs, both wholesalers for the City, they would have sufficient water supplies during single dry and multiple dry year scenarios.<sup>15,16</sup> As such, the additional supplies required, if necessary, during single dry and multiple dry year scenarios, would not be cumulatively considerable and impacts would be less than significant.

---

<sup>15</sup> Central Basin Municipal Water District. *Urban Water Management Plan – 2020*. 2021. Available at: [https://wuedata.water.ca.gov/public/uwmp\\_attachments/3596585929/CBMWD%20Final%202020%20UWMP\\_2021-06-30.pdf](https://wuedata.water.ca.gov/public/uwmp_attachments/3596585929/CBMWD%20Final%202020%20UWMP_2021-06-30.pdf), accessed October 18, 2022.

<sup>16</sup> Metropolitan Water District of Southern California. *Urban Water Management Plan – 2020*. 2021. Available at: [https://wuedata.water.ca.gov/public/uwmp\\_attachments/5202375113/MWDSC%202020%20Urban%20Water%20Management%20Plan%20-%20June%202021%20WUE%20Portal.pdf](https://wuedata.water.ca.gov/public/uwmp_attachments/5202375113/MWDSC%202020%20Urban%20Water%20Management%20Plan%20-%20June%202021%20WUE%20Portal.pdf), accessed October 18, 2022.

As noted above, wastewater is collected in by City's sewer system and is conveyed to a Joint Outfall System operated by the LACSD and is treated at the JWPCP. JWPCP provides primary and secondary treatment for a design capacity of 400 million gallons of wastewater per day. The JWPCP is part of a network of seven treatment plans and over 1,200 miles of trunk sewers known as the Joint Outfall System (JOS), which provides regional wastewater treatment for Los Angeles County, covering an extensive area that includes 73 cities and unincorporated county territory.<sup>17</sup> With respect to future growth in the JWPCP service area and associated increases in wastewater treatment demands, continued implementation of system improvements that follow the guidance of the County of Los Angeles Regional, Sanitary Sewer System Management Plan (SSMP) would ensure sufficient conveyance and treatment capacity to meet cumulative needs. Funding for such increases is available through a combination of connection fees paid by developers, service districts, and general fund monies. Compliance with these requirements would reduce cumulative impacts to wastewater treatment and collection systems to a less than significant level and the Project's contribution to wastewater service impacts would not be cumulatively considerable.

Future development within the Project Area would continue to increase solid waste generation. As discussed under Impact USS-4, area landfills have capacity to accommodate additional solid waste, and potential impacts associated with the implementation of the Project would be less than significant. Cumulatively, other areas which utilize the same landfills as the Project would likely also continue to experience growth and associated increases in solid waste generation. State mandated solid waste diversion rates (for recycling) would continue to minimize the quantity of waste directed to area landfills, and compliance with *General Plan* and Project policies would maintain or improve upon existing solid waste diversion rates. The Sunshine Canyon Landfill is expected to remain open with sufficient disposal capacity to accommodate it existing service territory. The Los Angeles Integrated Waste Management Plan includes strategies for meeting disposal capacity at both landfills, including increased waste diversion and potential expansion of landfill capacity. Solid waste disposal facilities and management approach would continue to adjust as needed to provide adequate disposal capacity throughout the county. Thus, cumulative impacts to solid waste facilities would be less than significant and the Project's contribution to solid waste impacts would not be cumulatively considerable.

### 3.12.6 REFERENCES

California Department of Resources Recycling and Recovery (CalRecycle). *Waste Evaluation and Enforcement Branch Staff Report. Summary of the City of Compton's Compliance Review and Consideration of the Issuance Compliance Order CO 018-002*. 2018.

---

<sup>17</sup> Los Angeles County Sanitation District. Wastewater Treatment Process at JWPCP. Available at: <https://www.lacsd.org/services/wastewater-sewage/facilities/joint-water-pollution-control-plant/wastewater-treatment-process-at-jwpcp>, accessed October 19, 2022.

- California Water Boards. Plans and Policies - Antidegradation, 2022. Available online at: [https://www.waterboards.ca.gov/plans\\_policies/antidegradation.html](https://www.waterboards.ca.gov/plans_policies/antidegradation.html), accessed on October 19, 2022.
- Central Basin Municipal Water District. *Urban Water Management Plan – 2020*, 2021. Available at: [https://wuedata.water.ca.gov/public/uwmp\\_attachments/3596585929/CBMWD%20Final%202020%20UWMP\\_2021-06-30.pdf](https://wuedata.water.ca.gov/public/uwmp_attachments/3596585929/CBMWD%20Final%202020%20UWMP_2021-06-30.pdf), accessed October 18, 2022.
- City of Vernon. *2020 Urban Water Management Plan*. June 2021. Available online at: <https://www.cityofvernon.org/home/showpublisheddocument/654/637619845748600000>, accessed October 13, 2022.
- City of Vernon. Natural Gas Division. Available online at: <https://www.cityofvernon.org/government/public-utilities/natural-gas-division>, accessed October 14, 2022.
- City of Vernon. Water Services. Available online at: <https://www.cityofvernon.org/government/public-utilities/water-division>, accessed October 13, 2022.
- County of Los Angeles Department of Public Works. Countywide Integrated Waste Management Plan – 2019 Annual Report. 2020. Available at: <https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=14372&hp=yes&type=PDF>, October 19, 2022.
- Los Angeles County Sanitation District. Wastewater Treatment Process at JWPCP. Available at: <https://www.lacsd.org/services/wastewater-sewage/facilities/joint-water-pollution-control-plant/wastewater-treatment-process-at-jwpcp>, accessed October 19, 2022.
- Metropolitan Water District of Southern California. *Urban Water Management Plan – 2020*. 2021. Available at: [https://wuedata.water.ca.gov/public/uwmp\\_attachments/5202375113/MWDSC%202020%20Urban%20Water%20Management%20Plan%20-%20June%202021%20WUE%20Portal.pdf](https://wuedata.water.ca.gov/public/uwmp_attachments/5202375113/MWDSC%202020%20Urban%20Water%20Management%20Plan%20-%20June%202021%20WUE%20Portal.pdf), accessed October 18, 2022.
- SoCalGas. Company Profile. Available online at: <https://www.socalgas.com/about-us/company-profile>, accessed October 19, 2022.

## 4.0 ALTERNATIVES

---

### INTRODUCTION

*This section of the Program Environmental Impact Report (PEIR) provides a comparative analysis of the merits of alternatives to the Project pursuant to Section 15124.6 of the 2022 California Environmental Quality Act (CEQA) Statutes and Guidelines, as amended. According to the State CEQA Guidelines, an EIR shall describe a range of reasonable alternatives to the project or to its location, which would feasibly attain most of the basic objectives of the project but avoid or substantially lessen any of the significant effects. The EIR shall evaluate the comparative merits of the alternatives. It need not consider every conceivable alternative to a project; rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation.*

### 4.1 CONSIDERATIONS

The range of alternatives in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to make a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any significant effects of the project (Section 15124.6(f)). Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the project’s basic objectives. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. When addressing feasibility, the *State CEQA Guidelines* state that “among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent).” The *State CEQA Guidelines* also state that the alternative discussion need not be presented in the same level of detail as the assessment of the proposed project.

Therefore, several factors need to be considered in determining the range of alternatives to be analyzed in an EIR and the level of detail that analysis should provide. These factors include (1) the nature of the significant impacts of the proposed project, (2) the ability of alternatives to avoid or substantially lessen impacts associated with the project, (3) the ability of the alternatives to meet most of the basic objectives of the project, and (4) the feasibility of the alternatives.

The selection and discussion of alternatives is intended to foster meaningful public participation and informed decision making. An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. The *State CEQA Guidelines* also require

the analysis of a no project alternative, and the identification of the environmentally superior alternative. Where the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.”<sup>1</sup>

In addition, the *State CEQA Guidelines* require an EIR to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination.<sup>2</sup>

Accordingly, several alternatives that might avoid or substantially lessen project impacts were considered. Two alternatives were selected for further analysis, as detailed below.

## 4.2 PROJECT OBJECTIVES

The alternatives to the Project ultimately selected for analysis in this PEIR were developed to avoid or substantially lessen one or more of the significant environmental impacts associated with the project, while still attaining most of the basic objectives of the project. The following are objectives for the Project:

- Reinvigorate the City’s competitive advantage as a center of production;
- Strengthen and provide long-term stability to the City’s fiscal position;
- Increase the residential population in order to increase access to proportionally allocated Federal and State funding, to strengthen the City’s governance, and help meet regional housing needs;
- Diversify and reorient the Westside’s land uses to take advantage of changes in the economic landscape of Southern California; and
- Increase amenities available to local residents and workers.

## 4.3 SELECTION OF ALTERNATIVES FOR ANALYSIS

According to the *State CEQA Guidelines*, the discussion of alternatives should focus on alternatives to a project or its location that can feasibly avoid or substantially lessen the significant effects of the project. The *State CEQA Guidelines* indicate that the range of alternatives included in this discussion should be sufficient to allow decision makers a reasoned choice. The alternative discussion should provide decision makers with an understanding of the merits and disadvantages of these alternatives.

---

<sup>1</sup> *State CEQA Guidelines* Section 15126.6(e)(2)

<sup>2</sup> *State CEQA Guidelines* Section 15126.6(c)

**Section 3.0, Environmental Impact Analysis**, concludes that implementation of the Project would result in significant and unavoidable environmental impacts. These impacts include:

**Air Quality:** Implementation of the Project would result in a cumulatively considerable net increase in emissions of criteria air pollutants during construction (**Impact AQ-2**) and potential exposure to sensitive receptors (**Impact AQ-3**).

**Noise:** Implementation of the Project would result in temporary increases in ambient noise in the Project Area on an intermittent basis during construction and, as such, would expose nearby sensitive receptors both in and adjacent to the Project Area to increased noise levels as a result of construction activity and increased traffic noise (**Impact NOI-1**). Construction activities in the Project Area would intermittently generate vibration that exceeds the residential annoyance threshold (**Impact NOI-2**). Impacts would be cumulatively significant.

The City of Vernon has developed and considered the following alternatives to the Project.

### **Alternative 1 - No Project Alternative**

Section 15126(2)(4) of the *State CEQA Guidelines* requires evaluation of the No Project Alternative. As described in the *State CEQA Guidelines*, the purpose of describing and analyzing the No Project Alternative is to allow decision makers to compare the impacts of approving the Project with the impacts of not approving the Project. However, “no project” does not necessarily mean that development will be prohibited. The No Project Alternative includes “what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.”<sup>3</sup>

For purposes of this PEIR, the No Project Alternative assumes buildout within the Project Area would occur in accordance with the land uses included in the *City of Vernon 2007 General Plan (General Plan)* and implemented by the City’s Zoning Code. The Zoning Code carries out the *General Plan* policies by regulating development and land uses within the City, consistent with the *General Plan*. Under this alternative the increased housing density opportunities and expanded mix of commercial, production, and research and development land uses proposed in the Project would not be achieved. Thus, the No Project Alternative assumes that without the Project in place to change the underlying land uses, the land uses reflected in the *General Plan* would be developed, resulting in primarily industrial development.

---

<sup>3</sup> CEQA § 15126.6[e][2]



## Alternative 2 – Vernon Westside Specific Plan Alternative

The Vernon Westside Specific Plan Alternative (Alternative 2) proposes the preparation and adoption of a Vernon Westside Specific Plan (Specific Plan) for the Project Area. The Specific Plan would include a slightly larger area than the Project and would contain the same zone changes and general plan amendments. The Specific Plan would be thematically organized into a combination of districts and corridors including the Santa Fe Mixed Use Corridor, Mixed-Use City Center District, Mixed-Use Santa Fe North District, Mixed-Use Santa Fe South District, and Mixed-Use Pacific Hampton District. Each district would be implemented over the same areas as the corresponding zones/land uses changes under the Project. The Specific Plan would include additional street improvements that are not included in the Project. The Santa Fe Mixed-Use Corridor would convert Santa Fe Avenue back into a “main street” by redirecting the existing heavy truck traffic that occurs on the roadway, and subsequently implementing additional transportation network improvements. Under the Specific Plan, each District would be zoned and include the same development standards as the corresponding zones/land uses changes identified in the Project. The Specific Plan would also outline different design guidelines for each District; including specific redevelopment standards and design guidelines that are specific to the following properties:

- Vernon City Hall: potential redevelopment to add 9,000 square feet of retail and restaurant, and up to 326 residential units within a five-story residential and live-work development.
- 4400 Pacific Boulevard: potential redevelopment to add approximately 23,000 square feet of farmers market/co-op, 16,800 square feet of production retail, 8,500 square feet of brewery production, 15,700 square feet of food and dining market, 14,500 square feet of small retail restaurant, 35,800 square feet of restaurant/bar/brewery, 12,400 square feet of workshare/technology/research and development, 81 residential units, and 481 parking spaces.
- 5201 South Santa Fe Avenue: potential redevelopment up to 7,403 square feet of office, 9,543 square feet of restaurant, 6,318 square feet of production retail uses, 32 residential units, and 101 parking spaces.

The Specific Plan would also include the conversion of Santa Fe Avenue into an historic “main street” corridor. Through this conversion, Santa Fe Avenue would be narrowed from four to two lanes. Accordingly, truck traffic would be diverted to the Alameda Truck Corridor (Alameda Street east) and Pacific Boulevard. The Specific Plan also proposes adding streetscape improvements such as pedestrian crossings and separated bike lanes.

## Alternatives Considered but Not Evaluated in Detail

In accordance with Section 15126.6(c) of the *State CEQA Guidelines*, an EIR should identify alternatives considered for analysis but rejected as infeasible, and briefly explain the reasons for their elimination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR is failure to meet most of the basic project objectives, infeasibility, or inability to avoid or substantially reduce significant environmental impacts. The analysis of alternatives started with an identification of a number of potential alternatives to the Project which would accomplish the City's goals while also receiving support from the surrounding community and encompassing the potential to reduce or eliminate the Project's significant environmental impacts. One alternative was considered but rejected. A brief explanation of the alternative is below.

### *No Residential Use Alternative*

Under the No Residential Use Alternative, development of the Project would not include any new residential development and would instead be focused on transportation and streetscape improvements, and non-residential development. A greater amount of commercial and production, and research and development space would be included. However, the No Residential Use Alternative would not meet the Project objectives listed below:

- Strengthen and provide long-term stability to the City's fiscal position.
- Increase the residential population in order to increase access to proportionally allocated Federal and State funding, to strengthen the City's governance, and help meet regional housing needs.

The objectives of diversifying land uses and increasing amenities available to residents and workers could be met, but without additional residential units, there would be a limited customer base for commercial and production retail. Further, as described in the Project, the feasibility of development for these types of uses is strongly enhanced by the incorporation of residential uses in development projects. As a result, these objectives would be met to a lesser degree:

- Diversify and reorient the Westside's land uses to take advantage of changes in the economic landscape of Southern California.
- Increase amenities available to local residents and workers.

#### 4.4 ANALYSIS METHODOLOGY

Each of the alternatives selected for analysis is evaluated in sufficient detail to determine whether its overall environmental impacts would be less, similar, or greater in comparison to the impacts of the Project. The impact analyses sections for the Project set forth in **Section 3.0** of this PEIR include mitigation measures that reduce the environmental impacts associated with buildout of the Project. The analysis assumes that equally effective mitigation measures would apply to the alternatives.

The analysis under each Alternative includes the following:

- An evaluation of the environmental impacts anticipated to occur for each environmental issue analyzed in **Section 3.0** of this PEIR and a determination as to the significance of those impacts. This discussion also includes an analysis of whether the Alternatives would avoid or substantially lessen any of the significant environmental impacts associated with implementation of the Project. Where the impacts of the alternative and the Project were roughly equivalent the comparative impact is said to be similar.
- A summary of the comparative impacts across all of the environmental issues.

#### 4.5 COMPARATIVE IMPACT ANALYSIS

##### Alternative 1 – No Project Alternative

###### *Aesthetics*

Under the No Project Alternative less development would occur within the Project Area compared to the Project and the development that would occur would primarily be industrial uses. Development would continue as allowed under the *General Plan* and existing zoning. The No Project Alternative does not include the same visual thematic elements that would result from future development associated with the Project and development under the No Project Alternative would not be as visually appealing or cohesive as with the Project. The lack of cohesive design standards could result in visual conflicts as projects are developed. Under this alternative, temporary construction impacts would continue to occur. Impacts under the No Project Alternative would be less than significant and greater than the Project due to the lack of a cohesive design strategy.

###### *Air Quality*

The No Project Alternative would result in less development compared to the Project. As less construction would occur, fewer emissions would be generated during construction of individual development projects. Due to the reduced amount of construction, construction emissions would not be expected to exceed

significance thresholds for a single project, however as with the Project it is possible for multiple projects to be constructed at once resulting in an exceedance of the standards. Further, **Mitigation Measures AQ-1** through **AQ-8** would not be applied, and although fewer projects would be constructed, those projects could have greater emissions without the proposed mitigation, and potentially significant impacts could occur. As shown in **Table 3.2-10** in **Section 3.2, Air Quality**, the No Project scenario would not result in significant operational emissions. As development under the No Project Alternative would be less than the Project, the No Project Alternative would also not conflict with the Air Quality Management Plan (AQMP). As less development is proposed under the *General Plan* (compared to the Project), operational air quality operational impacts would be less under the No Project Alternative and would be less than significant. Construction emissions would be similar to the Project and would be potentially significant.

### ***Cultural Resources including Tribal Cultural Resources***

Under the No Project Alternative, buildout of the Project Area would proceed in accordance with the land uses included in the *General Plan*, which is primarily industrial. No specific historical resources have been identified within the Project Area. Development, specifically grading, would have the potential unearth archaeological, paleontological and/or tribal cultural resources. As the permitted amount of development under *General Plan* would be less (compared to the amount of development under the Project), it is likely that the number of potential impacts would also decrease. Similar to the Project, specific projects under the No Project Alternative would still be reviewed for consistency with all applicable state and federal regulations, as well as the goals and policies included in the *General Plan*. Impacts to cultural resources associated with implementation of the *General Plan* were determined to be less than significant with the application of **Mitigation Measure CUL-1** which requires historical and built environmental surveys where demolition of buildings is proposed. As this mitigation measure would not be included in the No Project, the potential for historical resources impacts would be greater than with the Project and potentially significant. Therefore, impacts to cultural resources under the No Project Alternative would be greater than the Project and potentially significant.

### ***Greenhouse Gases***

Implementation of the No Project Alternative would generate fewer greenhouse gas (GHG) emissions compared to the Project. It is expected that land use designations under the *General Plan* would be consistent with AB 32, SB 32, AB 1279 and SB 375 and future development would be required to abide by regulations adopted by the California Air Resources Board (CARB) to ensure GHG emission reductions are met. However, this alternative would not achieve the vehicle miles traveled (VMT) reductions that would occur with the Project and as shown in **Table 3.4-4**, per capita GHG emissions would be greater under the No Project. This alternative would not help the region achieve Statewide goals to reduce GHG emissions, and

therefore while GHG emissions would be less than significant, impacts would be greater than with the Project.

### ***Hazards and Hazardous Materials***

The amount of development permitted within the Project Area would be reduced under the No Project Alternative. Individual development projects under the No Project Alternative would be required to comply with the General Plan goals and policies, the Vernon Municipal Code, as well as all applicable state and federal regulations. Thus, impacts under the No Project Alternative related to the routine transport, use, or disposal of hazardous materials, the accidental release of hazardous materials, hazardous emissions within one-quarter mile of an existing school, development within the City potentially located on a hazardous materials site, interference with an adopted emergency response plan or evacuation plan, and the exposure of people or structures to a significant risk involving wildland fires would all remain less than significant. However, **Mitigation Measure HAZ-1** would not be implemented under the No Project Alternative which requires development projects prepare a Phase I report and if necessary, a Phase II report to determine the extent of any contamination on project sites. While these reports are typically required, the inability to enforce compliance could lead to exposure or upset of hazardous materials. As a result, impacts related to hazards and hazardous materials under the No Project Alternative would be less than significant and would be greater than the Project.

### ***Hydrology and Water Quality***

Under the No Project Alternative, buildout of the Project Area would proceed in accordance with the General Plan land use designations. Individual development projects under the No Project Alternative would still be required to comply with the *General Plan* policies, the Vernon Municipal Code, and all applicable state and federal regulations. Similar to implementation of the Project, construction activities under the No Project Alternative could result in potentially significant impacts to water quality and could exceed the surrounding waterways total maximum daily loads (TMDLs). Under the No Project Alternative construction activities would be subject to compliance with the State General Construction Activity Storm Water Permit and the provisions in the MS4 Permit addressing control of construction phase water impacts. In addition, each development project would be required to submit a Hydrology/Hydraulic Report, Storm Water Pollution Prevention Plan (SWPPP), and Standard Urban Stormwater Management Plan (SUSMP), if applicable, and provide appropriate on-site mitigation measures. Thus, impacts under the No Project Alternative related to hydrology and water quality would be less than significant and would be similar to the Project.

### *Land Use*

Under the No Project Alternative, development within the Project Area would proceed in accordance with the *General Plan* land use designations. Implementation of the No Project Alternative would not physically divide an established community, conflict with applicable federal or state agency policies and regulations, or conflict with local plans, policies, and regulations. Although buildout of the No Project Alternative would not physically divide a community, the addition of residential units which aim to create a community where one currently does not exist would not be realized under this alternative. Thus, although impacts related to land use under the No Project Alternative would be less than significant, impacts would be greater than the Project.

### *Noise*

Under the No Project Alternative, development of the Project Area would proceed in accordance with the *General Plan* land use designations. Similar to the Project, specific projects under the No Project Alternative would be required to comply with the *General Plan* policies and actions, the Vernon Municipal Code, as well as all applicable state and federal regulations. However, **Mitigation Measures NOI -1 through NOI-3** would not apply under the No Project Alternative, and although fewer projects would be constructed, those projects could have greater noise and vibration impacts without the proposed mitigation measures, as such potentially significant impacts could occur. As such, construction noise and vibration impacts would be greater than the Project and potentially significant. As buildout of the *General Plan* would result in less development, operational noise and vibration impacts would be less than significant and less than the Project.

### *Population, Housing and Employment*

Under the No Project Alternative, development of the Project Area would proceed in accordance with the *General Plan* land use designations and Connect SoCal. As described in **Section 3.10, Population and Housing**, according to the Southern California Association of Government's (SCAG) growth forecasts, the City is not projected to grow in population or housing units. Although according to the Housing Element, the City is required to provide for nine housing units as part of the City's Regional Housing Needs Allocation (RHNA), which would result in the addition of 26 residents. Any future development would be subject to compliance with the *General Plan* goals and policies, which allow housing under a conditional use permit. Similar to the Project, the No Project Alternative would not result in the removal of existing residential uses and thus, the displacement of residents and/or existing residential units would not occur. Implementation of the No Project Alternative would not result in significant impacts from substantial population growth in the area, either directly or indirectly, nor would it result in the displacement of large

numbers of existing housing units and or people. However, this alternative would not help the region achieve its housing goals as identified by SCAG. Further, it is possible that the current lack of housing options would force Vernon employees to seek housing in neighboring jurisdiction leading to increased development pressure or overcrowding in the surrounding community. Nonetheless, impacts would be less than significant, but greater than the Project.

## ***Public Services***

### **Fire**

Under the No Project Alternative, development of the Project Area would proceed in accordance with the *General Plan* land use designations. New development associated with the buildout of the No Project Alternative would be required to comply with all applicable County fire code and ordinance requirements for construction, access, water mains, fire flows, and hydrants. Individual projects would be reviewed by the Los Angeles County Fire Department to determine the specific fire requirements applicable to the individual projects and to ensure compliance with these requirements.

Additionally, the *General Plan* includes policies and actions to ensure adequate resources are available to respond to health, fire, and police emergencies, and that the Los Angeles County Fire Department (LACoFD) is actively involved in the review of development projects to ensure the development would comply with building code requirements. The City also supports coordination with public safety agencies to ensure that adequate fire protection is provided to Vernon. This ensures that new development, including that under the No Project Alternative, would not reduce the staffing, response times, or service levels within the City. Under the No Project alternative, accommodating the RHNA would result in a population growth of 26 people in the City, and as a result there would be a negligible increase in the need for fire protection services. As a result of the reduced population growth under the No Project Alternative, impacts to fire services will be less than significant and less than the Project.

### **Police**

Under the No Project Alternative, development of the Project Area would proceed in accordance with the *General Plan* land use designations and any increase in demand for police protection services would occur gradually as additional development and associated population growth is added to the City. As individual projects are proposed within the City, the Vernon Police Department service levels and staffing requirements would be evaluated to determine if additional staffing and/or facilities would be required. Impact fees from new development would be used to offset any impacts to police services.

Further, the *General Plan* includes policies and actions to ensure that adequate police protection is available to serve existing and future development and population. The *General Plan* also supports proactive approaches to address public safety through collaboration with the community and other agencies and through environmental design, which would further reduce impacts.

Individual projects developed under the No Project Alternative would be required to comply with the General Plan policies and actions, and the Vernon Municipal Code, as well as all applicable state and federal regulations. Under the No Project Alternative, accommodating the RHNA would result in a population growth of 26 people in the City, and as a result there would be a negligible increase in the need for police protection services. As a result of the reduced population growth under the No Project Alternative, impacts to police services will be less than significant and less than the Project.

### **Education**

As described in **Section 3.10, Population and Housing**, according to SCAG's growth forecasts, the City is not projected to grow in population or housing units. Although according to the Housing Element, the City is required to provide for nine housing units. Using the state-wide factor as described in **Section 3.11.3, Public Services: Public Schools**, the No Project Alternative would add approximately 1.7 elementary school students, 0.48 middle school students, and 0.96 high school students, totaling an additional 3.14 students to be added to the Los Angeles Unified School District (LAUSD) by 2040. This is well within the current capacity of LAUSD schools within the surrounding area. The No Project Alternative would also be required to comply with the *General Plan* policies and actions, and all applicable state and federal regulations. As a result of the reduced population growth under the No Project Alternative, impacts to educational facilities will be less than significant and less than the Project.

### **Library Services**

Similar to the Project, development associated with implementation of the No Project Alternative would result in additional demands on existing library services. The No Project Alternative will result in substantially less development than the Project. Similar to the Project, residents generated by implementation of the No Project Alternative would have access to the libraries in the surrounding community. The No Project Alternative would also be required to comply with all applicable state and federal regulations. Therefore, similar to the Project, impacts under the No Project Alternative related to library facilities would be less than significant.



## **Parks and Recreation**

The City does not have any parks or open spaces for residents and has a park deficit of 1.11 acres of park land with 222 residents, below the Quimby Act and national standards. While the No Project Alternative would result in less development than the Project, it would also not implement the design measures and policies that would help offset the park deficiencies. As a result, impacts to park facilities will be incrementally greater than the Project. Under the No Project Alternative residential growth would increase by 26 people, and as a result there would be a negligible increase in the demand for parks. Therefore, impacts would be less than significant, but greater than the Project due to the lack of offsetting features.

## ***Transportation***

Although the No Project Alternative would result in less development compared to the Project, the No Project Alternative would not include the development standards included in the Project which emphasize transit-oriented development and maximize land use near transit. Development would not be focused in a High-Quality Transit Area. As a result, the No Project Alternative would lead to an increase of 0.5 VMT per capita (20.7 VMT/Service Population under the No Project Alternative compared to 20.2 VMT/Service Population under the Project); and a decrease in transit and active mode shares. Impacts would be greater than the Project but given the low projected population growth under the No Project Alternative, impacts would remain less than significant.

## ***Utilities and Services***

### **Water Supply**

The No Project Alternative would result in significantly less development compared to the Project, therefore the demand for water would not increase substantially. The City of Vernon Water Department provides the Project Area with potable water. Water is also purchased through Metropolitan Water District (MWD). The water in Vernon is imported from the Central Basin Municipal Water District (CBMWD), and includes groundwater from the Central Basin, and recycled water for power generation from CBMWD.

The City's 2020 *Urban Water Management Plan (2020 UWMP)* provides a long-range assessment of water supply for the Department's service area. The 2020 *UWMP* concluded that there would be sufficient water supplies during the "worst-case" effects of a multiple dry year drought. Therefore, implementation of the No Project Alternative would not result in project-level water supply and infrastructure impacts. Compared to the Project, the No Project Alternative would result in less development overall, and therefore a decreased amount of water usage as utilities such as water, wastewater, and power are generally population driven. However, the Project includes a more energy efficient land use type (i.e., multi-family

units), resulting in higher per capita residential water uses under the No Project Alternative. As such, impacts would be less than significant, but would be greater than the Project.

### **Wastewater**

The No Project Alternative would result in significantly less development compared to the Project; therefore, the generation of wastewater would not increase substantially.

Los Angeles County Sanitation District (LACSD) and the Joint Water Pollution Control Plant (JWPCP) is projected to have adequate treatment facilities for the foreseeable future. Any future development would be required to comply with *General Plan* policies to ensure that new developments would bear the cost of expanding sewage disposal system and site-specific sewer lines and supporting infrastructure would be designed and engineered for each development. Therefore, implementation of the No Project Alternative would not result in wastewater impacts. Compared to the Project, the No Project Alternative would result in less development overall and a lower amount of wastewater usage. Therefore, impacts would be less than significant and would be less than the Project.

### **Solid Waste**

The No Project Alternative would result in significantly less development compared to the Project; therefore, the generation of solid waste would not increase substantially.

Solid waste generated in the Project Area would be transported to Sunshine Canyon Landfill in Sylmar or the Simi Valley Landfill for disposal. The No Project Alternative would result in significantly less development than compared to the Project, therefore the generation of solid waste would not increase substantially. Therefore, implementation of the No Project Alternative would not result in solid waste impacts. Compared to the Project, the No Project Alternative would result in less development overall and produce a lower amount of solid waste. As a result, impacts would be less than significant and less than the Project.

### **Electricity**

Future development resulting from the implementation of the No Project Alternative would result in the long-term and continued use of the electricity services provided by Vernon Light and Power. Potential electricity impacts associated with future development would be evaluated on a project-by-project basis. The No Project Alternative would result in significantly less development compared to the Project and, as a result, electricity consumption would be incrementally reduced. However, the Project includes a more

energy efficient land use type (i.e., multi-family units) that could offset any potential electricity savings. As such, impacts related to electricity usage would be less than significant and would be similar to the Project.

