
Draft Environmental Impact Report

1450 Artesia Specific Plan

JULY 2024

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ACC	Advanced Clean Cars
ACM	asbestos-containing material
ADAM	Aerometric Data Analysis and Measurement System
ADT	average daily vehicle trips
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AFV	alternative fuel vehicle
AFY	acre-feet per year
APA	Annual Production Allowance
APA	Allowed Pumping Allocation
APN	Assessor's Parcel Number
APSA	Aboveground Petroleum Storage Act
AQMP	Air Quality Management Plan
ARC	Atlantic Richfield Company
ASF	Age Sensitivity Factor ¹
BACT	Best Available Control Technology
BMP	best management practice
BTU	British Thermal Unit
CAAQS	California Ambient Air Quality Standards
CAC	Certified Asbestos Consultant
CAFE	Corporate Average Fuel Economy
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEMA	California Emergency Management Agency
CalEPA	California Environmental Protection Agency
CalGEM	California Geologic Energy Management Division
CALGreen	California Green Building Standards
CAP	Climate Action Plan
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CCS	carbon capture and sequestration

Acronym/Abbreviation	Definition
CEC	California Energy Commission
CERS	California Environmental Reporting System
CERT	Community Emergency Response Training
CFC	chlorofluorocarbon
CGS	California Geological Survey
CH ₄	methane
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CIWM	California Integrated Waste Management
CIWQS	California Integrated Water Quality System
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPP	Clean Power Plan
CPUC	California Public Utilities Commission
CWA	Clean Water Act
DAC	Disadvantaged Community
dBA	A-weighted decibel
DDT	dichlorodiphenyltrichloroethane
DHS	Department of Health Services
DISEIO	Determination of Imminent and/or Substantial Endangerment and Issuance Order
DMA	drainage management area
DPM	diesel particulate matter
DPW	Department of Public Works
DRPEP	Distributed Resources Plan External Portal
DSOD	Division of Safety of Dams
DTSC	California Department of Toxic Substances Control
DU	dwelling unit
DWR	California Department of Water Resources
EERP	Enforcement and Emergency Response Program
EIR	environmental impact report
EISA	Energy Independence and Security Act of 2007

Acronym/Abbreviation	Definition
EJ	Environmental Justice
EOP	Emergency Operations Plan
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right to Know Act
ESL	Environmental Screening Level
EV	electric vehicle
EVSE	electric vehicle supply equipment
EWMP	enhanced watershed management program
FAH	fraction of time at home
FAR	Floor Area Ratio
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Plan
GGP	Gardena General Plan
GHG	greenhouse gas
GPD	Gardena Police Department
gpd	gallons per day
GSA	Groundwater Sustainability Agency
GSF	gross square feet
GSP	Groundwater Sustainability Plan
GSWC	Golden State Water Company
GWh	gigawatt-hour
GWP	global warming potential
HAP	hazardous air pollutant
HCFC	hydrochlorofluorocarbon
HERO	Human and Ecological Risk Office
HFC	hydrofluorocarbon
HHMD	Health and Hazardous Materials Division
HHRA	Human Health Risk Assessment
HMBP	hazardous materials business plan
HMIS	Hazardous Material Inventory Statements
HMMP	Hazardous Material Management Plan
HQTA	High-Quality Transit Area
HSC	California Health and Safety Code
IPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change

Acronym/Abbreviation	Definition
IRWMP	Integrated Regional Water Management Plan
IS	Initial Study
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
JWPCP	Joint Water Pollution Control Plant
kWh	kilowatt-hour
LACDPW	Los Angeles County Department of Public Works
LACFCD	Los Angeles County Flood Control District
LACoFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sanitation Districts
LADPW	Los Angeles County Department of Public Works
LAUSD	Los Angeles Unified School District
LBP	lead-based paint
LCFS	Low Carbon Fuel Standard
LEL	lower explosive limit
LEV	Low-Emission Vehicle
LID	Low Impact Development
Lmin	minimum sound level
LOR	Laws, Ordinances, and Regulations
LST	Local Significance Threshold
LTA	Local Transportation Assessment
LUC	land use covenant
LUST	leaking underground storage tank
MEIR	Maximally Exposed Individual Resident
mgd	million gallons per day
MLD	most likely descendant
MM	Mitigation Measure
MMT	million metric tons
MPO	metropolitan planning organization
MS4	municipal separate storm sewer systems
MW	megawatt
MWh	megawatt-hour
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NED	National Elevation Dataset

Acronym/Abbreviation	Definition
NESHAP	National Emission Standards for Hazardous Air Pollutants
NETR	Nationwide Environmental Title Research LLC
NF3	nitrogen trifluoride
NHTSA	National Highway Traffic Safety Administration
NO2	nitrogen dioxide
NOP	Notice of Preparation
NOX	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NSR	New Source Review
NWL	Natural and Working Lands
OAERP	Operational Area Emergency Response Plan
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PDF	Project Design Feature
PFC	perfluorocarbon
PM10	coarse particulate matter
PPV	peak particle velocity
PRC	California Public Resources Code
PRD	Permit Registration Document
RAO	Remedial Action Order
RAP	Remedial Action Plan
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RECLAIM	Regional Clean Air Incentives Market
REL	Reference Exposure Level
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Assessment
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RSL	Regional Screening Level
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill

Acronym/Abbreviation	Definition
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SEMS	Standardized Emergency Management System
SF	square feet
SF6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation plan
SLF	Sacred Lands File
SMP	Soil Management Plan
SO2	sulfur dioxide
SoCalGas	Southern California Gas Company
SPCC	Soil Prevention, Control, and Countermeasure
SR	State Route
SRA	source receptor area
STC	sound transmission class
SVOC	semi-volatile organic compound
SWIMS	Solid Waste Information Management System
SWIS	Solid Waste Information System
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TAT	Technical Assistance Team
TCR	Tribal Cultural Resource
TMDL	total maximum daily load
TRI	Toxics Release Inventory
TSCA	Toxic Substances Control Act
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Services
USGS	U.S. Geological Society
UST	underground storage tank
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
VIMS	vapor intrusion mitigation system
VMT	vehicle miles traveled

Acronym/Abbreviation	Definition
WDR	Waste Discharge Requirement
WEAP	Workers Environmental Awareness Program
WMP	watershed management program

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Executive Summary

This chapter provides a summary of the Draft Environmental Impact Report (EIR) for the proposed 1450 Artesia Specific Plan Project (proposed Project or Project). Included in this summary are areas of known controversy and issues to be resolved, a summary of Project alternatives, a summary of all Project impacts and associated mitigation measures, and a statement of the ultimate level of significance after mitigation is applied.

ES.1 Document Purpose

This Draft EIR was prepared by the City of Gardena (City), as lead agency, to inform decision makers and the public of the potential significant environmental impacts associated with the proposed Project. This Draft EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) Statute (California Public Resources Code, Section 21000 et seq.) and Guidelines (14 CCR 15000 et seq.) published by the Public Resources Agency of the State of California.

The purpose of this Draft EIR is to focus the discussion on those potential impacts on the environment of the Project that the lead agency has determined may be significant. In addition, feasible mitigation measures are recommended, when applicable, that could reduce or avoid significant environmental impacts.

ES.2 Document Organization

This EIR is organized as follows:

Executive Summary, summarizes the Project, potential environmental impacts associated with the Project as well as mitigation measures required to reduce any identified potentially significant impacts.

Chapter 1, Introduction, serves as a forward to the EIR, introducing the Project, the applicable environmental review procedures, and the organization of the EIR.

Chapter 2, Project Description, provides a thorough description of the proposed Project elements, the purpose and need for the Project, Project objectives, and required discretionary approvals. This chapter also includes a description of the intended uses of the EIR and public agency actions.

Chapter 3, Environmental Analysis, describes the potential environmental effects of the proposed Project, as well as proposed mitigation measures to reduce or avoid any potentially significant impacts. The discussion in Chapter 3 is organized by 12 environmental issue areas as follows:

- | | |
|-----------------------------------|--------------------------------|
| ▪ Air Quality | ▪ Hydrology and Water Quality |
| ▪ Cultural Resources | ▪ Land Use and Planning |
| ▪ Energy | ▪ Noise |
| ▪ Geology and Soils | ▪ Transportation |
| ▪ Greenhouse Gas Emissions | ▪ Tribal Cultural Resources |
| ▪ Hazards and Hazardous Materials | ▪ Utilities and Service System |

For each environmental issue area, the analysis and discussion are organized into subsections as described below:

- **Environmental Setting** – This subsection describes the physical environmental conditions in the vicinity of the proposed Project at the time of publication of the Notice of Preparation (NOP). The environmental setting establishes the baseline conditions by which the City will determine whether specific Project-related impacts are significant.
- **Relevant Plans, Policies, and Ordinances** – This subsection describes the regulatory setting applicable to the environmental issue area and the proposed Project at the time of publication of the NOP.
- **Thresholds of Significance** – This subsection identifies a set of thresholds by which the level of impact is determined.
- **Methodology** – This subsection describes how the analysis was conducted.
- **Impact Analysis** – This subsection provides a detailed analysis regarding the environmental effects of the proposed Project and whether the impacts of the proposed Project would meet or exceed the significance thresholds.
- **Mitigation Measures** – This subsection identifies potentially feasible mitigation measures that would avoid or substantially reduce significant adverse Project impacts.
- **Level of Significance After Mitigation** – This subsection discusses whether Project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse effects of the proposed Project that would result even with implementation of any feasible mitigation measures.
- **Cumulative Effects** – This subsection analyzes the potential of the proposed Project to result in significant cumulative impacts.
- **References** – In addition to the eight subsections listed above, full citations for all referenced documents are included at the end of each section or chapter.