### **Natural Gas**

Natural gas services are provided by Vernon's Public Utilities Department and SoCalGas, which is regulated by the CPUC. Potential natural gas impacts associated with future development would be evaluated on a project-by-project basis. Individual projects would be required to pay applicable fees. The No Project Alternative would result in significantly less development compared to the Project and, as a result, natural gas consumption would be significantly reduced. However, the Project includes a more energy efficient land use type (i.e., multi-family units) that could offset any potential natural gas savings. As such, impacts related to natural gas usage would be less than significant and would be similar to the Project.

### ***Relationship to the Project Goals***

As demonstrated in **Table 4.0-1, the No Project Alternative Relationship to the Project Goals**, the No Project Alternative would not achieve a majority of the project objectives. In addition, while a limited number of project objectives would be realized under the No Project Alternative, it would be to a lesser extent than the Project as future development would coincide with the *General Plan* land uses and zoning.

**Table 4.0-1  
the No Project Alternative Relationship to the Project Goals**

<b>Project Objective</b>	<b>Relationship to the Objective</b>
<b>Goal #1:</b> Reinvigorate the City’s competitive advantage as a center of production	Under the No Project Alternative, no additional development would occur. New residential, production, and research and development uses would not be permitted or encouraged through flexible development standards. However, existing industrial uses would remain. The goal would only partially be met.
<b>Goal #2:</b> Strengthen and provide long-term stability to the City’s fiscal position	Very limited growth would occur under the No Project Alternative. the No Project Alternative would not increase the amount of tax paying constituents that would provide stability to the City’s fiscal position. The goal would not be met.
<b>Goal #3:</b> Increase the residential population in order to increase access to proportionally allocated Federal and State funding, to strengthen the City’s governance, and help meet regional housing needs	the No Project Alternative would not increase the residential population significantly. Projected growth under the No Project Alternative is approximately nine units and 26 persons. The City would meet their RHNA but would not add to the regional housing needs of the larger Los Angeles community. The goal would not be met.
<b>Goal #4:</b> Diversify and reorient the Westside’s land uses to take advantage of changes in the economic landscape of Southern California	The policies included in the Project which would encourage a diversity of land uses on the Westside to better integrate the Downtown and the Arts District. Therefore, the goal would not be met under the No Project Alternative.
<b>Goal #5:</b> Increase amenities available to local residents and workers	The Project would facilitate a range of uses, as well as implement pedestrian and bicycle infrastructure for residents. This would not occur under the No Project Alternative. Therefore, the goal would not be met.

The environmental effects of the No Project Alternative are included in **Table 4.0-3, Comparison of Alternatives to the Project**, below.

## **Alternative 2 – Vernon Westside Specific Plan**

### *Aesthetics*

The proposed Vernon Westside Specific Plan Alternative (Alternative 2) would implement design guidelines that would result in development standards, and Specific Plan goals and policies that would serve as a roadmap for future development creating a vision for the scenic quality of the entire Project Area. As the City has not identified or designated any scenic vistas, similar to the Project, under Alternative 2 no impacts would occur related to scenic vistas. The proposed development standards under Alternative 2 would be similar to the proposed standards for each zone under the Project, and the total number of residential and commercial uses would be the same as the Project. Further, the proposed residential uses would be clustered in specific locations, resulting in similar levels of lighting during future construction activities as the Project. Future development under Alternative 2 would be required to adhere to the same

construction-related and operational outdoor lighting standards as the Project. However, Alternative 2 would implement new design guidelines for the Project Area, which in turn would provide community amenities that would contribute to the Project Area's overall scenic quality, such as greenways and streetscapes. As such, impacts related to aesthetics under Alternative 2 would be less than significant, and incrementally less than the Project.

### *Air Quality*

Similar to the Project, the magnitude of development under Alternative 2 would be 874 dwelling units. Future development under Alternative 2 would be located in four concentrated nodes, similar to the Project. Further, the permitted uses and anticipated buildout under Alternative 2 would be the same as the Project. As multiple projects could continue to be developed the same time, Alternative 2 would likely exceed the SCAQMD thresholds for construction. Alternative 2 would be subject to **Mitigation Measures AQ-1 through AQ-8**, which could reduce impacts, although not below a level of significance. Under Alternative 2, the population growth would be the same as under the Project, as a result, operational impacts would be less than significant, similar to the Project. Similar to the Project, Alternative 2 would be consistent with the air quality-related regional plans and would not jeopardize attainment of state and federal ambient air quality standards. Consequently, compared to the Project, impacts resulting from Alternative 2, would be similar for construction, but would remain significant. Operational impacts from Alternative 2 would be less than significant and would also be similar to the Project.

### *Cultural Resources including Tribal Cultural Resources*

Under Alternative 2, the number of multi-family dwelling units would be 874, the same as under the Project. The residential units would be clustered at identified nodes and would primarily take the form of adaptive reuse of existing buildings, similar to the Project. No specific historical resources have been identified within the Project Area. Development, specifically grading, would have the potential unearth archaeological and/or paleontological resources. More new construction would require additional ground disturbance. Specific projects would be reviewed for consistency with the *General Plan* goals and policies, state and federal regulations, and the Vernon Municipal Code, when applicable. The Preservation Standards and Incentives included in the Project would still apply to all development under Alternative 2, as well as **Mitigation Measures CUL-1 through CUL-4**. As such, impacts under Alternative 2 would be less than significant, and similar to the Project.

### *Greenhouse Gases*

Implementation of Alternative 2 would result in the construction of the same amount of multi-family as the Project, in the same concentrated nodes within the Project Area. Land uses would be consistent with

AB 32, SB 32, AB 1279 and SB 375 and would result in a decrease in VMT and associated GHG emissions. This alternative would also better maximize linkages with transit resulting in more efficient land use and travel patterns. These changes would better help the State achieve GHG reductions. Under Alternative 2, impacts related to GHG would be less than significant, and less than the Project.

### ***Hazards and Hazardous Materials***

Implementation of Alternative 2 would result in construction of the same number of multi-family units and would be developed in similar clusters identified in the Project's Zoning Map. Future development would take the form of adaptive reuse of existing buildings. Similar to the Project, operation of multi-family units does not generally involve the routine use, transport, or disposal of significant amounts of hazardous materials, including hazardous chemical, radioactive, and biohazardous materials. Further, land uses that use, create, or dispose of hazardous materials are regulated and monitored by federal, state, and local regulations and policies. Specifically, future development within the Project Area would be subject to compliance with the programs administered by the LACoFD's Health Hazardous Material Division (HHMD). Thus, future development under Alternative 2 would be subject to the same existing federal, state, and local regulations, which would reduce potential impacts to less than significant. Furthermore, Alternative 2 would be subject to **Mitigation Measure HAZ-1**, which would require all development projects to conduct a Phase I, and if necessary, a Phase II investigation. Alternative 2 includes the same number of residential units in similar clusters and will result in a similar number of people that could be exposed to hazardous material. However, Alternative 2, includes redirecting the existing heavy truck traffic and may reduce the exposure of the routine transportation or disposal of hazardous materials. Compliance with regulations and **Mitigation Measure HAZ-1** would result in a less than significant impact and would result in less impacts when compared to the Project.

### ***Hydrology and Water Quality***

Under Alternative 2, the proposed number of multi-family units would be the same as included in the Project and be located in similar nodes in the Project Area. The majority of the Project Area is developed and covered with impervious surface. Thus, future development projects associated with Alternative 2 would be limited to infill or redevelopment projects. Similar to the Project, projects developed under Alternative 2 would be required to comply with existing federal, state, and local regulations related to groundwater quality. Sustainable design features included in the Project as a means to reduce stormwater runoff volume (e.g., permeable paving, urban bioswales, efficient water irrigation, and drought tolerant landscaping) would be included under Alternative 2. As described above, most of the Project Area is currently developed and Alternative 2 would reduce the amount of impervious surface within the Project

Area at a similar level when compared to the Project. As such, water quality impacts would be similar to the Project and would be less than significant.

Groundwater recharge areas would be minimally impacted by Alternative 2 as the Project Area is developed and does not currently represent a significant source of groundwater recharge.

Similar to the Project, construction activities under Alternative 2 could result in potentially significant impacts to water quality and could exceed the surrounding waterways TMDLs. More new construction would take place under Alternative 2 and construction activities would be subject to existing regulatory requirements, including compliance with the State General Construction Activity Storm Water Permit and the provisions in the MS4 Permit addressing control of construction phase water impacts. In addition, individual development projects would be required to submit a Hydrology/Hydraulic Report, SWPPP, and SUSMP, if applicable, and provide appropriate on-site mitigation measures. As such, construction-related impacts to hydrology and water quality would be less than significant under Alternative 2.

Implementation of Alternative 2 could increase the rate and/or amount of stormwater runoff in comparison to existing conditions, which in turn could result in flooding issues on or off-site. The design guidelines included in the Project, which would help mimic natural hydrologic conditions and in turn would reduce sheet flow and the velocity of stormwater while preventing soil erosion, would be implemented under Alternative 2. As the ability of the storm drainage system to accommodate water flows is largely based on ground permeability and infrastructure capacity, the Project's design guidelines would help to reduce any future flooding and would be applied under Alternative 2. As a result, potential flooding impacts would be less than significant and would be similar to the Project.

### ***Land Use***

Under Alternative 2, the number of multi-family dwelling units would be 874, the same as under the Project. The residential units would be clustered at identified nodes. This change in proposed land uses would not result in the potential to divide an established community as a majority of the Project Area is currently developed. However, Alternative 2 would implement the principles of the Specific Plan and emphasize pedestrian and bicycle linkages by implementing specific development guidelines for the Project Area, whereas the Project would not. The same development standards included in the Project would also be included under the Vernon Westside Specific Plan Alternative, and therefore, would be consistent with SCAG's strategies, and the *General Plan's* goals and policies. Further, the Vernon Westside Specific Plan Alternative would implement a truck route system that would improve the overall freight movement in the Project Area. Because of this, Alternative 2 would be consistent with Policies C.1.1 and C.1.4 in the Circulation and Infrastructure Element of the *General Plan*. Lastly, the proposed Santa Fe Mixed Use

Corridor and design guidelines under Alternative 2 would allow for a greater level of walkability and connection to neighborhood resources compared to the Project. As such, impacts under Alternative 2 would be less than significant, and would be less than the Project.

### *Noise*

Grading and construction activities associated with the Alternative 2 could intermittently and temporarily generate noise levels above ambient background levels including noise levels above those permissible by the *General Plan*, noise ordinance and other applicable standards. Generally, construction-related noise impacts would be short-term and localized in nature and would occur in accordance with the City's Municipal Code Noise Ordinance and any additional applicable plans or standards. In addition, some sensitive receptors could experience noise levels that would exceed the City's interior and exterior noise standards due to the increase in roadway noise, surrounding land uses, and temporary construction activities. The anticipated amount of development in Alternative 2 would be similar to the Project, and both would result in adaptive reuse of existing buildings. Additionally, similar to the Project, development under the Vernon Westside Specific Plan Alternative would be required to adhere to and implement the *General Plan* goals and policies, would be subject to rigorous federal and local environmental review, and would be required to abate increases in noise levels in accordance with applicable criteria. Further, individual development projects would be reviewed for project-specific impacts during any required environmental review. **Mitigation Measures NOI-1, NOI-2, and NOI-3** would continue to apply.

Specific construction activities such as pile driving could result in potential vibration impacts. As discussed above, future development associated with Alternative 2 would be similar to the Project. Therefore, the anticipated amount of noise and vibration from construction activities (i.e., pile driving) under Alternative 2 would be similar. Construction noise impacts would be similar to the Project and would be significant and unavoidable.

Operational noise would also occur as a result of the Vernon Westside Specific Plan Alternative as a combination of residential, retail, office and industrial uses would be developed. Alternative 2 would result in the same amount to units developed as the Project. As the Vernon Westside Specific Plan Alternative would be required to comply with existing ordinances regarding noise and identified mitigation measures would be applied, impacts would be less than significant. Operational noise under Alternative 2 would be less than significant and similar to the Project.

### *Population, Housing and Employment*

The Vernon Westside Specific Plan Alternative would result in the same number of multi-family dwelling units as under the Project and be clustered at identified nodes. The projected population within the Project



Area would also remain the same. Under Alternative 2 development would take the form of new construction, as well as the adaptive reuse of existing buildings. Given that there is no residential outside of the identified clusters, Alternative 2 would not result in the displacement of large numbers of existing housing units and or people or result in substantial population growth. Thus, similar to the Project, implementation of Alternative 2 would not induce substantial population growth in the area, either directly or indirectly, nor would it result in the displacement of large numbers of existing housing units and or people. Impacts would be less than significant and would be similar to the Project.

### ***Public Services***

#### **Fire**

Similar to the Project, future buildout under the Vernon Westside Specific Plan Alternative would result in additional demands on existing fire services, as individual projects are developed and associated increases in population are realized. As buildout would occur over several years, any increase in demand for fire protection services would occur gradually as additional development and associated population growth is added to the Project Area. The LACoFD would continue to regularly monitor fire department resources to ensure that adequate facilities, staffing, and equipment are available to serve existing and future development and population increases. As the Vernon Westside Specific Plan Alternative would result the same amount of multi-family dwelling units that could be constructed, the number of services calls as well as the number of revenue-generating sources would be the same. Thus, with continued monitoring of LACoFD staffing levels by the county, impacts to fire services would be less than significant. Impacts to fire services would be similar to the Project.

#### **Police**

The Vernon Westside Specific Plan Alternative would include 874 multi-family units, resulting in a population growth of 2,523 people, the same as the Project. Similar to the Project, as population within the Project Area increases, additional police facilities, personnel, and equipment would be required to maintain adequate levels of police protection. As buildout of the Specific Plan would occur over several years, any increase in demand for police protection services would occur gradually as additional development and associated population growth is added to the Project Area. Nonetheless, with continued monitoring of police department staffing levels by the Vernon Police Department, impacts would be less than significant.

The Specific Plan would reduce the number of lanes on Santa Fe Avenue and redirect truck. The Specific Plan proposes adding streetscape improvements such as pedestrian crossings and separated bike lanes. These amenities will improve safety for pedestrians. These proposed improvements included in the Specific Plan will be designed to City and State engineering design standards to meet sight distance

requirements, including visibility of pedestrians and bicyclists. These amenities would improve safety and circulation within the Project Area.

In conclusion, Alternative 2 would result in the same number of multi-family units and the same projected population growth. However, the proposed alterations and overall improvements to Santa Fe Avenue and other roadways would improve safety within the Project Area. Thus, impacts to police services would be incrementally less than the Project.

### **Education**

The Vernon Westside Specific Plan Alternative would include 874 multi-family units, resulting in a population growth of 2,486 people, the same as the Project. This would keep the number of school aged children at 325 students, with 171 elementary school students, 47 junior high school students, 94 high school students, and 13 special day class students. Similar to the Project, individual development projects associated with Alternative 2 would be assessed education facilities fees based on the use and size of each project. Pursuant to California Government Code Section 65995, payment of fees to LAUSD is considered full mitigation for project impacts, including impacts related to 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, or other performance objectives for schools. The amount of education facility fees generated by development associated with Alternative 2 would be the same as the Project. Alternative 2 would also be required to comply with all applicable *General Plan* policies and actions, and state and federal regulations. Therefore, similar to the Project, impacts under Alternative 2 related to education facilities would be less than significant. With the same number of units and population growth projected under Alternative 2, impacts to educational facilities would be similar to the Project.

### **Library Services**

Under the Vernon Westside Specific Plan Alternative, 874 multi-family dwelling units would be developed, the same as under the Project. The City's new residents would increase the demand for library services in the Project Area, but similar to the Project, demand could be accommodated by both by LAPL and LA County Library branches in the surrounding area. As a result, impacts to library services associated with the implementation of Alternative 2 would be less than significant, similar to the Project.

### **Parks and Recreation**

The Vernon Westside Specific Plan Alternative would include 874 multi-family units, resulting in the same projected population growth as under the Project. As the Project Area does not contain any public open

space, buildout of Alternative 2 would require the addition of parkland acres to address the existing parkland deficit. Similar to the Project, Alternative 2 would include design measures and policies for plazas and public spaces to be incorporated in the Project Area. Additionally, all new development projects are expected to provide open space for residents. Thus, impacts would be similar to the Project and would be less than significant. With the same number of units proposed and the same projected population growth, impacts to recreational services would be similar to the Project.

### ***Transportation***

Under the Vernon Westside Specific Plan Alternative, 874 multi-family units would be developed, similar to the Project. As no changes would be made to the proposed retail, production, and research and development uses, the projected daily trips for all other future development would remain the same as the Project. The Vernon Westside Specific Plan Alternative includes the same number of units in proximity to nearby bus lines, and VMT would under Alternative 2 would be similar to the Project. However, Alternative 2 would narrow Santa Fe Avenue from four lanes to two lanes, diverting through traffic to Pacific Boulevard and reducing speeds. This traffic calming would also divert large trucks to Pacific Boulevard. Further, Alternative 2 proposes to remove the central exchange lane where it is not needed, add street parking to activate adjacent businesses, and restrict large trucks. Additionally, the Vernon Westside Specific Plan Alternative proposes traffic improving amenities, such as on-street parking, activated streetscapes, shortened pedestrian crossings, separated bikeways, street trees, and shaded walkways. The proposed improvements included in the Specific Plan would be designed to City and State engineering standards to meet sight distance requirements, including visibility of pedestrians and bicyclists improving safety. As such, impacts to traffic and transportation would be less than significant and less than the Project.

### ***Utilities and Services***

#### **Water Supply**

The Vernon Westside Specific Plan Alternative would include the same amount of development as proposed under the Project. As a result, the amount of demand for water would also remain the same. The City of Vernon Water Department provides the Project Area with potable water. Water is also purchased through Metropolitan Water District (MWD). The water in Vernon is imported from the Central Basin Municipal Water District (CBMWD), and includes groundwater from the Central Basin, and recycled water for power generation from CBMWD. The 2020 UWMP concluded that there would be sufficient water supplies to meet the water demands of its customers, including those in the Project Area, in normal, single dry, and multiple dry years. Similar to the Project, most development under Alternative 2 would include a more efficient land use (i.e., multi-family units). This would reduce the per capita water usage from existing

conditions. Further, the water efficient design guidelines included in the Project such as, water efficient irrigation, urban bioswales, and drought tolerant landscaping would be incorporated in Alternative 2 and would further reduce water consumption in the Project area. Water demand impacts under Alternative 2 would be less than significant and would be similar to the Project.

### **Wastewater**

Implementation of the Vernon Westside Specific Plan Alternative would result in the same number of units as proposed under the Project. As a result, the amount of wastewater generated under Alternative 2 would be the same. Individual development projects would generate wastewater typical of residential and commercial uses. Buildout of Alternative 2 would not disrupt sewer services in the Project Area or exceed the capability of Los Angeles County Sanitation District (LACSD) and the Joint Water Pollution Control Plant (JWPCP). Construction contractors would provide portable on-site sanitation facilities for use during demolition and construction of future development projects. Implementation of the Vernon Westside Specific Plan Alternative would result in less than significant impacts and would be similar to the Project.

### **Solid Waste**

Solid waste generated in the Project Area would be transported to Sunshine Canyon Landfill in Sylmar or the Simi Valley Landfill for disposal. The Sunshine Canyon Landfill has sufficient capacity to operate until 2037 and the Simi Valley Landfill has sufficient capacity until 2063. Implementation of the Vernon Westside Specific Plan Alternative would result in the same number of units as proposed under the Project. Further, the same amount of future development and redevelopment would occur under Alternative 2, resulting in similar levels of solid waste generation. As a result, more construction would occur, and more construction-related solid waste including wood, paper, metal, plastic, cardboard, and green wastes would be generated. Future projects under the Vernon Westside Specific Plan Alternative would be required to recycle/divert 75 percent of the construction waste, pursuant to the requirements of AB 939. Therefore, implementation of the Vernon Westside Specific Plan Alternative would result in a similar amount of solid waste generated compared to the Project. Impacts would be less than significant and similar to the Project.

### **Electricity**

Future development resulting from the implementation of the Vernon Westside Specific Plan Alternative would result in the long-term and continued use of electricity resources. Similar to the Project, potential electricity impacts associated with new developments would be evaluated on a project-by-project basis. New development would be served by Vernon Light and Power and would be required to pay applicable fees assessed by the Department necessary to provide service to the specific project. The Department would not provide service to future projects if there were not adequate electricity supplies and infrastructure to

maintain existing service levels and meet the anticipated electricity demands of the specific development requesting service. Impacts to electricity resources would be less than significant. Further, with the same number of units and nonresidential square footage, electricity use would be the same as the Project.

### **Natural Gas**

Future development resulting from the implementation of the Vernon Westside Specific Plan Alternative would result in long-term and continued use of natural gas resources. Similar to the Project, potential natural gas impacts associated would be evaluated on a project-by-project basis and would be required to pay applicable fees assessed by Vernon's Public Utilities Department and SoCalGas before service is provided to a project site. SoCalGas would not provide service to new developments if there were not adequate natural gas supplies and infrastructure to maintain existing service levels and meet the anticipated demands of the Project. Similar to the Project, implementation of Alternative 2 would result in less than significant impacts to natural gas services. Further, with the same number of units and nonresidential square footage, natural gas impacts would be the same the Project.

### ***Relationship to the Project Objectives***

The project's objectives are included in **Table 4.0-2, Alternative 2 Relationship to the Project Objectives**. As shown in **Table 4.0-2**, Alternative 2 would achieve all of the project objectives. Further, some would be met at a greater degree than the Project.

**Table 4.0-2  
Alternative 2 Relationship to the Project Goals**

Vernon Westside Project Goals	Relationship to Goals
<b>Goal #1:</b> Reinvigorate the City’s competitive advantage as a center of production	Under Alternative 2, the same amount of residential, production, and research and development uses would be developed. Alternative 2 would increase the number of residents and increase the diversity of jobs within the City, increasing the City’s competitive advantage. Furthermore, development would similarly be centered around clustered zone areas that would be within a close proximity to transit, increasing access to the neighborhood amenities and the region. The goal would be met.
<b>Goal #2:</b> Strengthen and provide long-term stability to the City’s fiscal position	Growth projected under Alternative 2 would increase the amount of tax paying constituents that would provide stability to the City’s fiscal position. The goal would be met.
<b>Goal #3:</b> Increase the residential population in order to increase access to proportionally allocated Federal and State funding, to strengthen the City’s governance, and help meet regional housing needs	Growth projected under Alternative 2 would increase the residential population. The City would meet their RHNA and add to the regional housing needs of the larger Los Angeles community. The goal would be met.
<b>Goal #4:</b> Diversify and reorient the Westside’s land uses to take advantage of changes in the economic landscape of Southern California	The policies included in Alternative 2 would encourage a diversity of land uses on the Westside to better integrate the Downtown and the Arts District. Therefore, the goal would be met.
<b>Goal #5:</b> Increase amenities available to local residents and workers	The same range of uses would be permitted under Alternative 2. However, unlike the Project, Alternative 2 would implement pedestrian and bicycle infrastructure for residents. Therefore, the goal would be met, and to a greater degree.

The environmental effects of Alternative 2 are included in **Table 4.0-3, Comparison of Alternatives to the Project**, below.

#### 4.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6 of the *State CEQA Guidelines* requires that an “environmentally superior” alternative be selected among the alternatives that are evaluated in an EIR. In general, the environmentally superior alternative is the alternative that would be expected to generate the fewest adverse impacts. If the No Project Alternative is identified as environmentally superior, then another environmentally superior alternative shall be identified among the other alternatives.

**Table 4.0-3, Comparison of Alternatives to the Project**, summarizes the impact of each alternative and whether impacts would be similar, less, or greater when compared to the Project. As shown in **Table 4.0-3**, Alternative 2 would result in similar impacts associated with air quality, cultural and tribal resources, hazards and hazardous materials, hydrology and water quality, noise, population, public services (fire protection, education, library system), recreation, and utility impacts (water supply, wastewater, solid

waste, electricity, natural gases). It would not eliminate the significant impacts associated with the Project (construction air quality emissions, construction noise and vibration) due to the similar increase in new construction in condensed areas. Impact areas determined to be less than significant that are incrementally reduced under Alternative 2 include operational aesthetics, land use, greenhouse gas emissions and transportation as a result of the proposed design guidelines and traffic calming measures that would be implemented under Alternative 2's Specific Plan.

While the No Project Alternative incrementally reduce those impact areas associated with population increases such as fire protection, police protection, education, wastewater, and solid waste, it would increase aesthetic, greenhouse gas, hazardous materials, and noise impacts. Further, the No Project Alternative would not fulfill the Project's Objectives. Alternative 2 would fulfill the Project's objectives and would also incrementally reduce most of the project's impacts and would not increase any impacts. Therefore, Alternative 2 is therefore the environmentally superior alternative. Although this alternative would not reduce any of the significant impacts of the Proposed Plan, it would meet the project objectives, even to a greater degree for some, it has more environmental benefits related to greenhouse gases and energy use and sustainable development patterns than the other alternatives. Based on the ability to incrementally reduce impacts of the project, and to meet the project objectives, Alternative 2 is the environmentally superior alternative.

## 4.7 COMPARISON OF ALTERNATIVES

**Table 4.0-3, Comparison of Alternatives to the Project**, summarizes the effects of the alternatives.

**Table 4.0-3  
Comparison of Alternatives to the Project**

<b>Environmental Issue Area</b>	<b>Project</b>	<b>No Project</b>	<b>Alternative 2</b>
Aesthetics	Less than significant	Greater, less than significant	Incrementally less, less than significant
Air Quality	Significant and unavoidable, construction level, even with <b>Mitigation Measure AQ-1 – AQ-8</b>	Similar, significant (construction) Less, less than significant (operation)	Similar, significant and unavoidable (construction) Similar, less than significant (operation)
Cultural Resources including Tribal Cultural Resources	Less than significant with <b>Mitigation Measures CUL-1 through CUL-4</b>	Greater, less than significant	Similar, less than significant
Greenhouse Gases	Less than significant	Greater, less than significant	Similar, less than significant
Hazards and Hazardous Materials	Less than significant	Greater, less than significant	Less, less than significant
Hydrology and Water Quality	Less than significant	Similar, less than significant	Similar, less than significant
Land Use	Less than significant	Greater, less than significant	Incrementally less, less than significant

<b>Environmental Issue Area</b>	<b>Project</b>	<b>No Project</b>	<b>Alternative 2</b>
Noise	Significant and unavoidable, even with <b>Mitigation Measure NOI-1 - NOI-3.</b>	Greater, significant	Significant and unavoidable. Similar, Construction Similar, Operations
Population, Housing, and Employment	Less than significant	Greater, less than significant	Similar, less than significant
Fire Protection	Less than significant	Incrementally less, less than significant	Similar, less than significant
Police Protection	Less than significant	Incrementally less, less than significant	Incrementally less, less than significant
Education	Less than significant	Incrementally less, less than significant	Similar, less than significant
Library Services	Less than significant	Similar, less than significant	Similar, less than significant
Recreation	Less than significant	Greater, less than significant	Similar, less than significant
Transportation	Less than significant	Greater, less than significant	Incrementally less, less than significant
Water Supply	Less than significant	Greater, less than significant	Similar, less than significant.
Wastewater	Less than significant	Incrementally less, less than significant	Similar, less than significant
Solid Waste	Less than significant	Incrementally less, less than significant	Similar, less than significant
Electricity	Less than significant	Similar, less than significant	Similar, less than significant
Natural Gas	Less than significant	Similar, less than significant	Similar, less than significant

Source: *Impact Sciences, 2023*



## 5.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

---

### INTRODUCTION

*As required by Section 15128 of the CEQA Guidelines, an EIR shall contain a brief discussion stating the reasons why various possible significant effects of a project were determined not significant and are, therefore, not discussed in detail in the EIR. In accordance with the CEQA Guidelines, this section discusses the environmental issue areas where impacts were found not to be significant. These discussions address the CEQA Guidelines Appendix G questions for each of the environmental topic areas where the Project would result in either a less than significant impact or no impact.*

### 5.1 AGRICULTURE AND FORESTRY RESOURCES

**The Project would not 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.** Based on the Department of Conservation’s Farmland Mapping and Monitoring Program, neither the Project Area nor adjacent properties are State-designated Farmland. The Project Area is listed as Urban and Built-up Land.<sup>1</sup> Implementation of the Project would have no impact on existing agricultural resources and would not result in the conversion of agricultural farmland.

**The Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.**

**No Impact.** Based on the Department of Conservation’s Williamson Act maps, neither the Project Area nor adjacent properties are enrolled in Williamson Act contracts. The Project Area is identified as located in Non-Enrolled Land, which is defined as land not enrolled in a Williamson Act contract.<sup>2</sup> Implementation of the Project would have no impact on existing agricultural resources or Williamson Act contract land.

**The Project would not 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)).**

---

<sup>1</sup> California Department of Conservation. California Important Farmland Finder. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed October 20, 2022.

<sup>2</sup> California Department of Conservation. *State of California Williamson Act Contract Land*. 2017. Available at: [https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/\(E\)%20Initial%20Study/Initial%20Study/Attachments%20B%20References/California%20Department%20of%20Conservation%20Williamson%20Map%202016.pdf](https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/(E)%20Initial%20Study/Initial%20Study/Attachments%20B%20References/California%20Department%20of%20Conservation%20Williamson%20Map%202016.pdf), accessed October 20, 2022.

**No Impact.** The Project Area is urbanized and fully developed. Because no forests are located in or adjacent to the Project Area, the Project would have no impact on the rezoning of forest land or timberland.

**The Project would not result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact.** The Project Area is urbanized and fully developed. Because no forests are located in or adjacent to the Project Area, the Project would have no impact to forest land or forestry resources.

**The Project would not 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.** As discussed above, the Project would have no impact with respect to conversion of Farmland to non-agricultural use; conflict with existing agricultural zoning or Williamson Act contract; result in the loss of forest land or conversion of forest land to non-forest use; or other conversion of farmland to non-agricultural use.

## 5.2 BIOLOGICAL RESOURCES

**The Project would not 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 regulation, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.**

**No impact.** The City of Vernon generally consists entirely of urban land with previously disturbed soils, which has led to highly fragmented habitats. The closest regional open spaces near the Project Area include Elysian Park, five miles north; Whittier Narrows Recreation Area, nine miles northeast; and the Puente Hills Habitat Preserve, 11 miles east. The Los Angeles River is located one half mile outside the Project Area boundaries.

A literature review and records search were conducted to determine the potential occurrence of special status plant and wildlife species in or in the immediate vicinity of Project Area. The Project Area is located within the South Gate and Los Angeles Quadrangles. A total of three endangered species were found in the South Gate and Los Angeles quadrangles; including the wester yellow-billed cuckoo, southwestern willow flycatcher, and least Bell's vireo. The western yellow-billed cuckoo (*Coccyzus americanus*) is described as a riparian forest nester along the broad, lower flood-bottoms of larger river systems. They nest in riparian jungles of willow, often mixed with cottonwoods with lower story blackberry, nettles or wildgrape. The southwestern willow flycatcher (*Empidonax traillii extimusis*) breeds in dense riparian

vegetation near surface water or saturated soils.<sup>3</sup> The least Bell's vireo (*Vireo bellii pusillus*) occupy a variety of habitats, including mesquite scrub within arroyos, palm groves, and hedgerows bordering agricultural and residential areas.<sup>4</sup> There is one plant species that is listed as endangered by both the USFWS and CDFW: California Orcutt grass (*Orcuttia californica*). The general habitat of California Orcutt is vernal pools, which are Seasonal amphibious environments dominated by annual herbs and grasses adapted to germination and early growth under water.<sup>5</sup> No suitable habitat for these endangered species exists in the Project Area. There are no critical habitats, national wildlife refuge lands, or wetlands identified at this location. The Project Area is considered to have a low habitat and species diversity value, due to the heavily disturbed and developed nature of the site, isolation from native habitats, and high human activity levels surrounding the area. Consequently, no suitable habitat for special status species is present within the Project Area. The Project Area is not located within or near any County of Los Angeles Significant Ecological Areas (SEAs).<sup>6</sup>

Given that the potential for any species identified as a candidate, sensitive, or special status species to occur is low within the Project Area, the Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. For these reasons, the Project would have no impact with regard to biological resources.

**The Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.**

**No impact.** As stated above, the Project Area is made up of urban development and is highly disturbed under existing conditions, with little potential for any riparian habitat or other sensitive natural community to flourish. The Los Angeles River is located one half mile outside the Project Area boundaries, and it is predominantly channelized with concrete. The Los Angeles River is a federally-listed impaired waterway; trash, nutrients, ammonia, indicator bacteria, oil, copper, and lead are the primary pollutants of concern.

---

<sup>3</sup> National Park Service. *Southwestern Willow Flycatcher*. Available online at: <https://www.nps.gov/articles/southwestern-willow-flycatcher.htm>, accessed October 20, 2022.

<sup>4</sup> U.S. Fish & Wildlife Service. *Least Bell's Vireo*. Available online at <https://www.fws.gov/story/least-bells-vireo>, accessed October 20, 2022.

<sup>5</sup> CNPS Rare Plant Inventory. Glossary. 2022. Available online at: [https://rareplants.cnps.org/Home/Glossary#\\_Toc72398849](https://rareplants.cnps.org/Home/Glossary#_Toc72398849), accessed August 2, 2022.

<sup>6</sup> County of Los Angeles Department of Regional Planning. *Significant Ecological Areas and Coastal Resource Areas Policy Map*. February 2015. Available online at: [https://planning.lacounty.gov/assets/upl/project/gp\\_2035\\_2014-FIG\\_9-3\\_significant\\_ecological\\_areas.pdf](https://planning.lacounty.gov/assets/upl/project/gp_2035_2014-FIG_9-3_significant_ecological_areas.pdf)

Therefore, no riparian habitat nor other sensitive natural community exists within the Project Area or in the surrounding area. Implementation of the Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. No impact would occur.

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

**No impact.** The Project Area is highly disturbed under existing conditions, with no state or federally protected wetlands on site or in the general vicinity.<sup>7</sup> The Los Angeles River is located one half mile outside the Project Area boundaries; it is predominantly channelized with concrete and is a federally-listed impaired waterway; with trash, nutrients, ammonia, indicator bacteria, oil, copper, and lead are the primary pollutants of concern.

The Project Area principally consists of urban development, with no wetlands nor bodies of water within the Project Area or in the surrounding area.<sup>8</sup> Implementation of the Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act. Therefore, no impact would occur.

**The Project would not 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.**

**No impact.** The heavily developed industrial nature of the Project Area has fragmented any potential wildlife corridors. In addition, the Project Area is surrounded by other densely developed industrial and commercial areas. The only potential wildlife corridor near the Project Area is the Los Angeles River, located approximately one-half mile away. However, the Project would not alter the concrete-lined river in any way, including allowing development that could impede existing wildlife movement along its course. As such, the Project Area has a limited ability to support both native resident and migratory species. These disturbances decrease the Project Area's value as suitable breeding and foraging habitat, and as a migration corridor or overland dispersal habitat because the property is movement-constrained. The more

---

<sup>7</sup> County of Los Angeles Department of Regional Planning. *Significant Ecological Areas and Coastal Resource Areas Policy Map*. February 2015. Available online at: [https://planning.lacounty.gov/assets/upl/project/gp\\_2035\\_2014-FIG\\_9-3\\_significant\\_ecological\\_areas.pdf](https://planning.lacounty.gov/assets/upl/project/gp_2035_2014-FIG_9-3_significant_ecological_areas.pdf)

<sup>8</sup> U.S. Fish and Wildlife Service. *National Wetlands Inventory*. 2020. Available online at: <https://www.fws.gov/wetlands/data/mapper.html>, accessed October 20, 2022.

factors that constrain species habitats and dispersal / movement corridors, the less likely individuals are to occur, or continue to occur within a specific locale. There are no large blocks of natural open space within the Project Area that are considered essential for long-term plant and wildlife viability in Los Angeles County. For these reasons, the Project would have no impact.

**The Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

**Less Than Significant.** As noted above, the Project Area is predominantly characterized by industrial land uses with small pockets of commercial and residential. The City of Vernon Municipal Code (§ 12.24 Street Trees) requires a permit to alter, remove, or interfere with any city-owned tree upon any street, parkway, alley or public right-of-way within the City. Any tree on public property is subject to obtain a permit to alter, remove, or interfere with any city-owned tree. The Public Works Department also has a tree master plan which provides for the planting, care, preservation, maintenance, removal, and appropriate species for all trees on public property. Future development under the Project would be required to adhere to the Street Tree ordinance and the Tree Master Plan. Therefore, the Project would not conflict with this policy regulating public right-of-way biological resources. No other local policies or ordinances are applicable to the Project Area, and therefore impacts will not occur.

**The Project would not 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 Area is not subject to an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan and, therefore, the Project would have no impact with respect to these plans.

### 5.3 GEOLOGY AND SOILS

**The Project would not 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.**
- ii. **Strong seismic ground shaking.**
- iii. **Seismic-related ground failure, including liquefaction.**
- iv. **Landslides.**

**Less than Significant Impact.** According to the California Department of Conservation's Earthquake Hazards Zone Application, the Project Area is not located within an Earthquake Fault Zone or Landslide Zone. While the southeastern portion of Project Area is located within a Liquefaction Zone,<sup>9</sup> future development under the Project would be required to comply with the California Building Code, Vernon Municipal Code, and *City of Vernon General Plan* policies, which would reduce potential impacts to less than significant levels. Implementation of the Project would not exacerbate the existing geologic hazards including fault rupture, seismic ground shaking, liquefaction, or landslides. In addition, any future development would be subject to existing State and local regulations, which set forth seismic design standards and geohazard study requirements, impacts would be less than significant.

**The Project would not result in substantial soil erosion or the loss of topsoil.**

**Less than Significant Impact.** The Project Area is relatively flat and includes limited pervious surface area, which limits the potential for substantial soil erosion. Future development projects under the Project may include ground-disturbing activities such as grading and excavation that could result in temporary soil erosion. However, as discussed under **Section 3.8, Hydrology and Water Quality**, the development projects under the Project would be required to comply with erosion control standards; including compliance with the National Pollutant Discharge Eliminate Systems permit and project specific Best Management Practices to secure disturbed soils, ensure proper drainage, and avoid potential adverse effects associated with erosion in the Project Area.

**The Project and would not 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 discussed above, the Project Area is not located in an Earthquake Fault Zone or Landslide Zone. While the southeastern portion of the Project Area is located within a Liquefaction Zone, future development under the Project would be required to comply with the California Building Code and Vernon Municipal Code and *General Plan* policies, which would reduce potential impacts associated with lateral spreading, subsidence, collapse, and liquefaction. Therefore, impacts would be less than significant.

**The Project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water.**

---

<sup>9</sup> California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, accessed October 21, 2022.

**No Impact.** Development under the Project would be served by the City's wastewater disposal system. No future development under the Project would include septic tanks or alternative wastewater disposal systems; therefore, there is no potential for adverse effects due to soil incompatibility. No impact would occur.

**The Project would not directly or indirectly destroy a unique geologic feature.**

**No Impact.** The Project Area is in a highly urbanized area of the City that has been previously disturbed. There are no identified unique geological features in the Project Area that would be affected by the Project. No impact would occur.

## 5.4 MINERAL RESOURCES

**The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

**Less than significant.** The Department of Conservation's Mineral Land Classification Map for the Los Angeles Quadrangle shows that most of the Project Area is identified as MRZ-2, or, "an area underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present or where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists."<sup>10</sup> However, per the most recent Department of Conservation maps, there are no active mine operations or mineral extraction occurring in the Project Area.<sup>11</sup> The Project Area is heavily developed with industrial uses, and therefore, access to any potential mineral resource within the Project Area is restricted. The Project would not add or eliminate the amount of urbanization within the Project Area, and therefore would not impact access to any potential mineral resources. Impacts would be less than significant.

**The Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, Project, or other land use plan?**

**No impact.** While the Department of Conservation identifies most of the Project Area as being located within an MRZ-2, the *City of Vernon General Plan* does not identify any locally important mineral resource recovery site within the City. As discussed, the Project Area is heavily developed with industrial uses, and

---

<sup>10</sup> Department of Conservation. *CGS Information Warehouse: Mineral Land Classification*. Available online at: <https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>, accessed October 20, 2022.

<sup>11</sup> California Department of Conservation. *Mines Online*. Available online at: <https://maps.conservation.ca.gov/mol/index.html>, accessed March 10, 2023.

therefore, existing access to any potential mineral resource within the Project Area is restricted. The Project would not create any further impact on mineral resources.

## 5.5 WILDFIRE

**The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan.**

**Less than Significant Impact.** The Project Area is surrounded on all sides by existing infrastructure including roadways, railways, and nearby freeways. Future development under the Project would occur over a period of 20 years on discreet sites in various locations within the Project Area. Although temporary lane and sidewalk closures immediately adjacent to site-specific development projects may be necessary for short durations, adequate emergency vehicle access throughout the Project Area would be maintained at all times as required. As part of the review and approval of site-specific development projects within the Project Area, development plans will be reviewed by the City's police and fire agencies prior to construction to ensure that alternative route planning to facilitate the passage of people and vehicles through/around any temporary required road closures occurs and is implemented, if needed.

The Project would not result in the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, such as the City's pending Local Hazard Mitigation Plan.<sup>12</sup> Accordingly, the Project would not impair any adopted emergency response plan or emergency evacuation plan and impacts would therefore be less than significant.

**The Project would not exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors.**

**No Impact.** Wildfires have the potential to occur not only in fire-prone undeveloped areas, but also in developed areas where existing transmission lines, lightning strikes, lawn equipment operated over dry grass, fireworks, and even arson may ignite a wildfire. Wildfires pose a significant public health risk due to their air quality impacts, particularly with regard to smoke and particulate matter exposure. This risk persists even after a wildfire is extinguished because particulate matter from fire ash can be picked up by winds.

---

<sup>12</sup> City of Vernon. *Local Hazard Mitigation Plan*. Available at: <https://www.cityofvernon.org/government/city-administration/trending-topics/trending-topics>, accessed October 20, 2022.



The Project Area is not located within a Very High Fire Hazard Zone (VHFHZ), nor does the Project Area contain vegetation that could contribute to the uncontrolled spread of wildfire. The nearest VHFHZ is located approximately five miles north at Elysian Park.<sup>13</sup> The Project will result in additional housing and retail uses within the Project Area and would not contain any uses that could add or contribute to wildfire risk. Therefore, the Project does not include any features that would exacerbate wildfire risk; and no impact would occur.

**The Project would not 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 Area is urbanized and does not include wildlands or high fire terrain. The Project Area is surrounded by existing infrastructure including roadways, railways, and nearby freeways and would not require the installation or maintenance of roads, fuel breaks, emergency water or other sources that could exacerbate fire risk. During construction of individual projects under the Project, temporary power would likely be required from existing power lines. However, maintenance of these temporary power sources would be in accordance with the Los Angeles Fire Department (LAFD) requirements. As such, in the unlikely event of a fire in the Project Area during construction, accepted protocols would be followed to minimize risk to surrounding areas. Due to the urbanized nature of the area, it is unlikely any fire would spread. Therefore, there would be no impacts.

**The Project would not 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.** In Southern California, intense rainfall may occur during the winter months, creating natural flooding events when the ground is saturated and water levels are high. This has the potential for flooding issues, and fire hazards may exacerbate such flooding and debris flows along waterways. Since debris flows may occur quickly and without warning, such flows can damage structures, block drainage or even sweep away vegetation resulting in tenuous post-fire slope stability. Fast moving debris flows can be one of the most dangerous post-fire hazards. The Project Area is generally flat and urbanized and is not in an area of wildfire risk, therefore would not be subject to any post fire slope instability or landslides. Therefore, there would be no impact.

---

<sup>13</sup> CalFire, *FHSZ Viewer*. Available online at: <https://egis.fire.ca.gov/FHSZ/>, accessed on February 4, 2022.

## 5.6 REFERENCES

- CalFire, FHSZ Viewer. Available online at: <https://egis.fire.ca.gov/FHSZ/>, accessed on February 4, 2022.
- California Department of Conservation. Regulatory Maps Geo Application. Available at: <https://maps.conservation.ca.gov/cgs/EOZApp/app/>, accessed October 21, 2022.
- California Department of Conservation. California Important Farmland Finder. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed October 20, 2022.
- California Department of Conservation. "Mines Online." Available online at: <https://maps.conservation.ca.gov/mol/index.html>, accessed October 31, 2022.
- California Department of Conservation. State of California Williamson Act Contract Land. 2017. Available at: [https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/\(E\)%20Initial%20Study/Initial%20Study/Attachment%20B%20References/California%20Department%20of%20Conservation%20Williamson%20Map%202016.pdf](https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/(E)%20Initial%20Study/Initial%20Study/Attachment%20B%20References/California%20Department%20of%20Conservation%20Williamson%20Map%202016.pdf), accessed October 20, 2022.
- City of Vernon. *Local Hazard Mitigation Plan*. Available at: <https://www.cityofvernon.org/government/city-administration/trending-topics/trending-topics>, accessed October 20, 2022.
- CNPS Rare Plant Inventory. "Glossary." 2022. Available online at: [https://rareplants.cnps.org/Home/Glossary#\\_Toc72398849](https://rareplants.cnps.org/Home/Glossary#_Toc72398849), accessed August 2, 2022.
- County of Los Angeles Department of Regional Planning. "Significant Ecological Areas and Coastal Resource Areas Policy Map." February 2015. Available online at: [https://planning.lacounty.gov/assets/upl/project/gp\\_2035\\_2014-FIG\\_9-3\\_significant\\_ecological\\_areas.pdf](https://planning.lacounty.gov/assets/upl/project/gp_2035_2014-FIG_9-3_significant_ecological_areas.pdf), accessed October 31, 2022.
- Department of Conservation. "CGS Information Warehouse: Mineral Land Classification." Available online at: <https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>, accessed October 20, 2022.
- National Park Service. "Southwestern Willow Flycatcher." Available online at: <https://www.nps.gov/articles/southwestern-willow-flycatcher.htm>, accessed October 20, 2022.
- U.S. Fish & Wildlife Service. "Least Bell's Vireo." Available online at: <https://www.fws.gov/story/least-bells-vireo>, accessed October 20, 2022.
- U.S. Fish and Wildlife Service. National Wetlands Inventory. 2020. Available online at: <https://www.fws.gov/wetlands/data/mapper.html>, accessed October 20, 2022.

## 6.0 OTHER CEQA CONSIDERATIONS

---

### 6.1 GROWTH INDUCEMENT

CEQA Guidelines Section 15126.2(d) requires that an environmental impact report (EIR) evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by CEQA Guidelines Section 15126.2 (d) as follows:

*the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also...the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.*

There are two types of growth-inducing impacts a project may have: direct and indirect. To assess the potential for growth-inducing impacts, the project features that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated.

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community that directly induces population growth or the construction of additional developments in the same area of the proposed project, thereby triggering related growth associated impacts. Included in this analysis are projects that would remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant that could allow more construction in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they trigger. In contrast, projects that physically remove obstacles to growth, projects that indirectly induce growth, are those that may provide a catalyst for future unrelated development in an area (such as a new residential community that requires additional commercial uses to support residents).

A project can have a direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for instance, involved the construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. For example, a project providing an increased water supply in an area where water service historically limited growth could be considered growth inducing.

The *CEQA Guidelines* explain that the environmental effects of induced growth are considered indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Typically, the growth-inducing potential would be considered significant if it stimulates human population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Significant growth potential could also occur if the project provides infrastructure or service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies.

As discussed below, this analysis evaluates whether the Project would directly or indirectly induce economic, population, or housing growth in the surrounding environment.

### 6.1.1 Direct and Indirect Growth-Inducing Impacts

New housing development implemented under the proposed Project would include up to a net total increase of 874 residential units, as well as approximately 157,960 square feet of non-residential employment generating uses. This would result in population growth as it provides new homes and businesses in the Project Area.

Using the City of Vernon's average renter household size of 2.92 (see **Table 3.9-2**) for incremental 2040 growth within the Project Area, and the City's occupancy rate, the addition of 874 residential units into the Project would generate a population increase of approximately 2,486 persons. The SCAG RTP/SCS does not predict any incremental population growth within the Project Area without implementation of the Project. The Project's incremental population growth represents an increase of 2,486 persons above SCAG's population growth projection for the Project Area.

As described in **Chapter 3.9, Population and Housing**, the Project Area currently has 13 units and approximately 34 residents. The Project's incremental increase of 874 residential units through 2040 would result in a total of 2,523 residents within the Project Area.

Although the Project would provide greater residential growth, the Project is consistent with the City's General Plan and Housing Element, as well as statewide goals for increase housing and density in high quality transit areas (HQTAs). The Project is specifically accommodated for by Housing Element Goal 1: New, quality housing to attract and accommodate a broad, diverse and engaged citizenry; and Housing Goal 2: Attractive, livable and healthy environments for residential uses. The Project is also consistent with

the General Plan's Land Use and Circulation Elements. Specifically, the Project would facilitate Land Use Policy LU-2.5: Assist in the reuse of properties from one industrial use to another; and Circulation Policy CI-1.4: Evaluate implementing measures that reduce the maneuvering of trucks on streets with substantial traffic during periods of high traffic volumes.

The Project will also accommodate the 2021-2029 RHNA allocation for the City. As discussed above, the Project would exceed the City's population and housing projection for the Project Area by 2,486 persons and 874 residential units. This exceedance of population and housing projection over 20 years within the region is considered nominal because the growth within the Project Area would represent 0.02 percent of the County's incremental population growth and incremental residential growth (**Table 3.9-5**) and the region is experiencing a well-documented housing crisis. Therefore, the Project would not induce additional population and housing growth that would result in significant impacts to the environment.

In addition, implementation of the Project would include a net total of approximately 157,960 square feet of non-residential employment generating uses, which will result in a net increase of approximately 126 jobs. This job growth would represent 16 percent of the projected job growth for the City of Vernon as a whole (795 jobs). The jobs are anticipated to be filled by people within the County due to the proximity of transit within the Project Area. As discussed in **Section 3.11, Transportation**, the Project Area is located in a High-Quality Transit Area, with access to several bus lines and is within a 15-minute walk of the Metro A Line.

The increase in jobs within the City through 2040 as a result of implementation of the Project is within the job growth projected for the County. Therefore, the Project would not exceed the job growth in the City and County, and increased job growth would accommodate the unemployed labor pool within the County. In addition, due to the Project Area's accessibility, no substantial additional growth in the Project Area or areas immediately adjacent to the Project Area would occur. Therefore, the Project would not result in a significant inducement of indirect growth from operation of the proposed uses.

Construction of future development projects under the Project would include a need for construction labor during short time periods. Due to the employment patterns of construction workers in southern California, and the market for construction labor, construction workers are not likely, to any significant degree, to relocate their households because of the job opportunities presented by the Project. The construction industry differs from most other industry sectors in several important ways that are relevant to potential impacts on housing:

- There is no regular place of work. Construction workers commute to job sites that change many times in the course of a year. These often lengthy daily commutes are made possible by the off-peak starting and ending times of the typical construction work day.
- Many construction workers are highly specialized (e.g., crane operators, steel workers, and masons), and move from job site to job site as dictated by the demand for their skills.
- The work requirements of most construction projects are also highly specialized and workers are employed on a job site only as long as their skills are needed to complete a particular phase of the construction process.

Therefore, the construction activities associated with the implementation of the Project would not result in a significant inducement of indirect growth.

## 6.2 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 21100(b)(2)(B) of *CEQA Guidelines* and Section 15126.2(c) of the *CEQA Guidelines* require that an EIR include a detailed statement setting forth “[a]ny significant effect on the environment that would be irreversible if the project is implemented” (Public Resources Code § 21100(b)(2)(B)). “Significant irreversible environmental changes” include the use of nonrenewable natural resources during the initial and continued phases of the project, should this use result in the unavailability of these resources in the future. Primary impacts and, particularly, secondary impacts generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with projects. Irretrievable commitments of these resources are required to be evaluated in an EIR to ensure that such consumption is justified (*CEQA Guidelines* §15126.2(c)).

Approval of the Project would cause irreversible environmental changes consisting of the following:

Construction and operation associated with the implementation of the Project would result in an irretrievable loss of, and irreversible commitment of, natural resources. The Project Area is located in an existing urbanized area but would require the commitment of resources such as lumber and steel to construct the infill development. Development projects that would be implemented in accordance with the Project would involve construction and operation that would use fossil fuels and other natural materials, such as wood and metals. The future construction of infill developments would also emit pollution into the air, from construction equipment and vehicles, and from vehicles traveling to and from each infill development project during operation. These developments would also consume fossil fuels (petroleum and natural gas), and electricity generated by fossil fuels and other non-renewable resources during operation. As described throughout this EIR, the Project would facilitate development in such a manner

## *6.0 Other CEQA Considerations*

that would reduce vehicle trips, encourage pedestrian and bicycle circulation, and promote public transit use. In addition, development projects that would be implemented under the Project would be required to comply with federal, state, and local requirements (described within each environmental resource section), such as Title 24 requirements and low impact development requirements that would reduce the irretrievable loss of, and irreversible commitment of, natural resources.

## 7.0 LIST OF EIR PREPARERS

---

### LIST OF PREPARERS

Impact Sciences, Inc., has prepared this environmental document for the City of Vernon. Persons directly involved in the review and preparation of this report include:

#### **City of Vernon**

Daniel S. Wall, P.E., Director of Public Works  
Manuel Garcia, Deputy Director of Public Works

#### **The Arroyo Group – Specific Plan**

Phil Burns, AICP, Principal  
Lance Lowrey, ASLA, Senior Associate  
Margaret Muñoz, Associate Planner

#### **Iteris, Inc. – Traffic Analysis**

Deepak Kaushik, Associate Vice President  
Sean Daly, Senior Planner

#### **Impact Sciences, Inc. – EIR Preparation**

Jessica Kirchner Flores, AICP, CEO & Managing Principal  
Brett Pomeroy, Associate Principal  
Kara Yates Hines, Director of Operations & Publications Manager  
Margaret Lin, Senior Project Manager  
Kay Real, AICP, Planner  
Eleni Getachew, ENV SP, Planner  
Raul Castillo, Planner  
Annalie Sarrieddine, Associate Planner







## CITY OF VERNON

4305 S. Santa Fe Avenue, Vernon, CA 90058

Main: (323) 583-8811 | Fax: (323) 826-1486 | [www.cityofvernon.org/home](http://www.cityofvernon.org/home)

---

### Notice of Preparation Draft Environmental Impact Report and Public Scoping Meeting for the Vernon Westside Specific Plan

**TO:** Agencies, Organizations, and Interested Parties

**DATE:** April 20, 2022

The City of Vernon (City), as the Lead Agency under the California Environmental Quality Act (CEQA), is preparing an Environmental Impact Report (EIR) for the proposed Vernon Westside Specific Plan (Proposed Specific Plan). The City is requesting identification of environmental issues and information that you or your organization believes should be considered in the EIR. The City is also conducting a Scoping Meeting for this Proposed Specific Plan as further described below. The Proposed Specific Plan would include the development of a Specific Plan to guide future growth in the western portion of the City.

#### PROJECT LOCATION

The Plan Area includes approximately 840 acres located in the western portion of the City of Vernon five miles south of downtown Los Angeles, California, as shown in **Figure 1, Regional Context**. The Plan Area roughly corresponds to a 1.75 by 0.75-mile area bound generally to the north by 27<sup>th</sup> Street; to the east by the Burlington Northern Santa Fe Railroad and Pacific Boulevard; to the south by Slauson Avenue; and to the west by Alameda Corridor, as shown in **Figure 2, Plan Area**.

The Plan Area is served by the Metro A line Vernon Station and Slauson Station, both located one block west of the Plan Area. The northern portion of the Plan Area is located approximately one-half mile from the I-10 Freeway, providing access to greater Los Angeles region.

The City of Vernon is bordered by the City of Los Angeles to the north and west; Huntington Park, Bell, and Maywood to the South; Commerce to the East; and East Los Angeles to the northeast. The Plan area is in proximity to several rapidly changing areas of Los Angeles. The Plan area is adjacent to the Downtown Los Angeles Warehouse District, and the Arts District has been steadily expanding toward the Plan Area.



## PROJECT DESCRIPTION

The Proposed Specific Plan is the preparation of a Specific Plan to spur development of people-centric environments that attract talent and stimulate innovation in the western portion of the City.

The purpose of the Proposed Specific Plan is to reinvigorate the City's competitive advantage as a center of production; strengthen and provide long-term stability to the City's fiscal position; increase the residential population; diversify and reorient the Westside's land uses to take advantage of changes in the economic landscape of Southern California; increase amenities available to local residents and workers; and create a physical environmental that is supportive of diverse land uses, welcoming to the larger region, and enhancing to the City's image and identity.

The Proposed Specific Plan, land use, zoning, and street improvement changes will be established to facilitate new community supporting development. In general, the Proposed Specific Plan land use plan:

- Identifies certain clusters of existing buildings with redevelopment potential and identifies catalytic sites within the clusters to undertake mixed-use development, including:
  - **Cluster 1 (South Santa Fe District):** This cluster is located in the southern portion of the Plan Area and holds creative office buildings and retail uses along with the prevailing industrial development. The Proposed Specific Plan will identify this stretch of Santa Fe Avenue for roadway improvements and live/work, multifamily residential, retail, production retail and creative office development.
  - **Cluster 3 (Civic Center/Santa Fe North):** This cluster is in the northern portion of the Plan Area and is primarily composed of light industrial and commercial uses, and includes the Vernon Civic Center, single-family residential buildings, and religious uses. Many of the existing buildings are older and some have been adapted into light manufacturing, distribution, and office uses. The Plan identifies the intersection of Santa Fe Avenue, Pacific Avenue, and Vernon Avenue to be transformed into a Civic Center, creating a node of office, retail, and residential. The Plan also proposes roadway and streetscape improvements to Santa Fe Avenue.
- Strengthens Santa Fe Avenue as a walkable Main Street that connects clusters and is suitable for a greater diversity of land uses. Proposed changes include eliminating the center turn lane and replacing it with on-street parking; adding large canopy shade trees; improve pedestrian crossings; and separate bike lanes.



- Redirects truck traffic: Create a truck route system which guides most heavy truck traffic off Santa Fe Avenue and improve Alameda East as a primary, functional truck route for the Westside through signal timing and infrastructure changes.
- Provides a streetscape and open spaces framework for connecting catalytic sites and clusters, other development sites, and regional active and public transportation connections.

The Proposed Specific Plan is being developed as part of the implementation of the 2021-2029 Housing Element (currently in draft form) and was included as Program 8: Westside Specific Plan.

## ISSUES TO BE ADDRESSED IN THE EIR

Based on the project description and the Lead Agency's understanding of the environmental issues associated with the Proposed Specific Plan, it is anticipated that implementation of the Proposed Specific Plan has the potential to result in significant environmental effects associated with some or all of the following topics, consistent with Appendix G of the *CEQA Guidelines* and analyzed in detail in the EIR:

- Aesthetics
- Air Quality
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems (including Energy)

The EIR will analyze the reasonably foreseeable indirect physical changes to the environment in the above topic areas caused by the Proposed Specific Plan. The City does not anticipate impacts in the following categories and as such, those impacts will not be discussed in detail in the EIR: Agriculture and Forestry Resources, Biological Resources, Geology and Soils, Mineral Resources, and Wildfire. Pursuant to *CEQA Guidelines* Section 15060(d), no initial study was prepared.

Alternatives to be analyzed in the EIR are to be defined and analyzed consistent with the requirements of *CEQA Guidelines*, Section 15126.6. The specific alternatives to be evaluated in the EIR may include, but are not limited to, the "No Project" Alternative, as required by CEQA and alternative land use configurations.

## NOTICE OF PUBLIC SCOPING MEETING

Pursuant to California Public Resources Code Sections 21083.9, 21092.2, and California Code of Regulations, Title 14 (*CEQA Guidelines*) Sections 15082 and 15083, the City, as the Lead Agency, will conduct a Scoping Meeting for the purpose of soliciting oral and written comments from interested parties



requesting notice; responsible agencies; agencies with jurisdiction by law; trustee agencies; and involved federal agencies, including transportation agencies, as to the appropriate scope and content of the EIR.

The Scoping Meeting is scheduled as follows:

**Date:** Wednesday, May 04, 2022 | Time: 9:00 A.M. Pacific Time

**Zoom Link:**

<https://us02web.zoom.us/j/87605880654>

Webinar ID: 876 0588 0654

Call in: 1-669-900-6833

**ALL INTERESTED PARTIES ARE INVITED TO ATTEND THE PUBLIC SCOPING MEETING TO ASSIST IN IDENTIFYING ISSUES TO BE ADDRESSED IN THE EIR. ATTENDEES WILL HAVE AN OPPORTUNITY TO PROVIDE INPUT TO THE CITY OF VERNON AND CONSULTANT TEAM PREPARING THE EIR.**

## **RESPONSIBLE AND TRUSTEE AGENCIES**

The City requests your agency's views on the scope and content of the environmental information relevant to your agency's statutory responsibilities in connection with the Proposed Specific Plan, in accordance with *CEQA Guidelines* Section 15082(b). Your agency will need to use the EIR prepared by the City when considering any permits or other project approvals that your agency must issue. As such, your responses to this Notice of Preparation (NOP), at a minimum, should identify: (1) significant environmental issues and reasonable alternatives and mitigation measures that your agency will need to have explored in the EIR; and (2) whether your agency will be a responsible or trustee agency for this project.

## **REVIEW AND RESPONSE PERIOD**

**In accordance with *CEQA Guidelines* Section 15082, this NOP is being circulated for a 30-day comment period.** Responses to this NOP must be provided during this response period as outlined below:

**Wednesday, April 20, 2022, through Friday, May 20, 2022**

## **DOCUMENT AVAILABILITY**

A hardcopy of the NOP will be available at Vernon City Hall, 4305 S. Santa Fe Avenue, Vernon, CA 90058. In addition, a copy can be viewed at the project website ([ReimagineVernon.com](http://ReimagineVernon.com)). For more information about the Vernon Westside Specific Plan, please visit the project website.



## SUBMITTAL OF WRITTEN COMMENTS

The Lead Agency solicits comments regarding the scope, content, and specificity of the EIR from all interested parties requesting notice, responsible agencies, agencies with jurisdiction by law, trustee agencies, and involved agencies. The City of Vernon requests that written comments be provided at the earliest possible date, but **no later than Friday, May 20, 2022.**

Please submit comments electronically through the project website or send a hard copy via mail (including name and contact information) to the following:

**Project Website:** [ReimagineVernon.com](http://ReimagineVernon.com)

**Mail:**

ATTN: Daniel Wall  
City of Vernon  
4305 S. Santa Fe Avenue  
Vernon, CA 90058

<p><b>30-DAY NOP COMMENT PERIOD:</b> April 20, 2022, through May 20, 2022</p>	<p><b>SCOPING MEETING:</b> <b>Date:</b> May 4, 2022 <b>Time:</b> 9:00 A.M. Pacific Time <b>Zoom Link:</b> <i>see above</i></p>
---	--

**Attachments:**

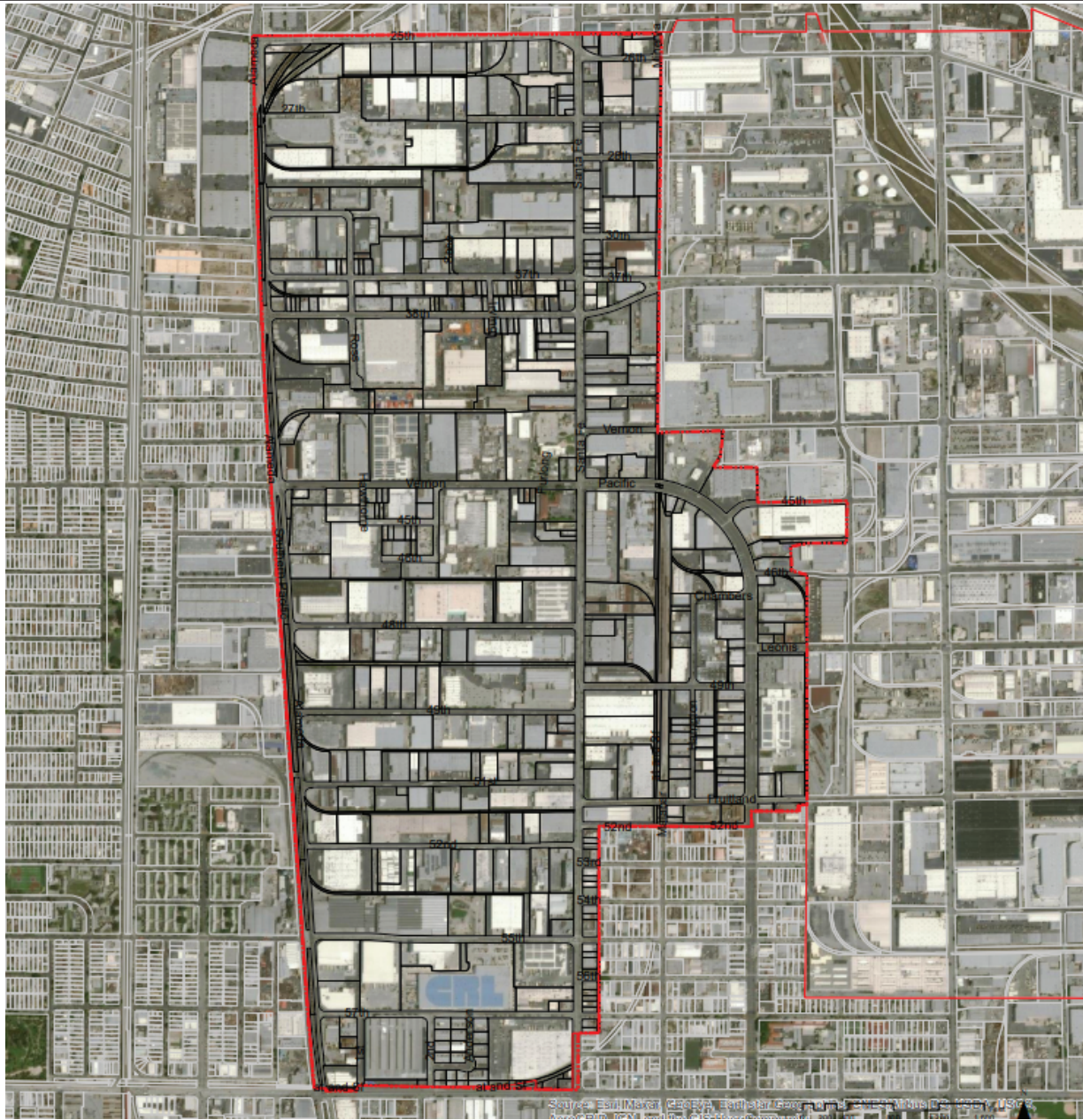
- Figure 1, Regional Context
- Figure 2, Plan Area



SOURCE: Google Earth, 2020

FIGURE 1





SOURCE: Google Earth, 2020

FIGURE 2

Plan Area



---

**Response Letter**

**DEPARTMENT OF TRANSPORTATION**

District 7 – Office of Regional Planning  
100 S. MAIN STREET, MS 16  
LOS ANGELES, CA 90012  
PHONE (213) 266-3562  
FAX (213) 897-1337  
TTY 711  
www.dot.ca.gov



*Making Conservation  
a California Way of Life.*

May 19, 2022

Daniel Wall  
City of Vernon  
4305 S. Santa Fe Avenue  
Vernon CA, 90058

RE: Vernon Westside Specific Plan –  
Notice of Preparation of an  
Environmental Impact Report (NOP)  
SCH # 2022040458  
GTS # 07-LA-2022-03923

Dear Daniel Wall:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced NOP. The Proposed Specific Plan is the preparation of a Specific Plan to spur development of people-centric environments that attract talent and stimulate innovation in the western portion of the City of Vernon. The purpose is to reinvigorate the City's competitive advantage as a center of production; strengthen and provide long-term stability to the City's fiscal position; increase the residential population; diversify and reorient the Westside's land uses to take advantage of changes in the economic landscape of Southern California; increase amenities available to local residents and workers; and create a physical environment that is supportive of diverse land uses, welcoming to the larger region, and enhancing to the City's image and identity. The Proposed Specific Plan is being developed as part of the implementation of the 2021-2029 Housing Element (currently in draft form) and was included as Program 8: Westside Specific Plan. The City of Vernon is the Lead Agency under the California Environmental Quality Act (CEQA).

The Plan Area includes approximately 840 acres located in the western portion of the City of Vernon five miles south of downtown Los Angeles, California.

According to the NOP, it is anticipated that implementation of the Proposed Specific Plan has the potential to result in significant environmental effects to certain topics, including to Transportation, associated with Appendix G of the CEQA Guidelines. Thus, these will be analyzed in detail in the Environmental Impact Report (EIR).

Additionally, Caltrans would request the study of the State facilities on/off-ramps and any arising inadequate weaving or queue spillback onto State facilities. We look forward to reviewing these analyses.

As a reminder, Senate Bill 743 (2013) mandates that Vehicle Miles Traveled (VMT) be used as the primary metric in identifying transportation impacts of all future projects under CEQA, starting July 1, 2020. For information on determining transportation impacts in terms of VMT on

the State Highway System, see the Technical Advisory on Evaluating Transportation Impacts in CEQA by the California Governor's Office of Planning and Research (OPR), dated December 2018. Caltrans has published the VMT-focused Transportation Impact Study Guide (TISG), dated May 20, 2020, and the Caltrans Interim Local Development and Intergovernmental Review (LD-IGR) Safety Review Practitioners Guidance, prepared on December 18, 2020. Caltrans' new TISG is largely based on the OPR 2018 Technical Advisory. You can review these resources online at:

- [http://opr.ca.gov/docs/20190122-743\\_Technical\\_Advisory.pdf](http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf)
- <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf>
- <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb743/2020-12-22-updated-interim-ldigr-safety-review-guidance-a11y.pdf>

We encourage the Lead Agency to evaluate the potential of Transportation Demand Management (TDM) strategies and Intelligent Transportation System (ITS) applications to better manage the transportation network, as well as transit service and bicycle or pedestrian connectivity improvements. For TDM strategies, please refer to the Federal Highway Administration's Integrating Demand Management into the Transportation Planning Process: A Desk Reference (Chapter 8). This reference is available online at: <http://www.ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf>

Caltrans also encourages Lead Agencies to promote alternative transportation. This will increase accessibility and decrease Greenhouse Gas Emissions, which supports Caltrans' mission to provide a safe and reliable transportation network that serves all people and respects the environment. For additional strategies that will promote equity and environmental preservation, please refer to the 2010 Quantifying Greenhouse Gas Mitigation Measures report by the California Air Pollution Control Officers Association (CAPCOA), which is available online at: <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

If you have any questions regarding these comments, please contact Ronnie Escobar, the project coordinator, at [Ronnie.Escobar@dot.ca.gov](mailto:Ronnie.Escobar@dot.ca.gov), and refer to GTS # 07-LA-2022-03923.

Sincerely,



MIYA EDMONSON  
LDR/CEQA Branch Chief

cc: State Clearinghouse

**APPENDIX 3.2**

---

**Air Quality and Greenhouse Gas Data**

# Vernon Westside Specific Plan - Construction Scenario 1 Detailed Report

## Table of Contents

1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year, Unmitigated
3. Construction Emissions Details
  - 3.1. Demolition (2023) - Unmitigated
  - 3.3. Grading (2023) - Unmitigated
  - 3.5. Building Construction (2023) - Unmitigated
  - 3.7. Paving (2023) - Unmitigated
  - 3.9. Architectural Coating (2023) - Unmitigated
4. Operations Emissions Details

#### 4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

#### 5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

## 5.8. Construction Electricity Consumption and Emissions Factors

### 5.18. Vegetation

#### 5.18.1. Land Use Change

##### 5.18.1.1. Unmitigated

#### 5.18.1. Biomass Cover Type

##### 5.18.1.1. Unmitigated

#### 5.18.2. Sequestration

##### 5.18.2.1. Unmitigated

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

### 6.2. Initial Climate Risk Scores

### 6.3. Adjusted Climate Risk Scores

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

### 7.1. CalEnviroScreen 4.0 Scores

### 7.2. Healthy Places Index Scores

### 7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data



# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Vernon Westside Specific Plan - Construction Scenario 1
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	18.4
Location	34.003958357842265, -118.23024627183685
County	Los Angeles-South Coast
City	Vernon
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4117
EDFZ	7
Electric Utility	City of Vernon Municipal Light Department
Gas Utility	City of Vernon Gas System

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	35.0	1000sqft	0.80	0.00	0.00	—	—	—
Parking Lot	15.0	1000sqft	0.34	0.00	0.00	—	—	—

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.06	7.20	17.8	14.5	0.03	0.75	3.37	4.12	0.69	1.49	2.18	—	3,874	3,874	0.19	0.30	0.12	3,969
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03	0.06	0.21	0.20	< 0.005	0.01	0.02	0.03	0.01	0.01	0.02	—	42.7	42.7	< 0.005	< 0.005	0.02	43.3
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	0.01	0.04	0.04	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	7.07	7.07	< 0.005	< 0.005	< 0.005	7.17

### 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	2.06	7.20	17.8	14.5	0.03	0.75	3.37	4.12	0.69	1.49	2.18	—	3,874	3,874	0.19	0.30	0.12	3,969

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.03	0.06	0.21	0.20	< 0.005	0.01	0.02	0.03	0.01	0.01	0.02	—	42.7	42.7	< 0.005	< 0.005	0.02	43.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	< 0.005	0.01	0.04	0.04	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	7.07	7.07	< 0.005	< 0.005	< 0.005	7.17

### 3. Construction Emissions Details

#### 3.1. Demolition (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52	1.27	12.8	11.2	0.02	0.58	—	0.58	0.53	—	0.53	—	1,668	1,668	0.07	0.01	—	1,674
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.14	9.14	< 0.005	< 0.005	—	9.17
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.51	1.51	< 0.005	< 0.005	—	1.52
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.69	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	137	137	0.01	< 0.005	0.02	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.3. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Vernon Westside Specific Plan - Construction Scenario 1 Detailed Report, 10/18/2022

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.86	1.56	15.3	12.9	0.02	0.73	—	0.73	0.67	—	0.67	—	1,945	1,945	0.08	0.02	—	1,952
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.76	1.76	< 0.005	< 0.005	—	1.77
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.69	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	137	137	0.01	< 0.005	0.02	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.14	0.04	2.39	0.88	0.01	0.02	0.14	0.17	0.02	0.04	0.07	—	1,792	1,792	0.11	0.28	0.11	1,879
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.81	9.81	< 0.005	< 0.005	0.01	10.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.62	1.62	< 0.005	< 0.005	< 0.005	1.71

### 3.5. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	5.05	4.25	0.01	0.22	—	0.22	0.20	—	0.20	—	1,143	1,143	0.05	0.01	—	1,147

Vernon Westside Specific Plan - Construction Scenario 1 Detailed Report, 10/18/2022

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.26	6.26	< 0.005	< 0.005	—	6.28	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.04	1.04	< 0.005	< 0.005	—	1.04	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.69	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	—	137	137	0.01	< 0.005	0.02	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.7. Paving (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	2.04	2.36	< 0.005	0.10	—	0.10	0.09	—	0.09	—	372	372	0.02	< 0.005	—	373
Paving	—	0.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.04	2.04	< 0.005	< 0.005	—	2.04
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.34	0.34	< 0.005	< 0.005	—	0.34
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.69	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	137	137	0.01	< 0.005	0.02	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.9. Architectural Coating (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.25	1.54	< 0.005	0.05	—	0.05	0.05	—	0.05	—	178	178	0.01	< 0.005	—	179
Architect ural Coatings	—	6.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Vernon Westside Specific Plan - Construction Scenario 1 Detailed Report, 10/18/2022

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.98	0.98	< 0.005	< 0.005	—	0.98	
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.16	0.16	< 0.005	< 0.005	—	0.16	
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.69	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	—	137	137	0.01	< 0.005	0.02	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.76	0.76	< 0.005	< 0.005	< 0.005	0.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

## 4. Operations Emissions Details

### 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	3/1/2023	3/2/2023	5.00	2.00	—
Grading	Grading	3/7/2023	3/8/2023	5.00	2.00	—
Building Construction	Building Construction	3/9/2023	3/10/2023	5.00	2.00	—
Paving	Paving	3/13/2023	3/14/2023	5.00	2.00	—
Architectural Coating	Architectural Coating	3/15/2023	3/16/2023	5.00	2.00	—

### 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	10.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	25.0	20.0	HHDT

Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	10.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%

## 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	0.00	3,000

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Grading	—	800	2.00	0.00	—
Paving	0.00	0.00	0.00	0.00	1.15

### 5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

## 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	0.80	0%
Parking Lot	0.34	100%

## 5.8. Construction Electricity Consumption and Emissions Factors

### kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	705	0.03	< 0.005

## 5.18. Vegetation

### 5.18.1. Land Use Change



5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.52	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	47.4
AQ-PM	87.9
AQ-DPM	87.9
Drinking Water	48.3
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	89.5
Traffic	56.3
Effect Indicators	—
CleanUp Sites	98.7
Groundwater	81.5
Haz Waste Facilities/Generators	99.4

Impaired Water Bodies	66.7
Solid Waste	89.0
Sensitive Population	—
Asthma	94.9
Cardio-vascular	87.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	1.06
Unemployment	—

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—

Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	8.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	99.8

Physically Disabled	10.4
Heart Attack ER Admissions	15.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	99.4
Elderly	14.8
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.3
Traffic Density	0.0
Traffic Access	58.9
Other Indices	—
Hardship	0.0
Other Decision Support	—

2016 Voting	0.0
-------------	-----

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Example construction scenario to estimate maximum daily emissions.
Construction: Off-Road Equipment	Example construction scenarios.
Construction: Trips and VMT	Construction scenarios.

# Vernon Westside Specific Plan - Construction Scenario 2 Detailed Report

## Table of Contents

1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year, Unmitigated
3. Construction Emissions Details
  - 3.1. Demolition (2023) - Unmitigated
  - 3.3. Grading (2023) - Unmitigated
  - 3.5. Building Construction (2023) - Unmitigated
  - 3.7. Paving (2023) - Unmitigated
  - 3.9. Architectural Coating (2023) - Unmitigated
4. Operations Emissions Details



#### 4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

#### 5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

## 5.8. Construction Electricity Consumption and Emissions Factors

### 5.18. Vegetation

#### 5.18.1. Land Use Change

##### 5.18.1.1. Unmitigated

#### 5.18.1. Biomass Cover Type

##### 5.18.1.1. Unmitigated

#### 5.18.2. Sequestration

##### 5.18.2.1. Unmitigated

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

### 6.2. Initial Climate Risk Scores

### 6.3. Adjusted Climate Risk Scores

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

### 7.1. CalEnviroScreen 4.0 Scores

### 7.2. Healthy Places Index Scores

### 7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Vernon Westside Specific Plan - Construction Scenario 2
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	18.4
Location	34.003983317873505, -118.23026579038702
County	Los Angeles-South Coast
City	Vernon
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4117
EDFZ	7
Electric Utility	City of Vernon Municipal Light Department
Gas Utility	City of Vernon Gas System

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	35.0	1000sqft	0.80	0.00	0.00	—	—	—
Parking Lot	15.0	1000sqft	0.34	0.00	0.00	—	—	—

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.78	7.24	33.0	27.3	0.06	1.35	6.53	7.88	1.25	2.96	4.21	—	7,470	7,470	0.37	0.60	0.24	7,660
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.09	0.51	0.47	< 0.005	0.02	0.04	0.06	0.02	0.02	0.04	—	92.9	92.9	< 0.005	< 0.005	0.03	94.2
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.02	0.09	0.09	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	15.4	15.4	< 0.005	< 0.005	0.01	15.6

### 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	3.78	7.24	33.0	27.3	0.06	1.35	6.53	7.88	1.25	2.96	4.21	—	7,470	7,470	0.37	0.60	0.24	7,660

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.06	0.09	0.51	0.47	< 0.005	0.02	0.04	0.06	0.02	0.02	0.04	—	92.9	92.9	< 0.005	< 0.005	0.03	94.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.01	0.02	0.09	0.09	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	15.4	15.4	< 0.005	< 0.005	0.01	15.6

### 3. Construction Emissions Details

#### 3.1. Demolition (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.03	2.55	25.6	22.4	0.03	1.16	—	1.16	1.07	—	1.07	—	3,337	3,337	0.14	0.03	—	3,348
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.14	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.3	18.3	< 0.005	< 0.005	—	18.3
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.03	3.03	< 0.005	< 0.005	—	3.04
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.12	1.39	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	274	274	0.01	0.01	0.03	277
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.3. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Vernon Westside Specific Plan - Construction Scenario 2 Detailed Report, 10/18/2022

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.38	2.84	28.1	24.1	0.03	1.31	—	1.31	1.20	—	1.20	—	3,614	3,614	0.15	0.03	—	3,626
Dust From Material Movement	—	—	—	—	—	—	5.32	5.32	—	2.65	2.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.8	19.8	< 0.005	< 0.005	—	19.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.28	3.28	< 0.005	< 0.005	—	3.29
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.12	1.39	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	274	274	0.01	0.01	0.03	277
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.29	0.07	4.78	1.76	0.02	0.04	0.29	0.33	0.04	0.09	0.13	—	3,583	3,583	0.21	0.57	0.21	3,757
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	19.6	19.6	< 0.005	< 0.005	0.02	20.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.25	3.25	< 0.005	< 0.005	< 0.005	3.41

### 3.5. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.77	17.9	15.4	0.03	0.80	—	0.80	0.74	—	0.74	—	2,811	2,811	0.11	0.02	—	2,821

Vernon Westside Specific Plan - Construction Scenario 2 Detailed Report, 10/18/2022

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.4	15.4	< 0.005	< 0.005	—	15.5	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.55	2.55	< 0.005	< 0.005	—	2.56	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.12	1.39	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	—	274	274	0.01	0.01	0.03	277
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.7. Paving (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.75	1.47	14.9	13.5	0.02	0.68	—	0.68	0.63	—	0.63	—	2,040	2,040	0.08	0.02	—	2,047
Paving	—	0.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.2	11.2	< 0.005	< 0.005	—	11.2
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.85	1.85	< 0.005	< 0.005	—	1.86
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.12	1.39	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	274	274	0.01	0.01	0.03	277
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.9. Architectural Coating (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.25	1.54	< 0.005	0.05	—	0.05	0.05	—	0.05	—	178	178	0.01	< 0.005	—	179
Architect ural Coatings	—	6.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Vernon Westside Specific Plan - Construction Scenario 2 Detailed Report, 10/18/2022

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.98	0.98	< 0.005	< 0.005	—	0.98	
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.16	0.16	< 0.005	< 0.005	—	0.16	
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.12	1.39	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	274	274	0.01	0.01	0.03	277	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.54	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

## 4. Operations Emissions Details

### 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	3/1/2023	3/2/2023	5.00	2.00	—
Grading	Grading	3/7/2023	3/8/2023	5.00	2.00	—
Building Construction	Building Construction	3/9/2023	3/10/2023	5.00	2.00	—
Paving	Paving	3/13/2023	3/14/2023	5.00	2.00	—
Architectural Coating	Architectural Coating	3/15/2023	3/16/2023	5.00	2.00	—

### 5.2. Off-Road Equipment



### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Building Construction	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Paving	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	20.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT

Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	50.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	20.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	20.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
----------------------------	----------------	-----------------

Water unpaved roads twice daily	55%	55%
---------------------------------	-----	-----

## 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	0.00	3,000

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Grading	—	1,600	3.00	0.00	—
Paving	0.00	0.00	0.00	0.00	1.15

### 5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

## 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	0.80	0%
Parking Lot	0.34	100%

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	705	0.03	< 0.005

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.52	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm

Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
----------------	----------------	-------------------	-------------------------	---------------------

Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	47.4
AQ-PM	87.9
AQ-DPM	87.9
Drinking Water	48.3
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	89.5

Traffic	56.3
Effect Indicators	—
CleanUp Sites	98.7
Groundwater	81.5
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	66.7
Solid Waste	89.0
Sensitive Population	—
Asthma	94.9
Cardio-vascular	87.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	1.06
Unemployment	—

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—

High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	8.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0



Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	99.8
Physically Disabled	10.4
Heart Attack ER Admissions	15.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	99.4
Elderly	14.8
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.3

Traffic Density	0.0
Traffic Access	58.9
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Example construction scenario to estimate maximum daily emissions.

Construction: Off-Road Equipment	Construction scenarios.
Construction: Trips and VMT	Construction scenarios.

# Vernon Westside Specific Plan - Construction Scenario 3 Detailed Report

## Table of Contents

1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year, Unmitigated
3. Construction Emissions Details
  - 3.1. Demolition (2023) - Unmitigated
  - 3.3. Grading (2023) - Unmitigated
  - 3.5. Building Construction (2023) - Unmitigated
  - 3.7. Paving (2023) - Unmitigated
  - 3.9. Architectural Coating (2023) - Unmitigated
4. Operations Emissions Details

#### 4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

#### 5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

## 5.8. Construction Electricity Consumption and Emissions Factors

### 5.18. Vegetation

#### 5.18.1. Land Use Change

##### 5.18.1.1. Unmitigated

#### 5.18.1. Biomass Cover Type

##### 5.18.1.1. Unmitigated

#### 5.18.2. Sequestration

##### 5.18.2.1. Unmitigated

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

### 6.2. Initial Climate Risk Scores

### 6.3. Adjusted Climate Risk Scores

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

### 7.1. CalEnviroScreen 4.0 Scores

### 7.2. Healthy Places Index Scores

### 7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Vernon Westside Specific Plan - Construction Scenario 3
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	18.4
Location	34.003983317873505, -118.23026579038702
County	Los Angeles-South Coast
City	Vernon
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4117
EDFZ	7
Electric Utility	City of Vernon Municipal Light Department
Gas Utility	City of Vernon Gas System

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	35.0	1000sqft	0.80	0.00	0.00	—	—	—
Parking Lot	15.0	1000sqft	0.34	0.00	0.00	—	—	—



### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.27	7.38	63.6	53.5	0.11	2.56	13.0	15.5	2.36	5.94	8.30	—	14,800	14,800	0.74	1.21	0.50	15,181
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	0.15	1.10	1.03	< 0.005	0.05	0.09	0.13	0.04	0.04	0.08	—	197	197	0.01	0.01	0.07	200
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.03	0.20	0.19	< 0.005	0.01	0.02	0.02	0.01	0.01	0.01	—	32.6	32.6	< 0.005	< 0.005	0.01	33.1

### 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	7.27	7.38	63.6	53.5	0.11	2.56	13.0	15.5	2.36	5.94	8.30	—	14,800	14,800	0.74	1.21	0.50	15,181

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.13	0.15	1.10	1.03	< 0.005	0.05	0.09	0.13	0.04	0.04	0.08	—	197	197	0.01	0.01	0.07	200
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.02	0.03	0.20	0.19	< 0.005	0.01	0.02	0.02	0.01	0.01	0.01	—	32.6	32.6	< 0.005	< 0.005	0.01	33.1

### 3. Construction Emissions Details

#### 3.1. Demolition (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.07	5.10	51.3	44.7	0.06	2.33	—	2.33	2.14	—	2.14	—	6,673	6,673	0.27	0.05	—	6,696
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.28	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	36.6	36.6	< 0.005	< 0.005	—	36.7
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.05	6.05	< 0.005	< 0.005	—	6.07
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.23	0.31	3.47	0.00	0.00	0.04	0.04	0.00	0.00	0.00	—	684	684	0.03	0.02	0.08	692
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.80	3.80	< 0.005	< 0.005	0.01	3.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.3. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Vernon Westside Specific Plan - Construction Scenario 3 Detailed Report, 10/18/2022

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.41	5.39	53.8	46.5	0.06	2.47	—	2.47	2.27	—	2.27	—	6,950	6,950	0.28	0.06	—	6,974
Dust From Material Movement	—	—	—	—	—	—	10.4	10.4	—	5.28	5.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	38.1	38.1	< 0.005	< 0.005	—	38.2
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.31	6.31	< 0.005	< 0.005	—	6.33
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.23	0.31	3.47	0.00	0.00	0.04	0.04	0.00	0.00	0.00	—	684	684	0.03	0.02	0.08	692
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.58	0.15	9.56	3.52	0.05	0.09	0.57	0.66	0.09	0.18	0.26	—	7,166	7,166	0.43	1.13	0.42	7,514
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.80	3.80	< 0.005	< 0.005	0.01	3.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	39.3	39.3	< 0.005	0.01	0.04	41.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.50	6.50	< 0.005	< 0.005	0.01	6.82

### 3.5. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.14	4.32	43.5	37.8	0.06	1.96	—	1.96	1.81	—	1.81	—	6,148	6,148	0.25	0.05	—	6,169

Vernon Westside Specific Plan - Construction Scenario 3 Detailed Report, 10/18/2022

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.24	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	33.7	33.7	< 0.005	< 0.005	—	33.8	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.01	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.58	5.58	< 0.005	< 0.005	—	5.60	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.28	0.23	0.31	3.47	0.00	0.00	0.04	0.04	0.00	0.00	0.00	—	684	684	0.03	0.02	0.08	692	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.80	3.80	< 0.005	< 0.005	0.01	3.86	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

### 3.7. Paving (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.78	4.02	40.5	35.9	0.05	1.84	—	1.84	1.70	—	1.70	—	5,377	5,377	0.22	0.04	—	5,395
Paving	—	0.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.5	29.5	< 0.005	< 0.005	—	29.6
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.88	4.88	< 0.005	< 0.005	—	4.89
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.23	0.31	3.47	0.00	0.00	0.04	0.04	0.00	0.00	0.00	—	684	684	0.03	0.02	0.08	692
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.80	3.80	< 0.005	< 0.005	0.01	3.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.9. Architectural Coating (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.25	1.54	< 0.005	0.05	—	0.05	0.05	—	0.05	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	6.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Vernon Westside Specific Plan - Construction Scenario 3 Detailed Report, 10/18/2022

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.98	0.98	< 0.005	< 0.005	—	0.98	
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.16	0.16	< 0.005	< 0.005	—	0.16	
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.23	0.31	3.47	0.00	0.00	0.04	0.04	0.00	0.00	0.00	—	684	684	0.03	0.02	0.08	692	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	3.80	3.80	< 0.005	< 0.005	0.01	3.86	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

## 4. Operations Emissions Details

### 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	3/1/2023	3/2/2023	5.00	2.00	—
Grading	Grading	3/7/2023	3/8/2023	5.00	2.00	—
Building Construction	Building Construction	3/9/2023	3/10/2023	5.00	2.00	—
Paving	Paving	3/13/2023	3/14/2023	5.00	2.00	—
Architectural Coating	Architectural Coating	3/15/2023	3/16/2023	5.00	2.00	—

### 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	4.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	4.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Building Construction	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Paving	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Paving	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	50.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT

Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	50.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	100	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	50.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	50.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	50.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
----------------------------	----------------	-----------------

Water unpaved roads twice daily	55%	55%
---------------------------------	-----	-----

## 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	0.00	3,000

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Grading	—	3,200	3.00	0.00	—
Paving	0.00	0.00	0.00	0.00	1.15

### 5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

## 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	0.80	0%
Parking Lot	0.34	100%

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	705	0.03	< 0.005

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.52	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm



Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
----------------	----------------	-------------------	-------------------------	---------------------

Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	47.4
AQ-PM	87.9
AQ-DPM	87.9
Drinking Water	48.3
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	89.5

Traffic	56.3
Effect Indicators	—
CleanUp Sites	98.7
Groundwater	81.5
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	66.7
Solid Waste	89.0
Sensitive Population	—
Asthma	94.9
Cardio-vascular	87.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	1.06
Unemployment	—

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—

High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	8.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	99.8
Physically Disabled	10.4
Heart Attack ER Admissions	15.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	99.4
Elderly	14.8
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.3

Traffic Density	0.0
Traffic Access	58.9
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Example construction scenario to estimate maximum daily emissions.

Construction: Off-Road Equipment	Construction scenarios.
Construction: Trips and VMT	Construction scenarios.
Construction: Dust From Material Movement	Construction scenarios.

# Vernon Westside Specific Plan - Construction Scenario 4 Detailed Report

## Table of Contents

1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
  - 2.1. Construction Emissions Compared Against Thresholds
  - 2.2. Construction Emissions by Year, Unmitigated
3. Construction Emissions Details
  - 3.1. Demolition (2023) - Unmitigated
  - 3.3. Grading (2023) - Unmitigated
  - 3.5. Building Construction (2023) - Unmitigated
  - 3.7. Paving (2023) - Unmitigated
  - 3.9. Architectural Coating (2023) - Unmitigated
4. Operations Emissions Details



#### 4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

#### 5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

## 5.8. Construction Electricity Consumption and Emissions Factors

### 5.18. Vegetation

#### 5.18.1. Land Use Change

##### 5.18.1.1. Unmitigated

#### 5.18.1. Biomass Cover Type

##### 5.18.1.1. Unmitigated

#### 5.18.2. Sequestration

##### 5.18.2.1. Unmitigated

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

### 6.2. Initial Climate Risk Scores

### 6.3. Adjusted Climate Risk Scores

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

### 7.1. CalEnviroScreen 4.0 Scores

### 7.2. Healthy Places Index Scores

### 7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Vernon Westside Specific Plan - Construction Scenario 4
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	18.4
Location	34.003983317873505, -118.23026579038702
County	Los Angeles-South Coast
City	Vernon
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4117
EDFZ	7
Electric Utility	City of Vernon Municipal Light Department
Gas Utility	City of Vernon Gas System

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	35.0	1000sqft	0.80	0.00	0.00	—	—	—
Parking Lot	15.0	1000sqft	0.34	0.00	0.00	—	—	—

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.28	7.57	81.4	68.0	0.15	3.19	16.7	19.9	2.94	7.56	10.5	—	20,307	20,307	1.04	1.80	0.74	20,871
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.18	0.19	1.42	1.33	< 0.005	0.06	0.11	0.17	0.06	0.05	0.10	—	260	260	0.01	0.01	0.11	264
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03	0.03	0.26	0.24	< 0.005	0.01	0.02	0.03	0.01	0.01	0.02	—	43.1	43.1	< 0.005	< 0.005	0.02	43.7

### 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	9.28	7.57	81.4	68.0	0.15	3.19	16.7	19.9	2.94	7.56	10.5	—	20,307	20,307	1.04	1.80	0.74	20,871

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.18	0.19	1.42	1.33	< 0.005	0.06	0.11	0.17	0.06	0.05	0.10	—	260	260	0.01	0.01	0.11	264
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.03	0.03	0.26	0.24	< 0.005	0.01	0.02	0.03	0.01	0.01	0.02	—	43.1	43.1	< 0.005	< 0.005	0.02	43.7

### 3. Construction Emissions Details

#### 3.1. Demolition (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.59	6.37	64.1	55.9	0.08	2.91	—	2.91	2.67	—	2.67	—	8,342	8,342	0.34	0.07	—	8,370
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.35	0.31	< 0.005	0.02	—	0.02	0.01	—	0.01	—	45.7	45.7	< 0.005	< 0.005	—	45.9
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.57	7.57	< 0.005	< 0.005	—	7.59
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.43	0.44	5.07	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	939	939	0.05	0.04	0.11	951
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	5.22	5.22	< 0.005	< 0.005	0.01	5.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.3. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Vernon Westside Specific Plan - Construction Scenario 4 Detailed Report, 10/18/2022

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.93	6.66	66.6	57.7	0.08	3.05	—	3.05	2.81	—	2.81	—	8,619	8,619	0.35	0.07	—	8,648
Dust From Material Movement	—	—	—	—	—	—	13.0	13.0	—	6.59	6.59	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.36	0.32	< 0.005	0.02	—	0.02	0.02	—	0.02	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.82	7.82	< 0.005	< 0.005	—	7.85
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.43	0.44	5.07	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	939	939	0.05	0.04	0.11	951
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.86	0.22	14.3	5.28	0.07	0.13	0.86	0.99	0.13	0.26	0.40	—	10,749	10,749	0.64	1.70	0.63	11,271
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	5.22	5.22	< 0.005	< 0.005	0.01	5.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	58.9	58.9	< 0.005	0.01	0.06	61.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.75	9.75	< 0.005	< 0.005	0.01	10.2

### 3.5. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.65	5.59	56.3	49.0	0.07	2.55	—	2.55	2.34	—	2.34	—	7,816	7,816	0.32	0.06	—	7,843

Vernon Westside Specific Plan - Construction Scenario 4 Detailed Report, 10/18/2022

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.31	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.8	42.8	< 0.005	< 0.005	—	43.0	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.01	0.01	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.09	7.09	< 0.005	< 0.005	—	7.11	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.49	0.43	0.44	5.07	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	939	939	0.05	0.04	0.11	951	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	5.22	5.22	< 0.005	< 0.005	0.01	5.30	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.88	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

### 3.7. Paving (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.30	5.29	53.3	47.1	0.07	2.42	—	2.42	2.23	—	2.23	—	7,045	7,045	0.29	0.06	—	7,069
Paving	—	0.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.29	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	38.6	38.6	< 0.005	< 0.005	—	38.7
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.39	6.39	< 0.005	< 0.005	—	6.41
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.43	0.44	5.07	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	939	939	0.05	0.04	0.11	951
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	5.22	5.22	< 0.005	< 0.005	0.01	5.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

### 3.9. Architectural Coating (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.25	1.54	< 0.005	0.05	—	0.05	0.05	—	0.05	—	178	178	0.01	< 0.005	—	179
Architect ural Coatings	—	6.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Vernon Westside Specific Plan - Construction Scenario 4 Detailed Report, 10/18/2022

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.98	0.98	< 0.005	< 0.005	—	0.98	
Architectural Coatings	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.16	0.16	< 0.005	< 0.005	—	0.16	
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.43	0.44	5.07	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	939	939	0.05	0.04	0.11	951	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	5.22	5.22	< 0.005	< 0.005	0.01	5.30	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.88	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

## 4. Operations Emissions Details

### 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	3/1/2023	3/2/2023	5.00	2.00	—
Grading	Grading	3/7/2023	3/8/2023	5.00	2.00	—
Building Construction	Building Construction	3/9/2023	3/10/2023	5.00	2.00	—
Paving	Paving	3/13/2023	3/14/2023	5.00	2.00	—
Architectural Coating	Architectural Coating	3/15/2023	3/16/2023	5.00	2.00	—

### 5.2. Off-Road Equipment



### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	5.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	5.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	5.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Building Construction	Rubber Tired Dozers	Diesel	Average	4.00	8.00	367	0.40
Paving	Rubber Tired Dozers	Diesel	Average	4.00	8.00	367	0.40
Paving	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	100	12.6	LDA,LDT1,LDT2
Demolition	Vendor	—	7.75	HHDT,MHDT

Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	100	12.6	LDA,LDT1,LDT2
Grading	Vendor	—	7.75	HHDT,MHDT
Grading	Hauling	150	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	100	12.6	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	7.75	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	100	12.6	LDA,LDT1,LDT2
Paving	Vendor	—	7.75	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	100	12.6	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.75	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
----------------------------	----------------	-----------------

Water unpaved roads twice daily	55%	55%
---------------------------------	-----	-----

## 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	0.00	3,000

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Grading	—	4,800	3.00	0.00	—
Paving	0.00	0.00	0.00	0.00	1.15

### 5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

## 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	0.80	0%
Parking Lot	0.34	100%

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	705	0.03	< 0.005

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.52	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm

Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

### 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
----------------	----------------	-------------------	-------------------------	---------------------

Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	47.4
AQ-PM	87.9
AQ-DPM	87.9
Drinking Water	48.3
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	89.5

Traffic	56.3
Effect Indicators	—
CleanUp Sites	98.7
Groundwater	81.5
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	66.7
Solid Waste	89.0
Sensitive Population	—
Asthma	94.9
Cardio-vascular	87.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	1.06
Unemployment	—

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—

High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	8.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0



Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	99.8
Physically Disabled	10.4
Heart Attack ER Admissions	15.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	99.4
Elderly	14.8
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.3

Traffic Density	0.0
Traffic Access	58.9
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Example construction scenario to estimate maximum daily emissions.

Construction: Off-Road Equipment	Construction scenarios.
Construction: Trips and VMT	Construction scenarios.
Construction: Dust From Material Movement	Construction scenarios.

# Vernon Westside Specific Plan - Existing Detailed Report

## Table of Contents

- 1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
  - 2.4. Operations Emissions Compared Against Thresholds
  - 2.5. Operations Emissions by Sector, Unmitigated
- 4. Operations Emissions Details
  - 4.1. Mobile Emissions by Land Use
    - 4.1.1. Unmitigated
  - 4.2. Energy
    - 4.2.1. Electricity Emissions By Land Use - Unmitigated
    - 4.2.3. Natural Gas Emissions By Land Use - Unmitigated
  - 4.3. Area Emissions by Source

4.3.2. Unmitigated

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

#### 5.10.2. Architectural Coatings

#### 5.10.3. Landscape Equipment

### 5.11. Operational Energy Consumption

#### 5.11.1. Unmitigated

### 5.12. Operational Water and Wastewater Consumption

#### 5.12.1. Unmitigated

### 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

### 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

### 5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

## 8. User Changes to Default Data



# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Vernon Westside Specific Plan - Existing
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	18.4
Location	34.00397253161066, -118.23026079797285
County	Los Angeles-South Coast
City	Vernon
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4117
EDFZ	7
Electric Utility	City of Vernon Municipal Light Department
Gas Utility	City of Vernon Gas System

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	14,942	1000sqft	839	14,942,363	0.00	—	—	—
Apartments Low Rise	13.0	Dwelling Unit	0.81	5,046	0.00	—	34.0	—

Free-Standing Discount store	6.93	1000sqft	0.16	6,930	0.00	—	—	—
------------------------------	------	----------	------	-------	------	---	---	---

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	241	552	409	3,363	7.29	18.1	212	230	18.1	37.7	55.8	16,630	1,165,797	1,182,427	1,732	38.7	6,836	1,244,112
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	125	445	427	2,327	6.97	17.2	212	229	16.9	37.7	54.6	16,630	1,134,784	1,151,414	1,732	39.7	3,966	1,210,497
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	205	518	436	2,876	7.07	17.8	212	230	17.7	37.7	55.4	16,630	1,144,030	1,160,660	1,732	40.1	5,162	1,221,062
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	37.3	94.6	79.5	525	1.29	3.24	38.6	41.9	3.23	6.88	10.1	2,753	189,407	192,160	287	6.63	855	202,161

### 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	107	77.8	231	2,569	6.22	4.11	212	216	3.83	37.7	41.5	—	635,440	635,440	19.6	20.1	2,947	644,876
Area	116	465	5.72	650	0.04	0.89	—	0.89	1.18	—	1.18	0.00	2,908	2,908	0.12	0.25	—	2,987
Energy	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	482,021	482,021	31.1	1.96	—	483,383
Water	—	—	—	—	—	—	—	—	—	—	—	6,623	45,427	52,051	681	16.4	—	73,968
Waste	—	—	—	—	—	—	—	—	—	—	—	10,006	0.00	10,006	1,000	0.00	—	35,009
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Total	241	552	409	3,363	7.29	18.1	212	230	18.1	37.7	55.8	16,630	1,165,797	1,182,427	1,732	38.7	6,836	1,244,112
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	106	77.7	255	2,183	5.94	4.11	212	216	3.83	37.7	41.5	—	607,103	607,103	19.3	21.3	76.4	614,014
Area	0.02	358	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	233	233	< 0.005	< 0.005	—	233
Energy	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	482,021	482,021	31.1	1.96	—	483,383
Water	—	—	—	—	—	—	—	—	—	—	—	6,623	45,427	52,051	681	16.4	—	73,968
Waste	—	—	—	—	—	—	—	—	—	—	—	10,006	0.00	10,006	1,000	0.00	—	35,009
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Total	125	445	427	2,327	6.97	17.2	212	229	16.9	37.7	54.6	16,630	1,134,784	1,151,414	1,732	39.7	3,966	1,210,497
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	107	77.8	260	2,287	6.02	4.11	212	216	3.83	37.7	41.5	—	614,733	614,733	19.4	21.5	1,272	622,911
Area	79.2	431	3.81	445	0.03	0.60	—	0.60	0.80	—	0.80	0.00	1,849	1,849	0.08	0.17	—	1,902
Energy	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	482,021	482,021	31.1	1.96	—	483,383
Water	—	—	—	—	—	—	—	—	—	—	—	6,623	45,427	52,051	681	16.4	—	73,968

Waste	—	—	—	—	—	—	—	—	—	—	—	10,006	0.00	10,006	1,000	0.00	—	35,009
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Total	205	518	436	2,876	7.07	17.8	212	230	17.7	37.7	55.4	16,630	1,144,030	1,160,660	1,732	40.1	5,162	1,221,062
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	19.4	14.2	47.5	417	1.10	0.75	38.6	39.4	0.70	6.88	7.58	—	101,776	101,776	3.20	3.57	211	103,130
Area	14.4	78.7	0.69	81.2	< 0.005	0.11	—	0.11	0.15	—	0.15	0.00	306	306	0.01	0.03	—	315
Energy	3.45	1.72	31.4	26.3	0.19	2.38	—	2.38	2.38	—	2.38	—	79,804	79,804	5.15	0.32	—	80,030
Water	—	—	—	—	—	—	—	—	—	—	—	1,097	7,521	8,618	113	2.71	—	12,246
Waste	—	—	—	—	—	—	—	—	—	—	—	1,657	0.00	1,657	166	0.00	—	5,796
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	644	644
Total	37.3	94.6	79.5	525	1.29	3.24	38.6	41.9	3.23	6.88	10.1	2,753	189,407	192,160	287	6.63	855	202,161

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

### 4.2. Energy

#### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	276,742	276,742	13.0	1.57	—	277,534
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	96.3	96.3	< 0.005	< 0.005	—	96.5
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	131	131	0.01	< 0.005	—	132
Total	—	—	—	—	—	—	—	—	—	—	—	—	276,970	276,970	13.0	1.57	—	277,763
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	276,742	276,742	13.0	1.57	—	277,534
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	96.3	96.3	< 0.005	< 0.005	—	96.5
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	131	131	0.01	< 0.005	—	132
Total	—	—	—	—	—	—	—	—	—	—	—	—	276,970	276,970	13.0	1.57	—	277,763
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	45,818	45,818	2.15	0.26	—	45,949
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	15.9	15.9	< 0.005	< 0.005	—	16.0
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	21.8	21.8	< 0.005	< 0.005	—	21.8

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	45,856	45,856	2.15	0.26	—	45,987
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	--------	--------	------	------	---	--------

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	204,970	204,970	18.1	0.39	—	205,539
Apartments Low Rise	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	67.9	67.9	0.01	< 0.005	—	68.1
Free-Standing Discount store	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.3
Total	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	205,051	205,051	18.1	0.39	—	205,620
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	204,970	204,970	18.1	0.39	—	205,539
Apartments Low Rise	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	67.9	67.9	0.01	< 0.005	—	68.1
Free-Standing Discount store	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.3
Total	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	205,051	205,051	18.1	0.39	—	205,620

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	3.45	1.72	31.4	26.3	0.19	2.38	—	2.38	2.38	—	2.38	—	33,935	33,935	3.00	0.06	—	34,029
Apartments Low Rise	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.2	11.2	< 0.005	< 0.005	—	11.3
Free-Standing Discount store	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.20	2.20	< 0.005	< 0.005	—	2.21
Total	3.45	1.72	31.4	26.3	0.19	2.38	—	2.38	2.38	—	2.38	—	33,949	33,949	3.00	0.06	—	34,043

### 4.3. Area Emissions by Source

#### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.02	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	233	233	< 0.005	< 0.005	—	233
Consumer Products	—	320	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	38.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	116	107	5.54	650	0.04	0.88	—	0.88	1.16	—	1.16	—	2,676	2,676	0.11	0.25	—	2,754
Total	116	465	5.72	650	0.04	0.89	—	0.89	1.18	—	1.18	0.00	2,908	2,908	0.12	0.25	—	2,987

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.02	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	233	233	< 0.005	< 0.005	—	233
Consumer Products	—	320	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	38.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.02	358	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	233	233	< 0.005	< 0.005	—	233
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.64	2.64	< 0.005	< 0.005	—	2.64
Consumer Products	—	58.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	6.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	14.4	13.3	0.69	81.2	< 0.005	0.11	—	0.11	0.15	—	0.15	—	303	303	0.01	0.03	—	312
Total	14.4	78.7	0.69	81.2	< 0.005	0.11	—	0.11	0.15	—	0.15	0.00	306	306	0.01	0.03	—	315

#### 4.4. Water Emissions by Land Use

##### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------



Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6,621	45,414	52,036	681	16.4	—	73,946
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.93	6.37	7.30	0.10	< 0.005	—	10.4
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	0.98	6.75	7.73	0.10	< 0.005	—	11.0
Total	—	—	—	—	—	—	—	—	—	—	—	6,623	45,427	52,051	681	16.4	—	73,968
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6,621	45,414	52,036	681	16.4	—	73,946
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.93	6.37	7.30	0.10	< 0.005	—	10.4
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	0.98	6.75	7.73	0.10	< 0.005	—	11.0
Total	—	—	—	—	—	—	—	—	—	—	—	6,623	45,427	52,051	681	16.4	—	73,968
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,096	7,519	8,615	113	2.71	—	12,243
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.15	1.05	1.21	0.02	< 0.005	—	1.72

Free-Standing	—	—	—	—	—	—	—	—	—	—	—	0.16	1.12	1.28	0.02	< 0.005	—	1.82
Total	—	—	—	—	—	—	—	—	—	—	—	1,097	7,521	8,618	113	2.71	—	12,246

#### 4.5. Waste Emissions by Land Use

##### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	9,986	0.00	9,986	998	0.00	—	34,937
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	4.58	0.00	4.58	0.46	0.00	—	16.0
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	16.1	0.00	16.1	1.61	0.00	—	56.2
Total	—	—	—	—	—	—	—	—	—	—	—	10,006	0.00	10,006	1,000	0.00	—	35,009
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	9,986	0.00	9,986	998	0.00	—	34,937
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	4.58	0.00	4.58	0.46	0.00	—	16.0

Free-Standing	—	—	—	—	—	—	—	—	—	—	—	16.1	0.00	16.1	1.61	0.00	—	56.2
Total	—	—	—	—	—	—	—	—	—	—	—	10,006	0.00	10,006	1,000	0.00	—	35,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,653	0.00	1,653	165	0.00	—	5,784
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.76	0.00	0.76	0.08	0.00	—	2.65
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	2.66	0.00	2.66	0.27	0.00	—	9.30
Total	—	—	—	—	—	—	—	—	—	—	—	1,657	0.00	1,657	166	0.00	—	5,796

#### 4.6. Refrigerant Emissions by Land Use

##### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	644	644
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	644	644

4.7. Offroad Emissions By Equipment Type

#### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.8. Stationary Emissions By Equipment Type

##### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.9. User Defined Emissions By Equipment Type

##### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	760,914	760,914	760,914	277,733,610

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	11
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	2

#### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
10218.15	3,406	22,423,940	7,474,647	—

#### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	143,338,144	705	0.0330	0.0040	639,562,148
Apartments Low Rise	49,856	705	0.0330	0.0040	211,974
Free-Standing Discount store	68,062	705	0.0330	0.0040	41,490

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	3,455,421,444	0.00
Apartments Low Rise	484,559	0.00
Free-Standing Discount store	513,323	0.00

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	18,529	0.00
Apartments Low Rise	3.25	0.00

Free-Standing Discount store	29.8	0.00
------------------------------	------	------

### 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Free-Standing Discount store	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Free-Standing Discount store	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

### 5.15. Operational Off-Road Equipment

#### 5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
----------------	-----------	-------------	----------------	---------------	------------	-------------

### 5.16. Stationary Sources

#### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
----------------	-----------	----------------	---------------	----------------	------------	-------------

### 5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
----------------	-----------	--------	--------------------------	------------------------------	------------------------------

### 5.17. User Defined

Equipment Type	Fuel Type
—	—

### 5.18. Vegetation

#### 5.18.1. Land Use Change

##### 5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

#### 5.18.1. Biomass Cover Type

##### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

#### 5.18.2. Sequestration

##### 5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

## 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.52	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

### 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

### 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	47.4

AQ-PM	87.9
AQ-DPM	87.9
Drinking Water	48.3
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	89.5
Traffic	56.3
Effect Indicators	—
CleanUp Sites	98.7
Groundwater	81.5
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	66.7
Solid Waste	89.0
Sensitive Population	—
Asthma	94.9
Cardio-vascular	87.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	1.06
Unemployment	—

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
-----------	---------------------------------

Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—



Insured adults	—
Arthritis	0.0
Asthma ER Admissions	8.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	99.8
Physically Disabled	10.4
Heart Attack ER Admissions	15.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	99.4

Elderly	14.8
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.3
Traffic Density	0.0
Traffic Access	58.9
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
Land Use	Square footage/dwelling units from Project Description Table 2.0-1. Population and total lot acreage edits based on Project Description information.
Operations: Hearths	Assumed no wood fireplaces or stoves.

# Vernon Westside Specific Plan - 2040 No Project Detailed Report

## Table of Contents

### 1. Basic Project Information

#### 1.1. Basic Project Information

#### 1.2. Land Use Types

#### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

### 2. Emissions Summary

#### 2.4. Operations Emissions Compared Against Thresholds

#### 2.5. Operations Emissions by Sector, Unmitigated

### 4. Operations Emissions Details

#### 4.1. Mobile Emissions by Land Use

##### 4.1.1. Unmitigated

#### 4.2. Energy

##### 4.2.1. Electricity Emissions By Land Use - Unmitigated

##### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

#### 4.3. Area Emissions by Source

4.3.2. Unmitigated

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

#### 5.10.2. Architectural Coatings

#### 5.10.3. Landscape Equipment

### 5.11. Operational Energy Consumption

#### 5.11.1. Unmitigated

### 5.12. Operational Water and Wastewater Consumption

#### 5.12.1. Unmitigated

### 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

### 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

### 5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

## 8. User Changes to Default Data



# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Vernon Westside Specific Plan - 2040 No Project
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	18.4
Location	34.00399979327008, -118.23019683044045
County	Los Angeles-South Coast
City	Vernon
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4118
EDFZ	7
Electric Utility	City of Vernon Municipal Light Department
Gas Utility	City of Vernon Gas System

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Heavy Industry	14,942	1000sqft	343	14,942,000	0.00	—	—	—
Apartments Low Rise	13.0	Dwelling Unit	0.81	13,780	0.00	—	38.0	—

Free-Standing Discount store	6.93	1000sqft	0.16	6,930	0.00	—	—	—
------------------------------	------	----------	------	-------	------	---	---	---

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	200	523	259	2,272	5.98	15.8	217	233	16.0	38.7	54.7	16,630	1,031,021	1,047,651	1,724	32.2	4,170	1,104,534
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	82.5	415	262	1,414	5.73	15.0	217	232	14.8	38.7	53.5	16,630	1,006,957	1,023,587	1,724	32.6	3,897	1,080,290
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	162	489	267	1,914	5.81	15.5	217	233	15.6	38.7	54.3	16,630	1,014,292	1,030,922	1,724	32.9	4,011	1,087,831
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.6	89.2	48.7	349	1.06	2.84	39.6	42.5	2.85	7.06	9.91	2,753	167,928	170,681	285	5.44	664	180,103

### 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	64.8	48.7	81.6	1,476	4.91	1.88	217	219	1.76	38.7	40.5	—	500,636	500,636	11.6	13.6	281	505,270
Area	116	465	5.69	651	0.04	0.89	—	0.89	1.17	—	1.17	0.00	2,949	2,949	0.12	0.25	—	3,028
Energy	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	482,010	482,010	31.1	1.96	—	483,371
Water	—	—	—	—	—	—	—	—	—	—	—	6,623	45,426	52,049	681	16.4	—	73,966
Waste	—	—	—	—	—	—	—	—	—	—	—	10,007	0.00	10,007	1,000	0.00	—	35,010
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Total	200	523	259	2,272	5.98	15.8	217	233	16.0	38.7	54.7	16,630	1,031,021	1,047,651	1,724	32.2	4,170	1,104,534
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	63.6	47.8	89.4	1,270	4.70	1.88	217	219	1.76	38.7	40.5	—	479,247	479,247	11.4	14.2	7.28	483,780
Area	0.03	358	0.22	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	274	274	0.01	< 0.005	—	274
Energy	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	482,010	482,010	31.1	1.96	—	483,371
Water	—	—	—	—	—	—	—	—	—	—	—	6,623	45,426	52,049	681	16.4	—	73,966
Waste	—	—	—	—	—	—	—	—	—	—	—	10,007	0.00	10,007	1,000	0.00	—	35,010
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Total	82.5	415	262	1,414	5.73	15.0	217	232	14.8	38.7	53.5	16,630	1,006,957	1,023,587	1,724	32.6	3,897	1,080,290
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	63.8	48.0	91.3	1,324	4.76	1.88	217	219	1.76	38.7	40.5	—	485,005	485,005	11.4	14.4	121	489,690
Area	79.4	431	3.77	446	0.03	0.60	—	0.60	0.79	—	0.79	0.00	1,851	1,851	0.08	0.17	—	1,905
Energy	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	482,010	482,010	31.1	1.96	—	483,371
Water	—	—	—	—	—	—	—	—	—	—	—	6,623	45,426	52,049	681	16.4	—	73,966

Waste	—	—	—	—	—	—	—	—	—	—	—	10,007	0.00	10,007	1,000	0.00	—	35,010
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Total	162	489	267	1,914	5.81	15.5	217	233	15.6	38.7	54.3	16,630	1,014,292	1,030,922	1,724	32.9	4,011	1,087,831
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.6	8.75	16.7	242	0.87	0.34	39.6	40.0	0.32	7.06	7.39	—	80,298	80,298	1.90	2.38	20.1	81,074
Area	14.5	78.7	0.69	81.4	< 0.005	0.11	—	0.11	0.14	—	0.14	0.00	307	307	0.01	0.03	—	315
Energy	3.45	1.72	31.4	26.3	0.19	2.38	—	2.38	2.38	—	2.38	—	79,802	79,802	5.15	0.32	—	80,028
Water	—	—	—	—	—	—	—	—	—	—	—	1,097	7,521	8,617	113	2.71	—	12,246
Waste	—	—	—	—	—	—	—	—	—	—	—	1,657	0.00	1,657	166	0.00	—	5,796
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	644	644
Total	29.6	89.2	48.7	349	1.06	2.84	39.6	42.5	2.85	7.06	9.91	2,753	167,928	170,681	285	5.44	664	180,103

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

### 4.2. Energy

#### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	276,736	276,736	13.0	1.57	—	277,528
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	96.3	96.3	< 0.005	< 0.005	—	96.5
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	131	131	0.01	< 0.005	—	132
Total	—	—	—	—	—	—	—	—	—	—	—	—	276,963	276,963	13.0	1.57	—	277,756
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	276,736	276,736	13.0	1.57	—	277,528
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	96.3	96.3	< 0.005	< 0.005	—	96.5
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	131	131	0.01	< 0.005	—	132
Total	—	—	—	—	—	—	—	—	—	—	—	—	276,963	276,963	13.0	1.57	—	277,756
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	45,817	45,817	2.15	0.26	—	45,948
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	15.9	15.9	< 0.005	< 0.005	—	16.0
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	21.8	21.8	< 0.005	< 0.005	—	21.8

Total	—	—	—	—	—	—	—	—	—	—	—	—	45,854	45,854	2.15	0.26	—	45,986
-------	---	---	---	---	---	---	---	---	---	---	---	---	--------	--------	------	------	---	--------

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	204,965	204,965	18.1	0.39	—	205,534
Apartments Low Rise	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	67.9	67.9	0.01	< 0.005	—	68.1
Free-Standing Discount store	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.3
Total	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	205,047	205,047	18.1	0.39	—	205,615
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	204,965	204,965	18.1	0.39	—	205,534
Apartments Low Rise	0.01	< 0.005	0.05	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	67.9	67.9	0.01	< 0.005	—	68.1
Free-Standing Discount store	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.3	13.3	< 0.005	< 0.005	—	13.3
Total	18.9	9.45	172	144	1.03	13.1	—	13.1	13.1	—	13.1	—	205,047	205,047	18.1	0.39	—	205,615

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	3.45	1.72	31.4	26.3	0.19	2.38	—	2.38	2.38	—	2.38	—	33,934	33,934	3.00	0.06	—	34,028
Apartments Low Rise	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.2	11.2	< 0.005	< 0.005	—	11.3
Free-Standing Discount store	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.20	2.20	< 0.005	< 0.005	—	2.21
Total	3.45	1.72	31.4	26.3	0.19	2.38	—	2.38	2.38	—	2.38	—	33,948	33,948	3.00	0.06	—	34,042

### 4.3. Area Emissions by Source

#### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.03	0.01	0.22	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	274	274	0.01	< 0.005	—	274
Consumer Products	—	320	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	38.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	116	107	5.48	651	0.04	0.87	—	0.87	1.16	—	1.16	—	2,676	2,676	0.11	0.25	—	2,754
Total	116	465	5.69	651	0.04	0.89	—	0.89	1.17	—	1.17	0.00	2,949	2,949	0.12	0.25	—	3,028

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.03	0.01	0.22	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	274	274	0.01	< 0.005	—	274
Consumer Products	—	320	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	38.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.03	358	0.22	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	274	274	0.01	< 0.005	—	274
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.10	3.10	< 0.005	< 0.005	—	3.11
Consumer Products	—	58.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	6.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	14.5	13.4	0.68	81.4	< 0.005	0.11	—	0.11	0.14	—	0.14	—	303	303	0.01	0.03	—	312
Total	14.5	78.7	0.69	81.4	< 0.005	0.11	—	0.11	0.14	—	0.14	0.00	307	307	0.01	0.03	—	315

#### 4.4. Water Emissions by Land Use

##### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------



Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6,621	45,413	52,034	681	16.4	—	73,945
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.93	6.37	7.30	0.10	< 0.005	—	10.4
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	0.98	6.75	7.73	0.10	< 0.005	—	11.0
Total	—	—	—	—	—	—	—	—	—	—	—	6,623	45,426	52,049	681	16.4	—	73,966
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6,621	45,413	52,034	681	16.4	—	73,945
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.93	6.37	7.30	0.10	< 0.005	—	10.4
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	0.98	6.75	7.73	0.10	< 0.005	—	11.0
Total	—	—	—	—	—	—	—	—	—	—	—	6,623	45,426	52,049	681	16.4	—	73,966
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,096	7,519	8,615	113	2.71	—	12,242
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.15	1.05	1.21	0.02	< 0.005	—	1.72

Free-Standing	—	—	—	—	—	—	—	—	—	—	—	0.16	1.12	1.28	0.02	< 0.005	—	1.82
Total	—	—	—	—	—	—	—	—	—	—	—	1,097	7,521	8,617	113	2.71	—	12,246

#### 4.5. Waste Emissions by Land Use

##### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	9,986	0.00	9,986	998	0.00	—	34,936
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	5.12	0.00	5.12	0.51	0.00	—	17.9
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	16.1	0.00	16.1	1.61	0.00	—	56.2
Total	—	—	—	—	—	—	—	—	—	—	—	10,007	0.00	10,007	1,000	0.00	—	35,010
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	9,986	0.00	9,986	998	0.00	—	34,936
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	5.12	0.00	5.12	0.51	0.00	—	17.9

Free-Standing	—	—	—	—	—	—	—	—	—	—	—	16.1	0.00	16.1	1.61	0.00	—	56.2
Total	—	—	—	—	—	—	—	—	—	—	—	10,007	0.00	10,007	1,000	0.00	—	35,010
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,653	0.00	1,653	165	0.00	—	5,784
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.85	0.00	0.85	0.08	0.00	—	2.96
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	2.66	0.00	2.66	0.27	0.00	—	9.30
Total	—	—	—	—	—	—	—	—	—	—	—	1,657	0.00	1,657	166	0.00	—	5,796

#### 4.6. Refrigerant Emissions by Land Use

##### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,889	3,889
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10

Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,889	3,889
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,890	3,890
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	644	644
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	644	644

4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### 4.8. Stationary Emissions By Equipment Type

#### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.9. User Defined Emissions By Equipment Type

##### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	779,427	779,427	779,427	284,490,855

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	13
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

#### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
27904.5	9,302	22,423,395	7,474,465	—

### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	143,334,662	705	0.0330	0.0040	639,546,611
Apartments Low Rise	49,856	705	0.0330	0.0040	211,974
Free-Standing Discount store	68,062	705	0.0330	0.0040	41,490

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	3,455,337,500	0.00
Apartments Low Rise	484,559	0.00
Free-Standing Discount store	513,323	0.00

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	18,528	0.00
Apartments Low Rise	3.25	0.00
Free-Standing Discount store	29.8	0.00

### 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Free-Standing Discount store	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Free-Standing Discount store	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

### 5.15. Operational Off-Road Equipment

#### 5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
----------------	-----------	-------------	----------------	---------------	------------	-------------

### 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
----------------	-----------	----------------	---------------	----------------	------------	-------------

### 5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
----------------	-----------	--------	--------------------------	------------------------------	------------------------------

### 5.17. User Defined

Equipment Type	Fuel Type
—	—

### 5.18. Vegetation

#### 5.18.1. Land Use Change

##### 5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

#### 5.18.1. Biomass Cover Type

##### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

#### 5.18.2. Sequestration

##### 5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.52	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

### 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

### 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
-----------	---------------------------------

Exposure Indicators	—
AQ-Ozone	47.4
AQ-PM	87.9
AQ-DPM	87.9
Drinking Water	48.3
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	89.5
Traffic	56.3
Effect Indicators	—
CleanUp Sites	98.7
Groundwater	81.5
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	66.7
Solid Waste	89.0
Sensitive Population	—
Asthma	94.9
Cardio-vascular	87.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	1.06
Unemployment	—

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—



Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	8.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	99.8
Physically Disabled	10.4
Heart Attack ER Admissions	15.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	99.4
Elderly	14.8
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.3
Traffic Density	0.0
Traffic Access	58.9
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
Operations: Hearths	Assumed natural gas fireplaces.

# Vernon Westside Specific Plan - Future 2040 Detailed Report

## Table of Contents

- 1. Basic Project Information
  - 1.1. Basic Project Information
  - 1.2. Land Use Types
  - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
  - 2.4. Operations Emissions Compared Against Thresholds
  - 2.5. Operations Emissions by Sector, Unmitigated
- 4. Operations Emissions Details
  - 4.1. Mobile Emissions by Land Use
    - 4.1.1. Unmitigated
  - 4.2. Energy
    - 4.2.1. Electricity Emissions By Land Use - Unmitigated
    - 4.2.3. Natural Gas Emissions By Land Use - Unmitigated
  - 4.3. Area Emissions by Source

4.3.2. Unmitigated

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

#### 5.10.2. Architectural Coatings

#### 5.10.3. Landscape Equipment

### 5.11. Operational Energy Consumption

#### 5.11.1. Unmitigated

### 5.12. Operational Water and Wastewater Consumption

#### 5.12.1. Unmitigated

### 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

### 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

### 5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

## 8. User Changes to Default Data



# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Vernon Westside Specific Plan - Future 2040
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	18.4
Location	34.008143302968094, -118.22509658271395
County	Los Angeles-South Coast
City	Vernon
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4117
EDFZ	7
Electric Utility	City of Vernon Municipal Light Department
Gas Utility	City of Vernon Gas System

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	887	Dwelling Unit	23.3	810,690	0.00	—	1,780	—
Regional Shopping Center	127	1000sqft	2.92	126,989	0.00	—	—	—
Manufacturing	613	1000sqft	14.1	613,450	0.00	—	—	—

General Heavy Industry	14,367	1000sqft	330	14,366,814	0.00	—	—	—
------------------------	--------	----------	-----	------------	------	---	---	---

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	209	553	279	2,362	6.18	17.3	221	238	17.5	39.4	56.9	17,042	1,072,225	1,089,267	1,767	32.8	4,191	1,147,418
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	85.7	440	281	1,445	5.93	16.4	221	238	16.3	39.4	55.7	17,042	1,047,616	1,064,658	1,767	33.2	3,913	1,122,624
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	168	516	273	1,979	5.93	15.9	221	237	16.0	39.4	55.4	17,042	1,038,022	1,055,064	1,767	33.4	4,029	1,113,224
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	30.6	94.1	49.8	361	1.08	2.90	40.4	43.3	2.92	7.19	10.1	2,822	171,856	174,678	292	5.54	667	184,307

### 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	66.0	49.6	83.1	1,503	5.00	1.91	221	223	1.79	39.4	41.2	—	509,603	509,603	11.8	13.9	286	514,319
Area	123	494	20.7	714	0.14	2.09	—	2.09	2.38	—	2.38	0.00	21,513	21,513	0.47	0.30	—	21,615
Energy	19.3	9.63	175	146	1.05	13.3	—	13.3	13.3	—	13.3	—	495,021	495,021	31.9	2.02	—	496,420
Water	—	—	—	—	—	—	—	—	—	—	—	6,720	46,087	52,807	691	16.6	—	75,043
Waste	—	—	—	—	—	—	—	—	—	—	—	10,323	0.00	10,323	1,032	0.00	—	36,115
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,906	3,906
Total	209	553	279	2,362	6.18	17.3	221	238	17.5	39.4	56.9	17,042	1,072,225	1,089,267	1,767	32.8	4,191	1,147,418
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	64.7	48.6	91.0	1,293	4.78	1.91	221	223	1.79	39.4	41.2	—	487,831	487,831	11.6	14.5	7.41	492,444
Area	1.72	381	14.7	6.26	0.09	1.19	—	1.19	1.19	—	1.19	0.00	18,677	18,677	0.35	0.04	—	18,696
Energy	19.3	9.63	175	146	1.05	13.3	—	13.3	13.3	—	13.3	—	495,021	495,021	31.9	2.02	—	496,420
Water	—	—	—	—	—	—	—	—	—	—	—	6,720	46,087	52,807	691	16.6	—	75,043
Waste	—	—	—	—	—	—	—	—	—	—	—	10,323	0.00	10,323	1,032	0.00	—	36,115
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,906	3,906
Total	85.7	440	281	1,445	5.93	16.4	221	238	16.3	39.4	55.7	17,042	1,047,616	1,064,658	1,767	33.2	3,913	1,122,624
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	65.0	48.8	92.9	1,348	4.84	1.91	221	223	1.79	39.4	41.2	—	493,692	493,692	11.7	14.6	123	498,460
Area	83.4	457	5.11	485	0.03	0.70	—	0.70	0.90	—	0.90	0.00	3,222	3,222	0.11	0.19	—	3,280
Energy	19.3	9.63	175	146	1.05	13.3	—	13.3	13.3	—	13.3	—	495,021	495,021	31.9	2.02	—	496,420
Water	—	—	—	—	—	—	—	—	—	—	—	6,720	46,087	52,807	691	16.6	—	75,043

Waste	—	—	—	—	—	—	—	—	—	—	—	10,323	0.00	10,323	1,032	0.00	—	36,115
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,906	3,906
Total	168	516	273	1,979	5.93	15.9	221	237	16.0	39.4	55.4	17,042	1,038,022	1,055,064	1,767	33.4	4,029	1,113,224
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.9	8.91	17.0	246	0.88	0.35	40.4	40.7	0.33	7.19	7.52	—	81,736	81,736	1.93	2.42	20.4	82,526
Area	15.2	83.5	0.93	88.5	0.01	0.13	—	0.13	0.16	—	0.16	0.00	533	533	0.02	0.03	—	543
Energy	3.51	1.76	31.9	26.6	0.19	2.43	—	2.43	2.43	—	2.43	—	81,956	81,956	5.28	0.33	—	82,188
Water	—	—	—	—	—	—	—	—	—	—	—	1,113	7,630	8,743	114	2.75	—	12,424
Waste	—	—	—	—	—	—	—	—	—	—	—	1,709	0.00	1,709	171	0.00	—	5,979
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	647	647
Total	30.6	94.1	49.8	361	1.08	2.90	40.4	43.3	2.92	7.19	10.1	2,822	171,856	174,678	292	5.54	667	184,307

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

### 4.2. Energy

#### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	6,278	6,278	0.29	0.04	—	6,296
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	2,408	2,408	0.11	0.01	—	2,415
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	11,361	11,361	0.53	0.06	—	11,394
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	266,083	266,083	12.5	1.51	—	266,844
Total	—	—	—	—	—	—	—	—	—	—	—	—	286,130	286,130	13.4	1.62	—	286,949
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	6,278	6,278	0.29	0.04	—	6,296
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	2,408	2,408	0.11	0.01	—	2,415
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	11,361	11,361	0.53	0.06	—	11,394
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	266,083	266,083	12.5	1.51	—	266,844
Total	—	—	—	—	—	—	—	—	—	—	—	—	286,130	286,130	13.4	1.62	—	286,949
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,039	1,039	0.05	0.01	—	1,042
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	399	399	0.02	< 0.005	—	400
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	1,881	1,881	0.09	0.01	—	1,886

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	44,053	44,053	2.06	0.25	—	44,179
Total	—	—	—	—	—	—	—	—	—	—	—	—	47,372	47,372	2.22	0.27	—	47,508

#### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.29	0.15	2.49	1.06	0.02	0.20	—	0.20	0.20	—	0.20	—	3,157	3,157	0.28	0.01	—	3,166
Regional Shopping Center	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	244	244	0.02	< 0.005	—	244
Manufacturing	0.78	0.39	7.05	5.92	0.04	0.54	—	0.54	0.54	—	0.54	—	8,415	8,415	0.74	0.02	—	8,438
General Heavy Industry	18.2	9.08	165	139	0.99	12.6	—	12.6	12.6	—	12.6	—	197,075	197,075	17.4	0.37	—	197,622
Total	19.3	9.63	175	146	1.05	13.3	—	13.3	13.3	—	13.3	—	208,891	208,891	18.5	0.39	—	209,471
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.29	0.15	2.49	1.06	0.02	0.20	—	0.20	0.20	—	0.20	—	3,157	3,157	0.28	0.01	—	3,166
Regional Shopping Center	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	244	244	0.02	< 0.005	—	244

Manufacturing	0.78	0.39	7.05	5.92	0.04	0.54	—	0.54	0.54	—	0.54	—	8,415	8,415	0.74	0.02	—	8,438
General Heavy Industry	18.2	9.08	165	139	0.99	12.6	—	12.6	12.6	—	12.6	—	197,075	197,075	17.4	0.37	—	197,622
Total Annual	19.3	9.63	175	146	1.05	13.3	—	13.3	13.3	—	13.3	—	208,891	208,891	18.5	0.39	—	209,471
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.03	0.45	0.19	< 0.005	0.04	—	0.04	0.04	—	0.04	—	523	523	0.05	< 0.005	—	524
Regional Shopping Center	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.3	40.3	< 0.005	< 0.005	—	40.5
Manufacturing	0.14	0.07	1.29	1.08	0.01	0.10	—	0.10	0.10	—	0.10	—	1,393	1,393	0.12	< 0.005	—	1,397
General Heavy Industry	3.32	1.66	30.1	25.3	0.18	2.29	—	2.29	2.29	—	2.29	—	32,628	32,628	2.89	0.06	—	32,719
Total	3.51	1.76	31.9	26.6	0.19	2.43	—	2.43	2.43	—	2.43	—	34,584	34,584	3.06	0.07	—	34,680

### 4.3. Area Emissions by Source

#### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.72	0.86	14.7	6.26	0.09	1.19	—	1.19	1.19	—	1.19	0.00	18,677	18,677	0.35	0.04	—	18,696
Consumer Products	—	341	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	39.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	122	112	5.99	708	0.04	0.90	—	0.90	1.19	—	1.19	—	2,836	2,836	0.12	0.27	—	2,919
Total	123	494	20.7	714	0.14	2.09	—	2.09	2.38	—	2.38	0.00	21,513	21,513	0.47	0.30	—	21,615
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.72	0.86	14.7	6.26	0.09	1.19	—	1.19	1.19	—	1.19	0.00	18,677	18,677	0.35	0.04	—	18,696
Consumer Products	—	341	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	39.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.72	381	14.7	6.26	0.09	1.19	—	1.19	1.19	—	1.19	0.00	18,677	18,677	0.35	0.04	—	18,696
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.02	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	212	212	< 0.005	< 0.005	—	212
Consumer Products	—	62.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	7.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	15.2	14.0	0.75	88.5	0.01	0.11	—	0.11	0.15	—	0.15	—	322	322	0.01	0.03	—	331
Total	15.2	83.5	0.93	88.5	0.01	0.13	—	0.13	0.16	—	0.16	0.00	533	533	0.02	0.03	—	543

#### 4.4. Water Emissions by Land Use



4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	63.4	435	498	6.52	0.16	—	708
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	18.0	124	142	1.85	0.04	—	201
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	272	1,864	2,136	28.0	0.67	—	3,036
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6,366	43,665	50,031	655	15.8	—	71,098
Total	—	—	—	—	—	—	—	—	—	—	—	6,720	46,087	52,807	691	16.6	—	75,043
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	63.4	435	498	6.52	0.16	—	708
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	18.0	124	142	1.85	0.04	—	201
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	272	1,864	2,136	28.0	0.67	—	3,036
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	6,366	43,665	50,031	655	15.8	—	71,098
Total	—	—	—	—	—	—	—	—	—	—	—	6,720	46,087	52,807	691	16.6	—	75,043

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	10.5	71.9	82.4	1.08	0.03	—	117
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	2.98	20.5	23.5	0.31	0.01	—	33.3
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	45.0	309	354	4.63	0.11	—	503
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,054	7,229	8,283	108	2.61	—	11,771
Total	—	—	—	—	—	—	—	—	—	—	—	1,113	7,630	8,743	114	2.75	—	12,424

## 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	240	0.00	240	24.0	0.00	—	838
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	71.9	0.00	71.9	7.18	0.00	—	251
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	410	0.00	410	41.0	0.00	—	1,434
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	9,601	0.00	9,601	960	0.00	—	33,591

Total	—	—	—	—	—	—	—	—	—	—	—	10,323	0.00	10,323	1,032	0.00	—	36,115
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	240	0.00	240	24.0	0.00	—	838
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	71.9	0.00	71.9	7.18	0.00	—	251
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	410	0.00	410	41.0	0.00	—	1,434
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	9,601	0.00	9,601	960	0.00	—	33,591
Total	—	—	—	—	—	—	—	—	—	—	—	10,323	0.00	10,323	1,032	0.00	—	36,115
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	39.7	0.00	39.7	3.97	0.00	—	139
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	11.9	0.00	11.9	1.19	0.00	—	41.6
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	67.9	0.00	67.9	6.78	0.00	—	237
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	1,590	0.00	1,590	159	0.00	—	5,561
Total	—	—	—	—	—	—	—	—	—	—	—	1,709	0.00	1,709	171	0.00	—	5,979

#### 4.6. Refrigerant Emissions by Land Use

##### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.81	5.81
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	160	160
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,740	3,740
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,906	3,906
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.81	5.81
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	160	160
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,740	3,740
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,906	3,906
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.96	0.96
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.4	26.4
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	619	619
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	647	647

### 4.7. Offroad Emissions By Equipment Type

#### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### 4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

##### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	793,387	793,387	793,387	289,586,255

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0

Gas Fireplaces	887
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1641647.25	547,216	22,660,880	7,553,627	—

### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	3,251,595	705	0.0330	0.0040	9,851,770
Regional Shopping Center	1,247,205	705	0.0330	0.0040	760,276
Manufacturing	5,884,664	705	0.0330	0.0040	26,256,851

General Heavy Industry	137,817,055	705	0.0330	0.0040	614,927,533
------------------------	-------------	-----	--------	--------	-------------

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	33,061,861	0.00
Regional Shopping Center	9,406,395	0.00
Manufacturing	141,860,313	0.00
General Heavy Industry	3,322,325,738	0.00

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	222	0.00
Regional Shopping Center	133	0.00
Manufacturing	761	0.00
General Heavy Industry	17,815	0.00

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0

Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

### 5.15. Operational Off-Road Equipment

#### 5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
----------------	-----------	-------------	----------------	---------------	------------	-------------

### 5.16. Stationary Sources

#### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
----------------	-----------	----------------	---------------	----------------	------------	-------------

#### 5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
----------------	-----------	--------	--------------------------	------------------------------	------------------------------

### 5.17. User Defined

Equipment Type	Fuel Type
—	—

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.52	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	47.4
AQ-PM	87.9
AQ-DPM	87.9
Drinking Water	48.3
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	89.5
Traffic	56.3
Effect Indicators	—

CleanUp Sites	98.7
Groundwater	81.5
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	66.7
Solid Waste	89.0
Sensitive Population	—
Asthma	94.9
Cardio-vascular	87.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	1.06
Unemployment	—

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—



Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—
Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	0.0
Asthma ER Admissions	8.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	0.0
Cognitively Disabled	99.8
Physically Disabled	10.4
Heart Attack ER Admissions	15.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	0.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	99.4
Elderly	14.8
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	98.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.3
Traffic Density	0.0
Traffic Access	58.9

Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
Land Use	Per Project Description
Operations: Hearths	assumes all gas fireplaces.

**APPENDIX 3.3**

---

**Tribal Consultation**



811 West 7th Street, Suite 200  
Los Angeles, California 90017  
www.impactsciences.com

Sent via email on May 9, 2022 to: [Andrew.Green@nahc.ca.gov](mailto:Andrew.Green@nahc.ca.gov)

**NATIVE AMERICAN HERITAGE COMMISSION**

Environmental and Cultural Department  
1550 Harbor Boulevard, Suite 100  
West Sacramento, CA 95691  
(916) 373-3710

*Information Below is Required for a Sacred Lands File Search*

**Project:** City of Vernon Westside Specific Plan

**County:** Los Angeles

**USGS Quadrangle Name:** Los Angeles, California

**Township:** 2 South    **Range:** 13 West

**Company/Firm/Agency:** Impact Sciences, Inc.

**Contact Person:** Yasmeen Hussain

**Street Address:** 811 W. 7th Street, Suite 200

**City:** Los Angeles    **Zip:** 90017

**Phone:** (909) 472-1464

**Email:** yhussain@impactsciences.com

**PROJECT DESCRIPTION**

The City of Vernon (City) is preparing a proposed specific plan to spur development in the western portion of Vernon. The purpose of the Vernon Westside Specific Plan is to reinvigorate the City's competitive advantage as a center of production; strengthen and provide long-term stability to the City's fiscal position; increase the residential population; diversify and reorient

the Westside’s land uses to take advantage of changes in the economic landscape of Southern California; increase amenities available to local residents and workers; and create a physical environmental that is supportive of diverse land uses, welcoming to the larger region, and enhancing to the City’s image and identity.

We appreciate your assistance in responding to this query. Your response will help ensure that our analysis is accurate and complete. To ensure a timely completion of our analysis, please provide your response (via mail, or email) no later than May 30, 2022.

If you have any questions or require any additional information, please contact me at (909) 472-1464 or via email at [yhussain@impactsociences.com](mailto:yhussain@impactsociences.com).

Sincerely,

*Yasmeen Hussain*

---

*Yasmeen Hussain*

*Planner*



811 W. 7th Street, Suite 200  
Los Angeles, CA 90017  
[yhussain@impactsociences.com](mailto:yhussain@impactsociences.com)

**Attachments: Notice of Preparation**

**Figure 1 – Regional Context**

**Figure 2 – Plan Area**

## NATIVE AMERICAN HERITAGE COMMISSION

June 1, 2022

Yasmeen Hussain  
Impact Sciences, Inc.

Via Email to: [yhussain@impactsciences.com](mailto:yhussain@impactsciences.com)

**Re: City of Vernon Westside Specific Plan Project, Los Angeles County**

Dear Ms. Hussain:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: [Pricilla.Torres-Fuentes@nahc.ca.gov](mailto:Pricilla.Torres-Fuentes@nahc.ca.gov).

Sincerely,

*Pricilla Torres-Fuentes*

Pricilla Torres-Fuentes  
Cultural Resources Analyst

Attachment



CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

PARLIAMENTARIAN  
**Russell Attebery**  
Karuk

SECRETARY  
**Sara Dutschke**  
Miwok

COMMISSIONER  
**William Mungary**  
Paiute/White Mountain  
Apache

COMMISSIONER  
**Isaac Bojorquez**  
Ohlone-Costanoan

COMMISSIONER  
**Buffy McQuillen**  
Yokayo Pomo, Yuki,  
Nomlaki

COMMISSIONER  
**Wayne Nelson**  
Luiseño

COMMISSIONER  
**Stanley Rodriguez**  
Kumeyaay

EXECUTIVE SECRETARY  
**Raymond C. Hitchcock**  
Miwok/Nisenan

**NAHC HEADQUARTERS**  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)

**Native American Heritage Commission  
Native American Contact List  
Los Angeles County  
6/1/2022**

**Gabrieleno Band of Mission  
Indians - Kizh Nation**

Andrew Salas, Chairperson  
P.O. Box 393 Gabrieleno  
Covina, CA, 91723  
Phone: (626) 926 - 4131  
admin@gabrielenoindians.org

**Santa Rosa Band of Cahuilla  
Indians**

Lovina Redner, Tribal Chair  
P.O. Box 391820 Cahuilla  
Anza, CA, 92539  
Phone: (951) 659 - 2700  
Fax: (951) 659-2228  
Isaul@santarosa-nsn.gov

**Gabrieleno/Tongva San Gabriel  
Band of Mission Indians**

Anthony Morales, Chairperson  
P.O. Box 693 Gabrieleno  
San Gabriel, CA, 91778  
Phone: (626) 483 - 3564  
Fax: (626) 286-1262  
GTTRibalcouncil@aol.com

**Soboba Band of Luiseno  
Indians**

Isaiah Vivanco, Chairperson  
P. O. Box 487 Cahuilla  
San Jacinto, CA, 92581 Luiseno  
Phone: (951) 654 - 5544  
Fax: (951) 654-4198  
ivivanco@soboba-nsn.gov

**Gabrielino /Tongva Nation**

Sandonne Goad, Chairperson  
106 1/2 Judge John Aiso St., Gabrielino  
#231  
Los Angeles, CA, 90012  
Phone: (951) 807 - 0479  
sgoad@gabrielino-tongva.com

**Soboba Band of Luiseno  
Indians**

Joseph Ontiveros, Cultural  
Resource Department  
P.O. BOX 487 Cahuilla  
San Jacinto, CA, 92581 Luiseno  
Phone: (951) 663 - 5279  
Fax: (951) 654-4198  
jontiveros@soboba-nsn.gov

**Gabrielino Tongva Indians of  
California Tribal Council**

Robert Dorame, Chairperson  
P.O. Box 490 Gabrielino  
Bellflower, CA, 90707  
Phone: (562) 761 - 6417  
Fax: (562) 761-6417  
gtongva@gmail.com

**Gabrielino Tongva Indians of  
California Tribal Council**

Christina Conley, Tribal  
Consultant and Administrator  
P.O. Box 941078 Gabrielino  
Simi Valley, CA, 93094  
Phone: (626) 407 - 8761  
christina.marsden@alumni.usc.edu

**Gabrielino-Tongva Tribe**

Charles Alvarez,  
23454 Vanowen Street Gabrielino  
West Hills, CA, 91307  
Phone: (310) 403 - 6048  
roadkingcharles@aol.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed City of Vernon Westside Specific Plan Project, Los Angeles County.



**APPENDIX 3.8**

---

**Noise and Vibration Data**

# NOISE MONITORING FIELD REPORT

## Site Map

**Project Name:** Vernon Westside Specific Plan

**Monitoring Address:** Santa Fe Ave./53<sup>rd</sup> St.

**Date:** 08/29/2022                      **Site Number:** 1

**Measured By:** Raul Castillo

**Measurement Start Time:** 1:15 p.m.

**Measurement End Time:** 1:30 p.m.

**Total Measurement Time:** 15 min.

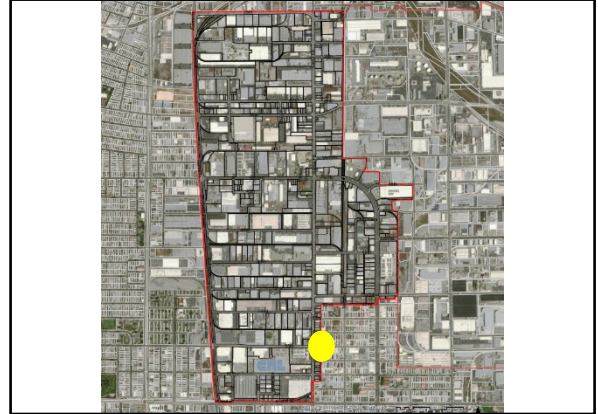
**Noise Meter Model:** Larson Davis Soundtrack LxT

**Calibration:** 94.0 (dBA)

**Meter Setting:** A-Weighted Sound Level (SLOW)

**Session File Name:** LxT\_Data.173

**Primary Noise Sources:** Traffic



### Data Summary

Noise Scale	Noise Level (dBA)
L <sub>eq</sub>	73.4
L <sub>max</sub>	83.4
L <sub>min</sub>	57.2

### Other Noise Sources During Monitoring

1. \_\_\_\_\_ Time: \_\_\_\_\_
2. \_\_\_\_\_ Time: \_\_\_\_\_
3. \_\_\_\_\_ Time: \_\_\_\_\_
4. \_\_\_\_\_ Time: \_\_\_\_\_
5. \_\_\_\_\_ Time: \_\_\_\_\_

**Additional Notes:**

---



---



---



---



---

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.173.s	Computer's File Name	LxT_0005667-20220829 131513-LxT_Data.173.ldbin	
Meter	LxT1 0005667			
Firmware	2.302			
User		Location		
Job Description				
Note				
Start Time	2022-08-29 13:15:13	Duration	0:15:00.0	
End Time	2022-08-29 13:30:13	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

L <sub>Aeq</sub>	73.4 dB		
L <sub>AE</sub>	102.9 dB	SEA	--- dB
EA	2.2 mPa <sup>2</sup> h		
EA <sub>8</sub>	69.3 mPa <sup>2</sup> h		
EA <sub>40</sub>	346.6 mPa <sup>2</sup> h		
L <sub>Apeak</sub>	98.8 dB	2022-08-29 13:23:22	
L <sub>ASmax</sub>	83.4 dB	2022-08-29 13:23:23	
L <sub>ASmin</sub>	57.2 dB	2022-08-29 13:19:00	
L <sub>Aeq</sub>	73.4 dB		
L <sub>Ceq</sub>	80.7 dB	L <sub>Ceq</sub> - L <sub>Aeq</sub>	7.4 dB
L <sub>AIeq</sub>	74.5 dB	L <sub>AIeq</sub> - L <sub>Aeq</sub>	1.1 dB

### Exceedances

	Count	Duration
L <sub>AS</sub> > 85.0 dB	0	0:00:00.0
L <sub>AS</sub> > 115.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 135.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 137.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
--- dB	--- dB	0.0 dB	
LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	73.4 dB		80.7 dB		--- dB	
L <sub>S(max)</sub>	83.4 dB	2022-08-29 13:23:23	--- dB		--- dB	
L <sub>S(min)</sub>	57.2 dB	2022-08-29 13:19:00	--- dB		--- dB	
L <sub>Peak(max)</sub>	98.8 dB	2022-08-29 13:23:22	--- dB		--- dB	

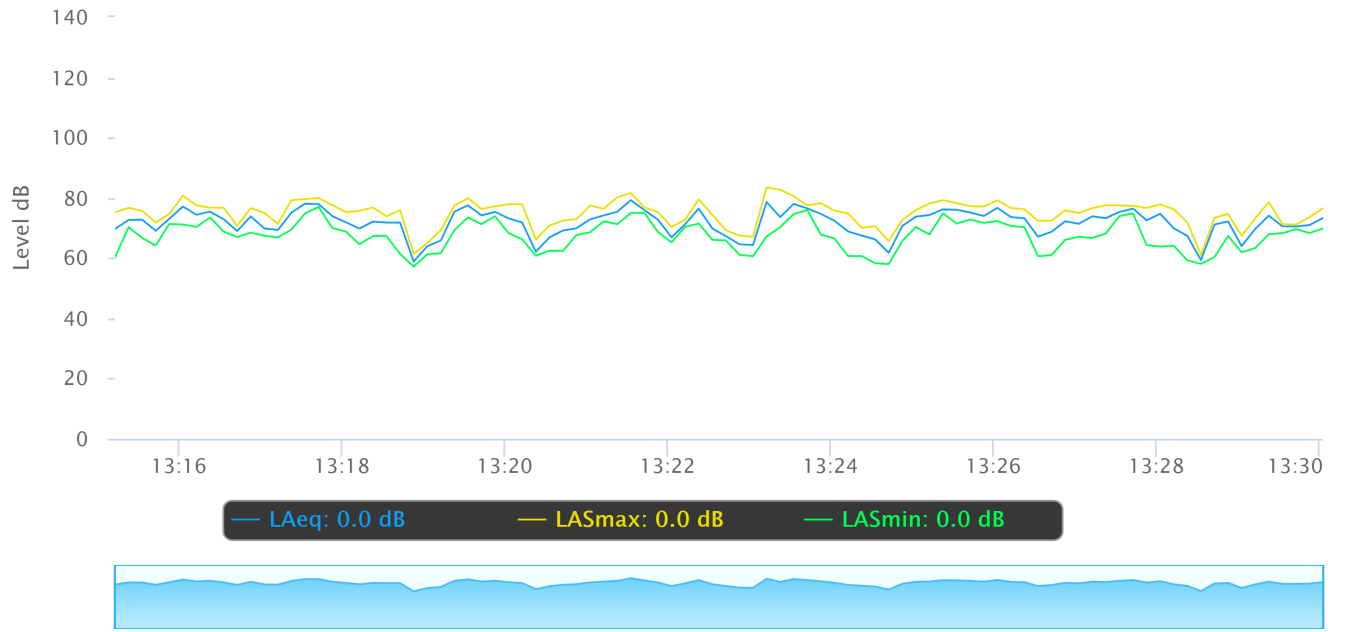
### Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

### Statistics

L <sub>AS</sub> 0.0	--- dB
L <sub>AS</sub> 0.0	--- dB
L <sub>AS</sub> 10.0	76.8 dB
L <sub>AS</sub> 33.3	73.8 dB
L <sub>AS</sub> 66.7	69.5 dB
L <sub>AS</sub> 90.0	63.2 dB

# Time History



# NOISE MONITORING FIELD REPORT

## Site Map

**Project Name:** Vernon Westside Specific Plan

**Monitoring Address:** 2315 E. 52<sup>nd</sup> St.

**Date:** 08/29/2022

**Site Number:** 2

**Measured By:** Raul Castillo

**Measurement Start Time:** 1:39 p.m.

**Measurement End Time:** 1:54 p.m.

**Total Measurement Time:** 15 min.

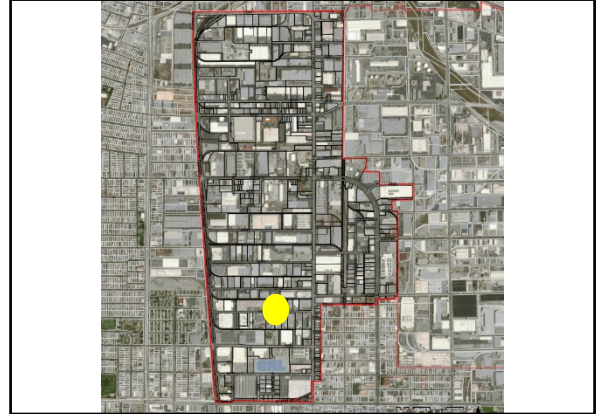
**Noise Meter Model:** Larson Davis Soundtrack LxT

**Calibration:** 94.0 (dBA)

**Meter Setting:** A-Weighted Sound Level (SLOW)

**Session File Name:** LxT\_Data.174

**Primary Noise Sources:** Traffic, truck noise from deliveries



### Data Summary

Noise Scale	Noise Level (dBA)
L <sub>eq</sub>	66.2
L <sub>max</sub>	82.6
L <sub>min</sub>	55.9

### Other Noise Sources During Monitoring

1. \_\_\_\_\_ Time: \_\_\_\_\_
2. \_\_\_\_\_ Time: \_\_\_\_\_
3. \_\_\_\_\_ Time: \_\_\_\_\_
4. \_\_\_\_\_ Time: \_\_\_\_\_
5. \_\_\_\_\_ Time: \_\_\_\_\_

**Additional Notes:**

---

---

---

---

---

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.174.s	Computer's File Name	LxT_0005667-20220829 133912-LxT_Data.174.ldbin	
Meter	LxT1 0005667			
Firmware	2.302			
User		Location		
Job Description				
Note				
Start Time	2022-08-29 13:39:12	Duration	0:15:00.0	
End Time	2022-08-29 13:54:12	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	66.2 dB		
LAE	95.8 dB	SEA	--- dB
EA	418.4 μPa²h		
EA8	13.4 mPa²h		
EA40	67.0 mPa²h		
LA <sub>peak</sub>	97.1 dB	2022-08-29 13:53:10	
LAS <sub>max</sub>	82.6 dB	2022-08-29 13:53:10	
LAS <sub>min</sub>	55.9 dB	2022-08-29 13:48:27	
LA <sub>eq</sub>	66.2 dB		
LC <sub>eq</sub>	75.4 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	9.2 dB
LAI <sub>eq</sub>	67.9 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	1.7 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
--- dB	--- dB	0.0 dB	
LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	66.2 dB		75.4 dB		--- dB	
LS(max)	82.6 dB	2022-08-29 13:53:10	--- dB		--- dB	
LS(min)	55.9 dB	2022-08-29 13:48:27	--- dB		--- dB	
L <sub>Peak(max)</sub>	97.1 dB	2022-08-29 13:53:10	--- dB		--- dB	

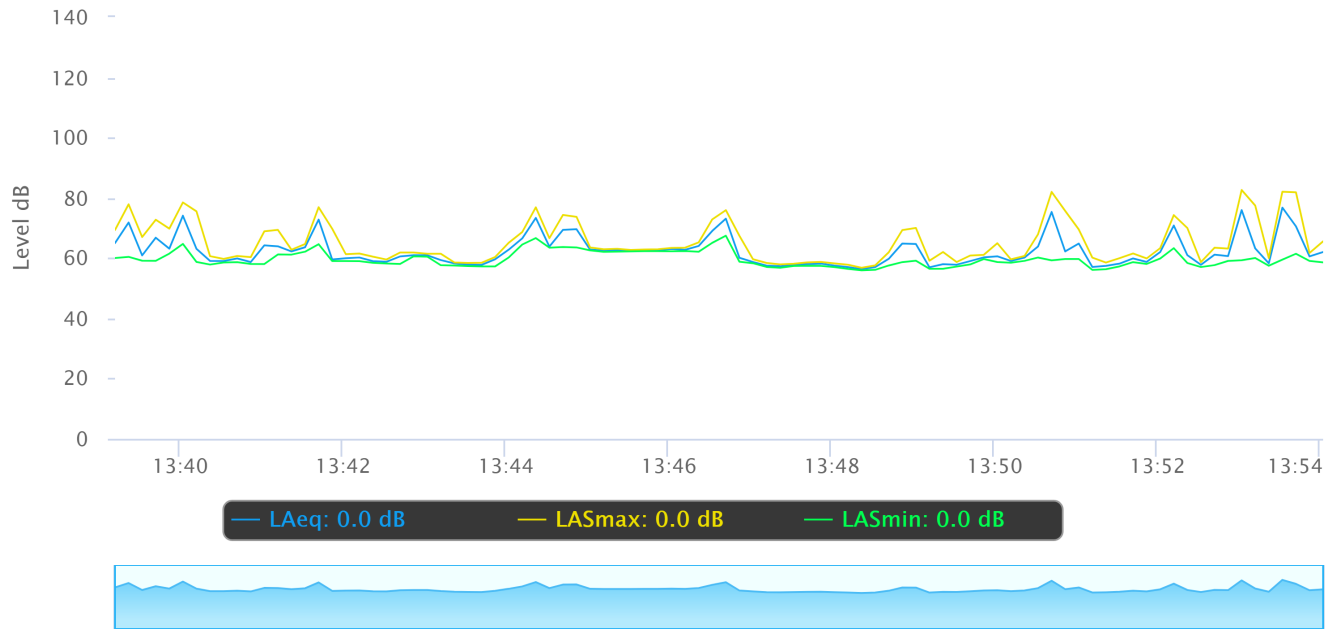
### Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

### Statistics

LAS 0.0	--- dB
LAS 0.0	--- dB
LAS 10.0	68.3 dB
LAS 33.3	62.5 dB
LAS 66.7	59.1 dB
LAS 90.0	57.5 dB

# Time History



# NOISE MONITORING FIELD REPORT

## Site Map

**Project Name:** Vernon Westside Specific Plan

**Monitoring Address:** Vernon Ave./Alameda St.

**Date:** 08/29/2022                      **Site Number:** 3

**Measured By:** Raul Castillo

**Measurement Start Time:** 2:26 p.m.

**Measurement End Time:** 2:41 p.m.

**Total Measurement Time:** 15 min.

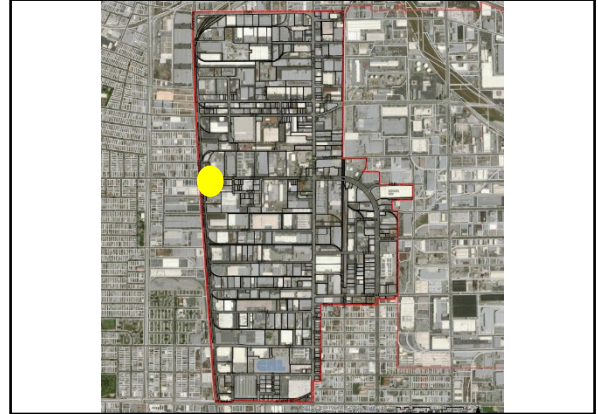
**Noise Meter Model:** Larson Davis Soundtrack LxT

**Calibration:** 94.0 (dBA)

**Meter Setting:** A-Weighted Sound Level (SLOW)

**Session File Name:** LxT\_Data.175

**Primary Noise Sources:** Traffic



### Data Summary

Noise Scale	Noise Level (dBA)
L <sub>eq</sub>	76.1
L <sub>max</sub>	90.5
L <sub>min</sub>	61.1

### Other Noise Sources During Monitoring

1. \_\_\_\_\_ Time: \_\_\_\_\_
2. \_\_\_\_\_ Time: \_\_\_\_\_
3. \_\_\_\_\_ Time: \_\_\_\_\_
4. \_\_\_\_\_ Time: \_\_\_\_\_
5. \_\_\_\_\_ Time: \_\_\_\_\_

**Additional Notes:**

---

---

---

---

---



# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.175.s	Computer's File Name	LxT_0005667-20220829 142616-LxT_Data.175.ldbin	
Meter	LxT1 0005667			
Firmware	2.302			
User		Location		
Job Description				
Note				
Start Time	2022-08-29 14:26:16	Duration	0:15:00.0	
End Time	2022-08-29 14:41:16	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

L <sub>Aeq</sub>	76.1 dB		
L <sub>AE</sub>	105.6 dB	SEA	--- dB
EA	4.1 mPa <sup>2</sup> h		
EA8	130.6 mPa <sup>2</sup> h		
EA40	652.8 mPa <sup>2</sup> h		
L <sub>Apeak</sub>	103.8 dB	2022-08-29 14:36:58	
L <sub>Smax</sub>	90.5 dB	2022-08-29 14:31:43	
L <sub>Smin</sub>	61.1 dB	2022-08-29 14:30:00	
L <sub>Aeq</sub>	76.1 dB		
L <sub>Ceq</sub>	85.4 dB	L <sub>Ceq</sub> - L <sub>Aeq</sub>	9.3 dB
L <sub>AIeq</sub>	78.5 dB	L <sub>AIeq</sub> - L <sub>Aeq</sub>	2.4 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	12	0:00:25.3
LAS > 115.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 135.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 137.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
--- dB	--- dB	0.0 dB	
LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	76.1 dB		85.4 dB		--- dB	
L <sub>S(max)</sub>	90.5 dB	2022-08-29 14:31:43	--- dB		--- dB	
L <sub>S(min)</sub>	61.1 dB	2022-08-29 14:30:00	--- dB		--- dB	
L <sub>Peak(max)</sub>	103.8 dB	2022-08-29 14:36:58	--- dB		--- dB	

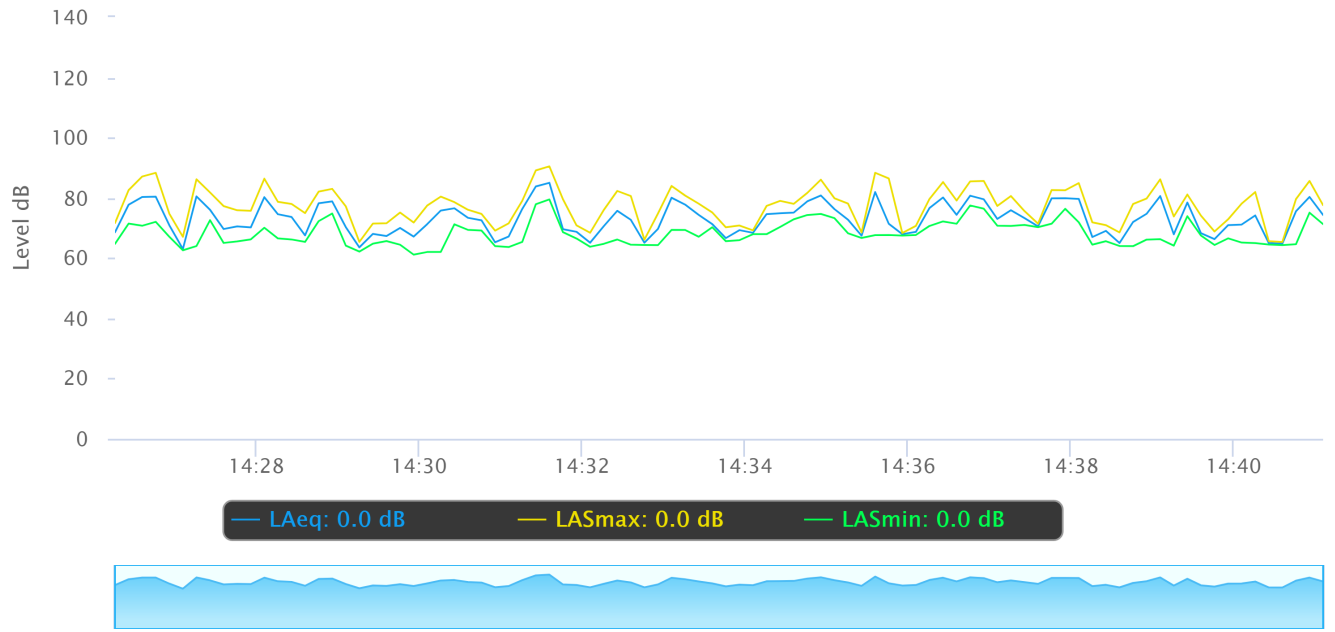
### Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

### Statistics

LAS 0.0	--- dB
LAS 0.0	--- dB
LAS 10.0	79.8 dB
LAS 33.3	74.7 dB
LAS 66.7	68.2 dB
LAS 90.0	65.0 dB

# Time History



# NOISE MONITORING FIELD REPORT

## Site Map

**Project Name:** Vernon Westside Specific Plan

**Monitoring Address:** Santa Fe Ave./Vernon Ave./Pacific

**Date:** 08/29/2022

**Site Number:** 4

**Measured By:** Raul Castillo

**Measurement Start Time:** 3:00 p.m.

**Measurement End Time:** 3:15 p.m.

**Total Measurement Time:** 15 min.

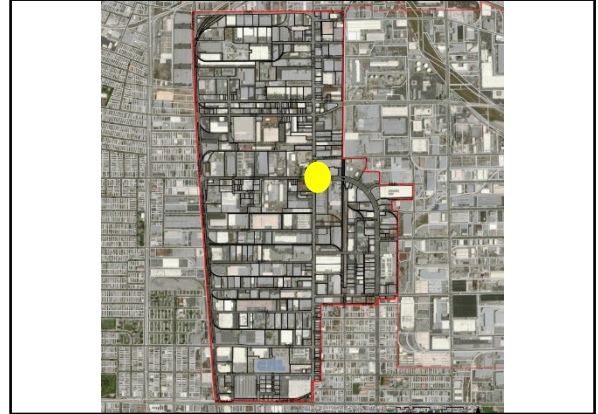
**Noise Meter Model:** Larson Davis Soundtrack LxT

**Calibration:** 94.0 (dBA)

**Meter Setting:** A-Weighted Sound Level (SLOW)

**Session File Name:** LxT\_Data.176

**Primary Noise Sources:** Traffic



### Data Summary

Noise Scale	Noise Level (dBA)
L <sub>eq</sub>	75.1
L <sub>max</sub>	91.7
L <sub>min</sub>	62.8

### Other Noise Sources During Monitoring

1. \_\_\_\_\_ Time: \_\_\_\_\_
2. \_\_\_\_\_ Time: \_\_\_\_\_
3. \_\_\_\_\_ Time: \_\_\_\_\_
4. \_\_\_\_\_ Time: \_\_\_\_\_
5. \_\_\_\_\_ Time: \_\_\_\_\_

**Additional Notes:**

---

---

---

---

---

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.176.s	Computer's File Name	LxT_0005667-20220829 150052-LxT_Data.176.ldbin	
Meter	LxT1 0005667			
Firmware	2.302			
User				Location
Job Description				
Note				
Start Time	2022-08-29 15:00:52	Duration	0:15:00.0	
End Time	2022-08-29 15:15:52	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

L <sub>Aeq</sub>	75.1 dB		
L <sub>AE</sub>	104.7 dB	SEA	--- dB
EA	3.3 mPa <sup>2</sup> h		
EA <sub>8</sub>	104.1 mPa <sup>2</sup> h		
EA <sub>40</sub>	520.3 mPa <sup>2</sup> h		
L <sub>Apeak</sub>	112.7 dB	2022-08-29 15:04:21	
L <sub>ASmax</sub>	91.7 dB	2022-08-29 15:04:21	
L <sub>ASmin</sub>	62.8 dB	2022-08-29 15:08:17	
L <sub>Aeq</sub>	75.1 dB		
L <sub>Ceq</sub>	84.9 dB	L <sub>Ceq</sub> - L <sub>Aeq</sub>	9.8 dB
L <sub>AIeq</sub>	77.6 dB	L <sub>AIeq</sub> - L <sub>Aeq</sub>	2.5 dB

### Exceedances

	Count	Duration
L <sub>AS</sub> > 85.0 dB	4	0:00:14.3
L <sub>AS</sub> > 115.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 135.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 137.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
--- dB	--- dB	0.0 dB	
LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	75.1 dB		84.9 dB		--- dB	
L <sub>S(max)</sub>	91.7 dB	2022-08-29 15:04:21	--- dB		--- dB	
L <sub>S(min)</sub>	62.8 dB	2022-08-29 15:08:17	--- dB		--- dB	
L <sub>Peak(max)</sub>	112.7 dB	2022-08-29 15:04:21	--- dB		--- dB	

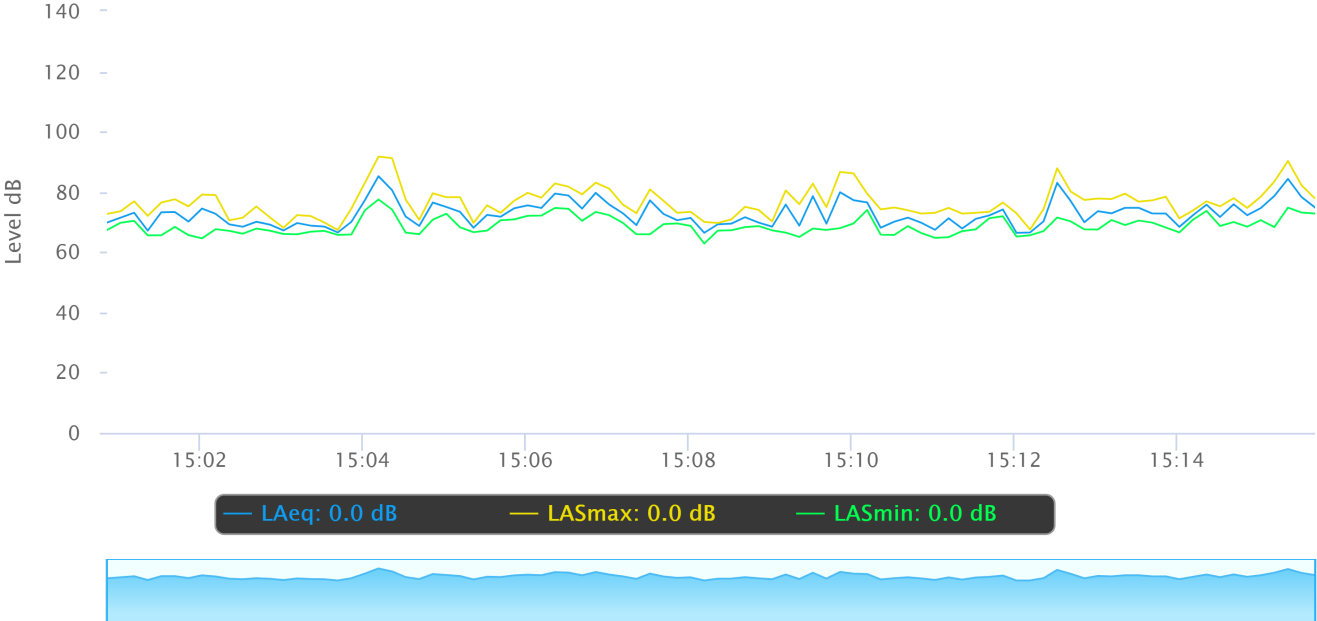
### Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

### Statistics

L <sub>AS</sub> 0.0	--- dB
L <sub>AS</sub> 0.0	--- dB
L <sub>AS</sub> 10.0	77.9 dB
L <sub>AS</sub> 33.3	73.3 dB
L <sub>AS</sub> 66.7	69.5 dB
L <sub>AS</sub> 90.0	66.9 dB

# Time History



# NOISE MONITORING FIELD REPORT

## Site Map

**Project Name:** Vernon Westside Specific Plan

**Monitoring Address:** 49<sup>th</sup> St./Hampton St.

**Date:** 08/29/2022                      **Site Number:** 5

**Measured By:** Raul Castillo

**Measurement Start Time:** 3:48 p.m.

**Measurement End Time:** 4:03 p.m.

**Total Measurement Time:** 15 min.

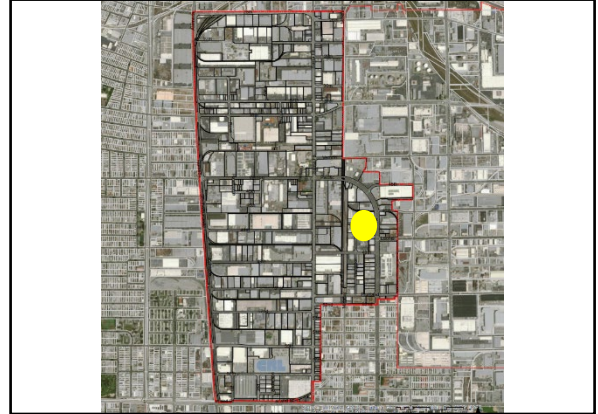
**Noise Meter Model:** Larson Davis Soundtrack LxT

**Calibration:** 94.0 (dBA)

**Meter Setting:** A-Weighted Sound Level (SLOW)

**Session File Name:** LxT\_Data.177

**Primary Noise Sources:** Traffic



### Data Summary

Noise Scale	Noise Level (dBA)
L <sub>eq</sub>	63.1
L <sub>max</sub>	80.9
L <sub>min</sub>	52.5

### Other Noise Sources During Monitoring

1. \_\_\_\_\_ Time: \_\_\_\_\_
2. \_\_\_\_\_ Time: \_\_\_\_\_
3. \_\_\_\_\_ Time: \_\_\_\_\_
4. \_\_\_\_\_ Time: \_\_\_\_\_
5. \_\_\_\_\_ Time: \_\_\_\_\_

**Additional Notes:**

---

---

---

---

---

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.177.s	Computer's File Name	LxT_0005667-20220829 154819-LxT_Data.177.ldbin	
Meter	LxT1 0005667			
Firmware	2.302			
User		Location		
Job Description				
Note				
Start Time	2022-08-29 15:48:19	Duration	0:15:00.0	
End Time	2022-08-29 16:03:19	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	63.1 dB		
LAE	92.6 dB	SEA	--- dB
EA	202.1 μPa <sup>2</sup> h		
EA8	6.5 mPa <sup>2</sup> h		
EA40	32.3 mPa <sup>2</sup> h		
LA <sub>peak</sub>	96.9 dB	2022-08-29 15:53:33	
LAS <sub>max</sub>	80.9 dB	2022-08-29 15:59:36	
LAS <sub>min</sub>	52.5 dB	2022-08-29 15:52:07	
LA <sub>eq</sub>	63.1 dB		
LC <sub>eq</sub>	79.8 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	16.7 dB
LAI <sub>eq</sub>	65.7 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	2.7 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
--- dB	--- dB	0.0 dB	
LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	63.1 dB		79.8 dB		--- dB	
LS(max)	80.9 dB	2022-08-29 15:59:36	--- dB		--- dB	
LS(min)	52.5 dB	2022-08-29 15:52:07	--- dB		--- dB	
L <sub>Peak(max)</sub>	96.9 dB	2022-08-29 15:53:33	--- dB		--- dB	

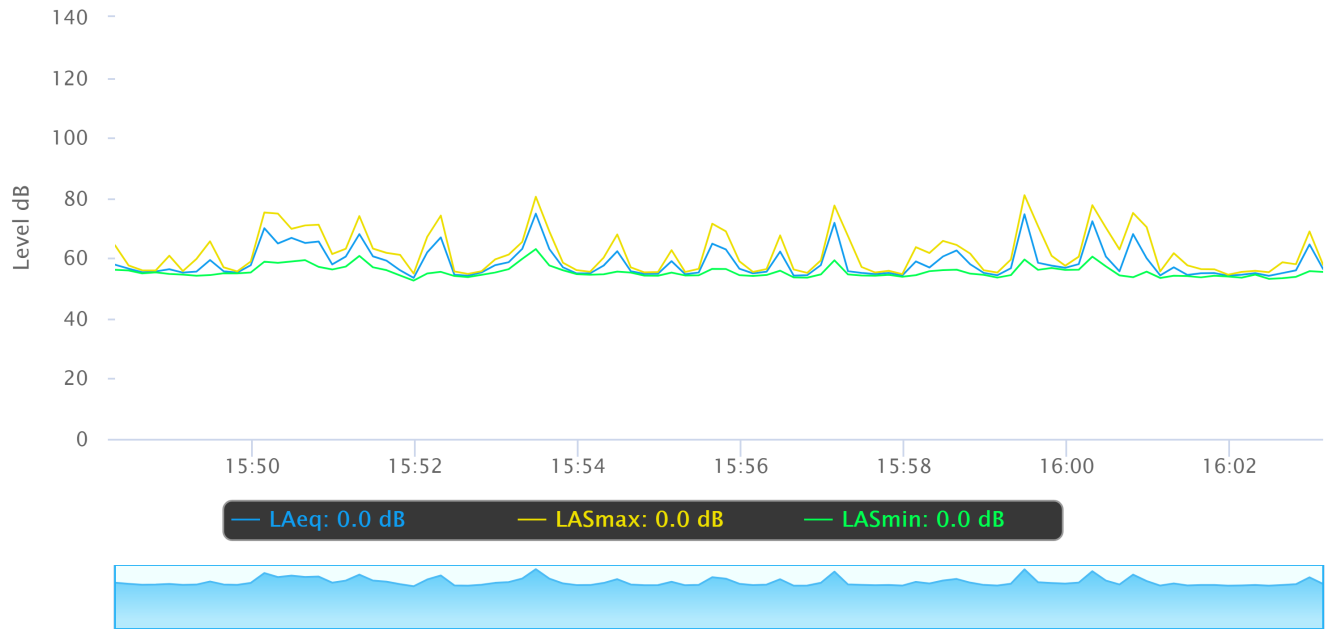
### Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

### Statistics

LAS 0.0	--- dB
LAS 0.0	--- dB
LAS 10.0	64.5 dB
LAS 33.3	57.7 dB
LAS 66.7	55.2 dB
LAS 90.0	54.3 dB

# Time History





# NOISE MONITORING FIELD REPORT

## Site Map

**Project Name:** Vernon Westside Specific Plan

**Monitoring Address:** Santa Fe Ave./28<sup>th</sup> St.

**Date:** 08/29/2022                      **Site Number:** 6

**Measured By:** Raul Castillo

**Measurement Start Time:** 4:13 p.m.

**Measurement End Time:** 4:28 p.m.

**Total Measurement Time:** 15 min.

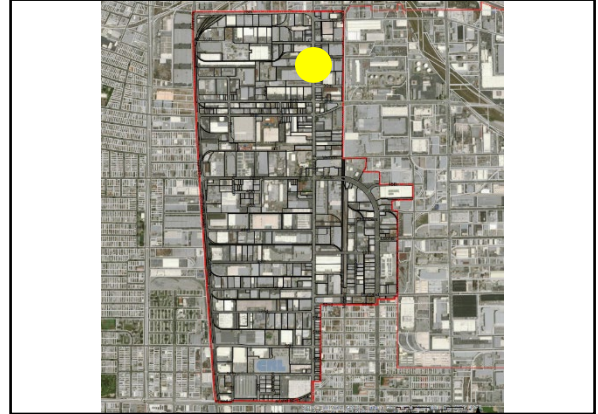
**Noise Meter Model:** Larson Davis Soundtrack LxT

**Calibration:** 94.0 (dBA)

**Meter Setting:** A-Weighted Sound Level (SLOW)

**Session File Name:** LxT\_Data.178

**Primary Noise Sources:** Traffic



### Data Summary

Noise Scale	Noise Level (dBA)
L <sub>eq</sub>	73.3
L <sub>max</sub>	85.6
L <sub>min</sub>	56.3

### Other Noise Sources During Monitoring

1. \_\_\_\_\_ Time: \_\_\_\_\_
2. \_\_\_\_\_ Time: \_\_\_\_\_
3. \_\_\_\_\_ Time: \_\_\_\_\_
4. \_\_\_\_\_ Time: \_\_\_\_\_
5. \_\_\_\_\_ Time: \_\_\_\_\_

**Additional Notes:**

---

---

---

---

---

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.178.s	Computer's File Name	LxT_0005667-20220829 161307-LxT_Data.178.ldbin	
Meter	LxT1 0005667			
Firmware	2.302			
User		Location		
Job Description				
Note				
Start Time	2022-08-29 16:13:07	Duration	0:15:00.0	
End Time	2022-08-29 16:28:07	Run Time	0:15:00.0	Pause Time 0:00:00.0

## Results

### Overall Metrics

L <sub>Aeq</sub>	73.3 dB		
L <sub>AE</sub>	102.9 dB	SEA	--- dB
EA	2.2 mPa <sup>2</sup> h		
EA8	69.0 mPa <sup>2</sup> h		
EA40	345.1 mPa <sup>2</sup> h		
L <sub>Apeak</sub>	103.4 dB	2022-08-29 16:18:27	
L <sub>ASmax</sub>	85.6 dB	2022-08-29 16:18:28	
L <sub>ASmin</sub>	56.3 dB	2022-08-29 16:27:14	
L <sub>Aeq</sub>	73.3 dB		
L <sub>Ceq</sub>	82.2 dB	L <sub>Ceq</sub> - L <sub>Aeq</sub>	8.8 dB
L <sub>AIeq</sub>	75.9 dB	L <sub>AIeq</sub> - L <sub>Aeq</sub>	2.6 dB

### Exceedances

	Count	Duration
LAS > 85.0 dB	1	0:00:00.8
LAS > 115.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 135.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 137.0 dB	0	0:00:00.0
L <sub>Apeak</sub> > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight	
--- dB	--- dB	0.0 dB	
LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	73.3 dB		82.2 dB		--- dB	
L <sub>S(max)</sub>	85.6 dB	2022-08-29 16:18:28	--- dB		--- dB	
L <sub>S(min)</sub>	56.3 dB	2022-08-29 16:27:14	--- dB		--- dB	
L <sub>Peak(max)</sub>	103.4 dB	2022-08-29 16:18:27	--- dB		--- dB	

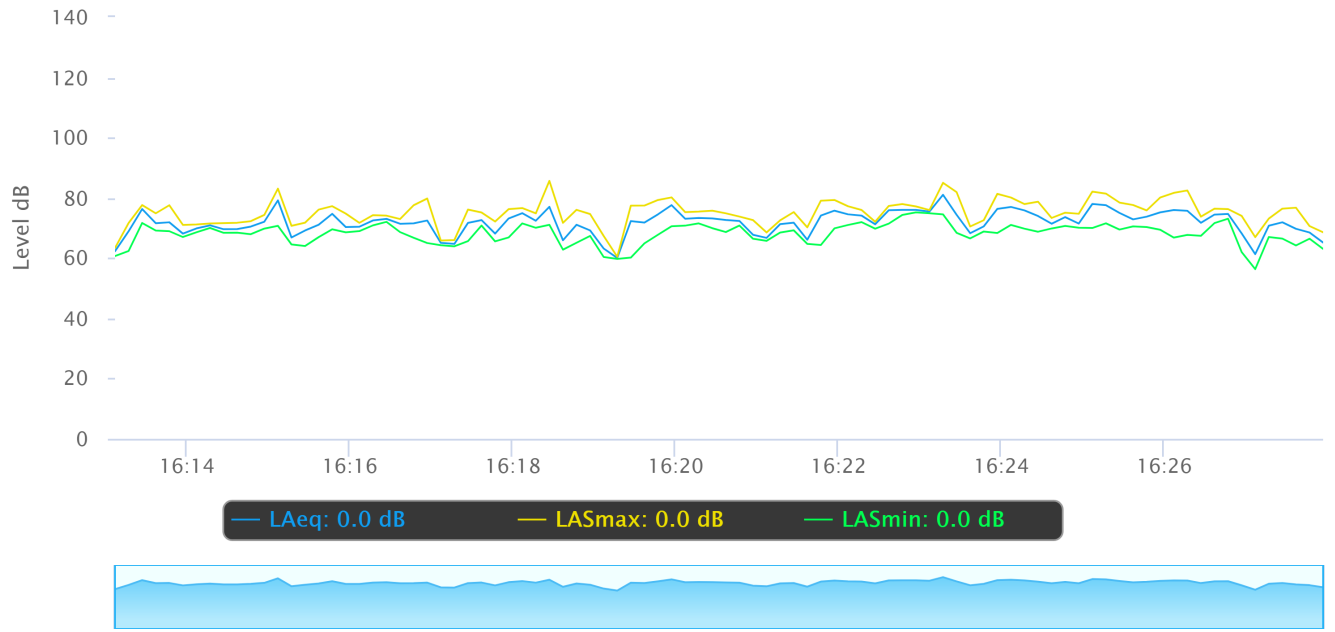
### Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

### Statistics

LAS 0.0	--- dB
LAS 0.0	--- dB
LAS 10.0	76.5 dB
LAS 33.3	73.1 dB
LAS 66.7	69.6 dB
LAS 90.0	65.3 dB

# Time History



Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/5/2022  
 Case Description: Vernon Westside SP - Demolition

---- Receptor #1 ----

Description  
 Reference at 50 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Dozer	No	40		81.7	50	0
Concrete Saw	No	20		89.6	50	0
Tractor	No	40	84		50	0
Front End Loader	No	40		79.1	50	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	81.7	77.7
Concrete Saw	89.6	82.6
Tractor	84	80
Front End Loader	79.1	75.1
Total	89.6	85.7

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description  
 Reference at 100 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Dozer	No	40		81.7	100	0
Concrete Saw	No	20		89.6	100	0
Tractor	No	40	84		100	0
Front End Loader	No	40		79.1	100	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	75.6	71.7
Concrete Saw	83.6	76.6
Tractor	78	74
Front End Loader	73.1	69.1
Total	83.6	79.7

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description  
Reference at 500 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Dozer	No	40		81.7	500	0
Concrete Saw	No	20		89.6	500	0
Tractor	No	40	84		500	0
Front End Loader	No	40		79.1	500	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	61.7	57.7
Concrete Saw	69.6	62.6
Tractor	64	60
Front End Loader	59.1	55.1
Total	69.6	65.7

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/5/2022

Case Description: Vernon Westside SP - Site Preperation

---- Receptor #1 ----

Description  
Reference at 50 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85	85	50	0
Tractor	No	40	84	84	50	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	85	81
Tractor	84	80
Total	85	83.6

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description  
Reference at 100 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85	85	100	0
Tractor	No	40	84	84	100	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	75.6	71.7
Tractor	83.6	76.6
Total	83.6	79.7

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description  
Reference at 500 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85		500	0
Tractor	No	40	84		500	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	61.7	57.7
Tractor	69.6	62.6
Total	69.6	65.7

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 10/5/2022

Case Description: Vernon Westside SP - Grading

---- Receptor #1 ----

Description  
Reference at 50 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85		50	0
Tractor	No	40	84		50	0
Dozer	No	40		81.7	50	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	85	81
Tractor	84	80
Dozer	81.7	77.7
Total	85	84.6

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description  
Reference at 100 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85		100	0
Tractor	No	40	84		100	0
Dozer	No	40		81.7	100	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	79	75
Tractor	78	74



Dozer		75.6	71.7
	Total	79	78.5

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description  
Reference at 500 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85		500	0
Tractor	No	40	84		500	0
Dozer	No	40		81.7	500	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Grader	65	61
Tractor	64	60
Dozer	61.7	57.7
Total	65	64.6

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/5/2022

Case Description: Vernon Westside SP - Building Construction

---- Receptor #1 ----

Description

Reference at 50 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16		80.6	50	0
Backhoe	No	40		77.6	50	0
Backhoe	No	40		77.6	50	0
Tractor	No	40	84		50	0
Tractor	No	40	84		50	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	80.6	72.6
Backhoe	77.6	73.6
Backhoe	77.6	73.6
Tractor	84	80
Tractor	84	80
Total	84	84.2

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description

Reference at 100 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16		80.6	100	0
Backhoe	No	40		77.6	100	0
Backhoe	No	40		77.6	100	0
Tractor	No	40	84		100	0
Tractor	No	40	84		100	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	74.5	66.6
Backhoe	71.5	67.6
Backhoe	71.5	67.6
Tractor	78	74
Tractor	78	74
Total	78	78.2

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description  
Reference at 500 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16		80.6	500	0
Backhoe	No	40		77.6	500	0
Backhoe	No	40		77.6	500	0
Tractor	No	40	84		500	0
Tractor	No	40	84		500	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	60.6	52.6
Backhoe	57.6	53.6
Backhoe	57.6	53.6
Tractor	64	60
Tractor	64	60
Total	64	64.2

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/5/2022

Case Description: Vernon Westside SP - Architectural Coating

---- Receptor #1 ----

Description  
Reference at 50 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Compressor (air)	No	40		77.7	50	0

Calculated (dBA)

Equipment	*Lmax	Leq
Compressor (air)	77.7	73.7
<b>Total</b>	<b>77.7</b>	<b>73.7</b>

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description  
Reference at 100 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Compressor (air)	No	40		77.7	100	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Compressor (air)	74.5	66.6
<b>Total</b>	<b>78</b>	<b>78.2</b>

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description  
Reference at 500 feet

Description	Impact	Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
				Spec Lmax (dBA)	Actual Lmax (dBA)		
Compressor (air)	No		40		77.7	500	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Compressor (air)	57.7	53.7
Total	57.7	53.7

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 10/5/2022

Case Description: Vernon Westside SP - Paving

---- Receptor #1 ----

Description  
Reference at 50 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Paver	No	50		77.2	50	0
Drum Mixer	No	50		80	50	0
Drum Mixer	No	50		80	50	0
Drum Mixer	No	50		80	50	0
Drum Mixer	No	50		80	50	0
Roller	No	20		80	50	0
Backhoe	No	40		77.6	50	0

Calculated (dBA)

Equipment	*Lmax	Leq
Paver	77.2	74.2
Drum Mixer	80	77
Drum Mixer	80	77
Drum Mixer	80	77
Drum Mixer	80	77
Roller	80	73
Backhoe	77.6	73.6
<b>Total</b>	<b>80</b>	<b>84.3</b>

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description  
Reference at 100 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Paver	No	50		77.2	100	0
Drum Mixer	No	50		80	100	0

Drum Mixer	No	50	80	100	0
Drum Mixer	No	50	80	100	0
Drum Mixer	No	50	80	100	0
Roller	No	20	80	100	0
Backhoe	No	40	77.6	100	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Paver	71.2	68.2
Drum Mixer	74	71
Drum Mixer	74	71
Drum Mixer	74	71
Drum Mixer	74	71
Roller	74	67
Backhoe	71.5	67.6
Total	74	78.3

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description  
Reference at 500 feet

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Paver	No	50		77.2	500	0
Drum Mixer	No	50		80	500	0
Drum Mixer	No	50		80	500	0
Drum Mixer	No	50		80	500	0
Drum Mixer	No	50		80	500	0
Roller	No	20		80	500	0
Backhoe	No	40		77.6	500	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Paver	57.2	54.2
Drum Mixer	60	57
Drum Mixer	60	57
Drum Mixer	60	57
Drum Mixer	60	57
Roller	60	53

Backhoe

	57.6	53.6
Total	60	64.3

\*Calculated Lmax is the Loudest value.



## TRAFFIC NOISE LEVELS

Project Name: Vernon Westside

### Background Information

Model Description: FHWA Highway Noise Prediction Model with California Vehicle Noise (CALVENO) Emission Levels.  
 Analysis Scenario(s): Existing, Future Without Project, Future With Project  
 Source of Traffic Volumes: Traffic Impact Analysis, Iteris 2023.  
 Community Noise Descriptor: X

Assumed 24-Hour Traffic Distribution:	X		
	(Ldn) Day	Evening	(CNEL) Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

### Traffic Noise Levels

Analysis Condition	Median	ADT	Design	Dist. from	Barrier	Vehicle Mix	24-Hour
Roadway Name	Lanes	Volume	Speed	Center to	Attn.	Medium Heavy	dB(A)
Roadway Segment	Width		(mph)	Receptor <sup>1</sup>	Factor	Trucks Trucks	CNEL
<b>Existing Traffic Noise</b>							
Santa Fe Ave.							
North of Vernon Ave.	4	35,430	35	50	0	1.8% 0.7%	70.7
South of Vernon Ave.	4	27,770	35	50	0	1.8% 0.7%	69.7
Vernon Ave.							
West of Alameda St.	4	14,810	30	50	0	1.8% 0.7%	65.4
Between Alameda and Santa Fe Ave.	4	16,460	40	50	0	1.8% 0.7%	68.9
Pacific Blvd.							
East of Santa Fe Ave.	6	13,540	40	50	0	1.8% 0.7%	69.0
Alameda St. West							
North of Vernon Ave.	4	19,350	40	50	0	1.8% 0.7%	69.6
South of Vernon Ave.	4	17,860	40	50	0	1.8% 0.7%	69.2
Alameda St. East							
North of Vernon Ave.	2	5,540	35	50	0	1.8% 0.7%	62.2
South of Vernon Ave.	2	4,610	35	50	0	1.8% 0.7%	61.4
55th St.							
East of Alameda St.	4	8,870	35	50	0	1.8% 0.7%	64.7
<b>Future Without Project</b>							
Santa Fe Ave.							
North of Vernon Ave.	4	35,780	35	50	0	1.8% 0.7%	70.8
South of Vernon Ave.	4	28,050	35	50	0	1.8% 0.7%	69.7
Vernon Ave.							
West of Alameda St.	4	14,960	30	50	0	1.8% 0.7%	65.5
Between Alameda and Santa Fe Ave.	4	16,620	40	50	0	1.8% 0.7%	68.9
Pacific Blvd.							
East of Santa Fe Ave.	6	13,680	40	50	0	1.8% 0.7%	69.0
Alameda St. West							
North of Vernon Ave.	4	19,540	40	50	0	1.8% 0.7%	69.6
South of Vernon Ave.	4	18,040	40	50	0	1.8% 0.7%	69.3
Alameda St. East							
North of Vernon Ave.	2	5,600	35	50	0	1.8% 0.7%	62.3
South of Vernon Ave.	2	4,660	35	50	0	1.8% 0.7%	61.5
55th St.							
East of Alameda St.	4	8,960	35	50	0	1.8% 0.7%	64.8
<b>Future With Project</b>							
Santa Fe Ave.							
North of Vernon Ave.	4	39,050	35	50	0	1.8% 0.7%	71.2
South of Vernon Ave.	4	31,950	35	50	0	1.8% 0.7%	70.3
Vernon Ave.							
West of Alameda St.	4	15,430	30	50	0	1.8% 0.7%	65.6
Between Alameda and Santa Fe Ave.	4	18,290	40	50	0	1.8% 0.7%	69.3
Pacific Blvd.							
East of Santa Fe Ave.	6	15,290	40	50	0	1.8% 0.7%	69.5
Alameda St. West							
North of Vernon Ave.	4	20,480	40	50	0	1.8% 0.7%	69.8
South of Vernon Ave.	4	18,430	40	50	0	1.8% 0.7%	69.4
Alameda St. East							
North of Vernon Ave.	2	6,010	35	50	0	1.8% 0.7%	62.6
South of Vernon Ave.	2	5,050	35	50	0	1.8% 0.7%	61.8
55th St.							
East of Alameda St.	4	9,310	35	50	0	1.8% 0.7%	64.9

<sup>1</sup> Distance in feet from the roadway centerline to nearest receptor location.

**APPENDIX 3.11**

---

**Transportation Report**

## DRAFT MEMORANDUM

**To:** City of Vernon

**From:** Iteris, Inc.

**Date:** February 28, 2023

**RE:** Vernon Westside Specific Plan – **Draft** CEQA Transportation Impact Analysis

### INTRODUCTION

This memorandum describes the California Environmental Quality Act (CEQA) transportation impact analysis for the Westside Specific Plan in the City of Vernon. The evaluation is consistent with CEQA Guidelines effective December 28, 2018.

### IMPACT ANALYSIS

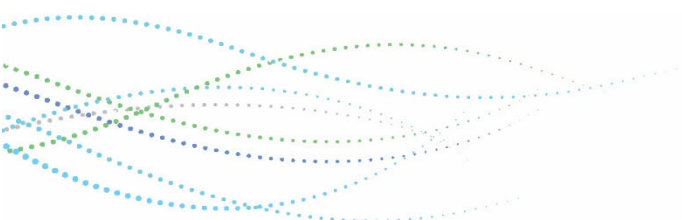
The Specific Plan's impacts are evaluated per Appendix G Environmental Checklist Form of the current CEQA guidelines, which assesses projects by the four criteria listed below:

- T-1 Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- T-2 Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*
- T-3 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)?*
- T-4 Would the project result in inadequate emergency access?*

#### T-1 Impact Evaluation

The goals of the Specific Plan are to diversify land use in a small portion of the City's westside to include residential and commercial uses, primarily along Santa Fe Avenue. The Specific Plan does not include any modifications to the circulation network.

Therefore, the Specific Plan does not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Thus, this impact is considered **less than significant**.



## T-2 Impact Evaluation

Under criteria T-2, the proposed Specific Plan's effects on Vehicle Miles Traveled (VMT) are evaluated, as described in the following sub-sections.

### Analysis Methodology

This section presents the changes in VMT based on the implementation of the Westside Specific Plan. Los Angeles County's guidelines state: Daily vehicle trips, daily VMT, and daily total VMT per service population for land use plans should be estimated using the SCAG RTP/SCS Travel Demand Forecast Model. Transportation demand management strategies to be included as project design features should be considered in the estimation of a project's daily vehicle trips and VMT. For consistency with the County's guidelines, the project's VMT estimates are summarized below.

The SCAG RTP/SCS travel demand model, with a base year of 2018, was used to calculate the baseline Specific Plan project area and City of Vernon area VMT which was divided by the service populations (residents and employees) to obtain a value of VMT per service population. It should be noted that the Traffic Analysis Zone (TAZ) structure, within the travel demand model, for the City of Vernon includes some adjacent unincorporated areas; therefore, the population and employment values for the group of TAZ's for the City of Vernon area differ from the totals for the City proper and may, therefore, vary slightly from the U.S. Census or other data sources provided within this PEIR. However, since the metric of analysis is the indexed VMT per service population rather than the absolute VMT values, the slight differences in analysis boundaries as compared to City values are indistinguishable from each other and do not affect the analysis.

In order to determine the Specific Plan project's potential level of impact, a new model scenario was prepared, incorporating the land use components of the Westside Specific Plan. For land use plans which include both residential and employment uses, the appropriate analysis metric is VMT per service population, where service population is defined as the number of residents plus the number of jobs. **Table 1** summarizes the Specific Plan's proposed net changes in land use, which were incorporated into the model's TAZ's based on the location of the district.

**Table 1: Specific Plan Project Net Change in Land Use (by district)**

District	Residential Units	Retail (sq ft)	Production Retail (sq ft)	Research & Development (sq ft)	Industrial (sq ft)
Santa Fe South	295	31,679	37,128	138,860	-117,205
Santa Fe North	165	22,666	94,243	67,693	-222,943
City Center	414	65,714	64,800	0	-64,800
Pacific	0	0	56,850	153,877	-170,601
<b>Net Total</b>	<b>874</b>	<b>120,059</b>	<b>253,021</b>	<b>360,430</b>	<b>-575,549</b>

As shown, the Specific Plan's anticipated change in dwelling units and non-residential square footage over

the 2040 estimated buildout is:

- Addition 874 dwelling units;
- Addition of 120,059 net square feet of retail uses, 253,021 net square feet of production retail uses, 360,430 net square feet of research and development uses;
- Reduction of 575,549 net square feet of industrial uses.

**Appendix A** summarizes the Average Daily Traffic (ADT) volumes for roadways within the area.

**VMT Impact Analysis**

The thresholds of significance, for use in this analysis, are defined as:

- The project would result in a significant impact if the project conditions (i.e., the With Specific Plan conditions) average daily citywide VMT per service population is above the existing conditions average daily citywide VMT per service population.

Applying the described land use plan, citywide VMT outputs were developed using the SCAG model. **Table 2** summarizes the existing/baseline VMT per service population for the Specific Plan project area as well as the City of Vernon. As shown in **Table 2**, the baseline (i.e., existing) Specific Plan project area daily VMT per service population is 20.9, which is lower than the City area’s VMT per service population of 21.2.

**Table 2: Existing (Baseline) VMT Per Service Population**

Area	Total Home-based VMT	Total Work-based VMT	Total VMT	Residents	Employees	Service Population	VMT/ Service Population
SP Area	2,611	758,303	760,914	209	36,196	36,405	20.9
City of Vernon	2,611	941,769	944,380	209	44,285	44,494	21.2

**Table 3** shows the future year 2040 base (no project) scenario which includes cumulative development and transportation infrastructure and services outside of the Specific Plan project area.

**Table 3: Future Year 2040 Base (No Project) VMT Per Service Population**

Area	Total Home-based VMT	Total Work-based VMT	Total VMT	Residents	Employees	Service Population	VMT/ Service Population
SP Area	1,379	778,048	779,427	117	37,560	37,677	20.7
City of Vernon	1,379	986,526	987,905	117	46,752	46,869	21.1

**Table 4** shows the future year 2040 Project scenario which includes the Project as well as cumulative development and transportation infrastructure and services outside of the Project area.

**Table 4: Future Year 2040 Project VMT Per Service Population**

Area	Total Home-based VMT	Total Work-based VMT	Total VMT	Residents	Employees	Service Population	VMT/ Service Population
SP Area	19,315	774,072	793,387	1,780	37,967	39,747	20.0
City of Vernon	19,315	979,501	998,816	1,780	47,159	48,939	20.4

As shown, the VMT per service population of the Specific Plan area is lower than the Vernon area average VMT per service population. In addition, the Project is forecast to reduce VMT per service population in the Specific Plan area by approximately four percent and the VMT per service population in the City of Vernon area by three percent, when compared to the no project scenario.

Since the Specific Plan project is a subset of the residents and employees of the project area, the VMT per service population for just the project-related change in residents and employment is shown in **Table 5**.

**Table 5: Future Year 2040 Project VMT Per Service Population (Project Only)**

Area	Total Home-based VMT	Total Work-based VMT	Total VMT	Residents	Employees	Service Population	VMT/ Service Population
SP Area	17,936	-3,976	13,960	1,663	407	2,070	6.7

As shown in **Table 5**, the Specific Plan project VMT per service population is forecast as 6.7 which is approximately 68 percent below the existing baseline Specific Plan project area condition shown in **Table 2** and 66 percent below the future base Specific Plan project area condition shown in **Table 3**. In addition, for informational purposes only, note that the Project-only VMT per service population is greater than 16.8 percent below the existing/baseline VMT per service population, which is the impact criteria used by Los Angeles County to identify a potentially significant impact under T-2.

Thus, this impact is considered **less than significant**. VMT outputs are provided in **Appendix B**.

### T-3 Impact Evaluation

The objective of the Specific Plan is to provide a diversity of future land uses. Access to future land use will be designed to City and State engineering design standards to meet sight distance requirements, including visibility of pedestrians and bicyclists. The Specific Plan does not propose any incompatible uses that would increase hazards. Thus, this impact is considered **less than significant**.

### T-4 Impact Evaluation

The Specific Plan does not include elements that would impede emergency vehicle access. Public roadways and buildings would conform to City and County Fire Department standards for access. These standards consist of requirements for access by fire apparatus. A fire apparatus access road is a road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general

term inclusive of all other terms such as fire lane, public street, private street, parking lot lane and access roadway. Thus, this impact is considered **less than significant**.

## APPENDIX A – ADT VOLUMES



**Vernon Westside Specific Plan - Daily Volumes**

<b>Segment</b>	<b>Existing*</b>	<b>Future No Build</b>	<b>Buildout With Project (Land Use Plan Only)</b>
Santa Fe Ave n/o Vernon Ave	35,430	35,780	39,050
Santa Fe Ave s/o Vernon Ave	27,770	28,050	31,950
Vernon Ave w/o Alameda St	14,810	14,960	15,430
Vernon Ave btwn Alameda & Santa Fe	16,460	16,620	18,290
Pacific Blvd e/o of Santa Fe	13,540	13,680	15,290
Alameda St West n/o Vernon Ave	19,350	19,540	20,480
Alameda St West s/o Vernon Ave	17,860	18,040	18,430
Alameda St East n/o Vernon Ave	5,540	5,600	6,010
Alameda St East s/o Vernon Ave	4,610	4,660	5,050
55th St e/o Alameda St	8,870	8,960	9,310

\* Existing daily volumes are based off 2022 peak hour intersection counts, factored up to calculate daily volumes

## APPENDIX B – VMT OUTPUTS

Existing

SP Area			
ID	Purpose	Productions	Attractions
1	Home-based Work	1,230	698,055
2	Home-based School	50	425
3	Home-based University	17	-
4	Home-based Shopping	203	63,363
5	Home-based Social-Recreational	471	22,016
6	Home-based Serve Passenger	175	19,809
7	Home-based Other	464	52,794
8	Work-Based Other	60,247	87,231
9	Other Based Other	70,309	76,407
Total VMT		133,168	1,020,100
Total Home-based VMT		2,611	
Total Work-based VMT		758,303	
Total Population		209	
Total Employees		36,196	
Service Population		36,405	
Total Home-based VMT/Capita		12.5	
Total Work-based VMT/Employee		20.9	
Total VMT/Service Population		20.9	

Vernon			
ID	Purpose	Productions	Attractions
1	Home-based Work	1,230	866,235
2	Home-based School	50	425
3	Home-based University	17	-
4	Home-based Shopping	203	73,810
5	Home-based Social-Recreational	471	26,456
6	Home-based Serve Passenger	175	24,592
7	Home-based Other	464	65,358
8	Work-Based Other	75,535	109,237
9	Other Based Other	85,260	91,867
Total VMT		163,405	1,257,980
Total Home-based VMT		2,611	
Total Work-based VMT		941,769	
Total Population		209	
Total Employees		44,285	
Service Population		44,494	
Total Home-based VMT/Capita		12.5	
Total Work-based VMT/Employee		21.3	
Total VMT/Service Population		21.2	

Future Year 2040 Base (Without Project)

SP Area			
ID	Purpose	Productions	Attractions
1	Home-based Work	668	701,499
2	Home-based School	25	458
3	Home-based University	10	-
4	Home-based Shopping	98	88,230
5	Home-based Social-Recreational	241	66,224
6	Home-based Serve Passenger	105	30,774
7	Home-based Other	232	110,354
8	Work-Based Other	76,550	84,504
9	Other Based Other	113,158	128,885
Total VMT		191,087	1,210,928
Total Home-based VMT		1,379	
Total Work-based VMT		778,048	
Total Population		117	
Total Employees		37,560	
Service Population		37,677	
Total Home-based VMT/Capita		11.8	
Total Work-based VMT/Employee		20.7	
Total VMT/Service Population		20.7	

Vernon			
ID	Purpose	Productions	Attractions
1	Home-based Work	668	894,099
2	Home-based School	25	458
3	Home-based University	10	-
4	Home-based Shopping	98	108,811
5	Home-based Social-Recreational	241	75,886
6	Home-based Serve Passenger	105	37,251
7	Home-based Other	232	129,973
8	Work-Based Other	92,427	106,345
9	Other Based Other	135,020	154,574
Total VMT		228,826	1,507,397
Total Home-based VMT		1,379	
Total Work-based VMT		986,526	
Total Population		117	
Total Employees		46,752	
Service Population		46,869	
Total Home-based VMT/Capita		11.8	
Total Work-based VMT/Employee		21.1	
Total VMT/Service Population		21.1	

Future Year 2040 Land Use Only

SP Area			
ID	Purpose	Productions	Attractions
1	Home-based Work	9,373	697,022
2	Home-based School	93	41,199
3	Home-based University	336	-
4	Home-based Shopping	1,518	98,942
5	Home-based Social-Recreational	3,724	69,626
6	Home-based Serve Passenger	870	56,400
7	Home-based Other	3,400	113,511
8	Work-Based Other	77,050	85,939
9	Other Based Other	115,204	182,454
Total VMT		211,568	1,345,094
Total Home-based VMT			19,315
Total Work-based VMT			774,072
Total Population		1,780	
Total Employees		37,967	
Service Population		39,747	
<b>Total Home-based VMT/Capita</b>		<b>10.9</b>	
<b>Total Work-based VMT/Employee</b>		<b>20.4</b>	
<b>Total VMT/Service Population</b>		<b>20.0</b>	

Vernon			
ID	Purpose	Productions	Attractions
1	Home-based Work	9,373	886,640
2	Home-based School	93	41,199
3	Home-based University	336	-
4	Home-based Shopping	1,518	119,392
5	Home-based Social-Recreational	3,724	79,204
6	Home-based Serve Passenger	870	62,875
7	Home-based Other	3,400	133,047
8	Work-Based Other	92,861	107,821
9	Other Based Other	136,594	208,065
Total VMT		248,770	1,638,243
Total Home-based VMT			19,315
Total Work-based VMT			979,501
Total Population		1,780	
Total Employees		47,159	
Service Population		48,939	
<b>Total Home-based VMT/Capita</b>		<b>10.9</b>	
<b>Total Work-based VMT/Employee</b>		<b>20.8</b>	
<b>Total VMT/Service Population</b>		<b>20.4</b>	