Chapter 4, Other CEQA Requirements, addresses significant environmental effects that cannot be avoided, the significant irreversible environmental changes that would result from implementation of the proposed Project, growth-inducing impacts associated with the proposed Project, and potential secondary effects of mitigation measures included for the proposed Project.

Chapter 5, Alternatives, discusses alternatives to the proposed Project, including a No Project Alternative. This chapter describes the rationale for selecting the range of alternatives discussed in the EIR and identifies the alternatives considered by the City that were rejected from further discussion as infeasible during the scoping process. Lastly, Chapter 5 includes a discussion of the environmental effects of the alternatives that were carried forward for analysis and identifies the environmentally superior alternative.

Chapter 6, List of Preparers, gives names and contact information of those responsible for writing this EIR.

Appendices include various technical studies prepared for the proposed Project, as listed in the Table of Contents.

ES.3 Project Location

The 1450 Artesia Specific Plan would cover a site that is approximately 6.33 acres located in the City of Gardena, at the corner of Artesia Boulevard and Normandie Avenue, two major thoroughfares within the City (Figure 2-1, Project Location). The Project site is located approximately 12 miles southwest of downtown Los Angeles and is locally accessible via several major freeways including Interstate (I) 405, I-110, I-105 and State Route (SR) 91 (Artesia Boulevard). Artesia Boulevard, an east-west street forming the northern boundary of the Plan area, delivers direct access to the Specific Plan area. Local access to the Project site is also provided from Normandie Avenue, traveling north-south just east of the Project site and Western Avenue, traveling north-south within the vicinity to the west of the Project site (Figure 2-1).

The Project site consists of the following Assessor Parcel Numbers (APNs): 6106-036-010, 6106-036-012, 6106 036-034, 6106-036-035, 6106-036-036, 6106-036-037 (collectively, the “Project site”). Specifically, the Project site is located in Township 3 South, Range 14 West, Section 00 (Randymajors Research Hub 2024).

ES.4 Project Description

ES.4.1 Project Overview

The proposed Project would result in the redevelopment of mixed-use property with a new mixed-use development consisting of the following components, as shown in Figure 2-4, Site Plan: a 268,000 gross-square-foot (GSF) building, associated surface parking, landscaping and circulation improvements, a self-storage use of three levels totaling 186,000 GSF, an industrial warehousing use (one level totaling 72,000 GSF plus 10 loading docks), and an office/retail use (a mezzanine totaling 10,000 GSF). Other Project improvements include a small storage structure for use by the City, perimeter fencing, on-site and perimeter landscaping, lighting, and exterior sidewalks, two curb cuts – one for right turn in, and one for right turn out driveways along Artesia Boulevard and 124 automobile parking stalls, including 5 accessible spaces, 6 electric vehicle (EV) charging station spaces, and 25 EV-ready spaces.

ES.4.2 Project Objectives

The primary objectives of the proposed Project include the following:

- Redevelop an underutilized, blighted and environmentally impacted property with economically vibrant industrial and commercial uses along a major development corridor within the City
- Develop appropriate uses in an area with a legacy of contamination in a manner that protects human health and the environment and allows for continued monitoring of remediated areas
- Produce short-and long-term jobs during the Project’s construction and operations phases
- Generate property and sales tax revenues for the City to enhance its services to the community and infrastructural improvements

- Provide the City a substantial monetary public benefit to the City's General Fund
- Provide the City with an outdoor venue to hold community events

ES.5 Areas of Known Controversy

In accordance with the CEQA Guidelines, an NOP was distributed on June 8, 2023, to public agencies, organizations, and interested individuals. The purpose of the NOP was to provide notification that the City planned to prepare an EIR and to solicit input on the scope and content of the EIR. Approximately 21 copies of the NOP were distributed, and eight written comment letters were received by the City. These letters and the NOP are included in Appendix A of this EIR.

A scoping meeting was held at the City of Gardena City Council Chambers on June 22, 2023. The purpose of this meeting was to seek input from public agencies and the general public regarding the potential environmental impacts of the proposed Project. Approximately seven people attended the scoping meeting. The public comments, questions, and concerns that were received at the scoping meeting generally included the following areas:

- **Air Quality** – emissions during construction and from operational traffic
- **Land Use and Planning** – land use conflicts between warehouses and sensitive receptors
- **Noise** – noise increases from operational traffic
- **Transportation** – adequate parking or implementation of TDM elements to reduce needed parking spaces, increased VMT and traffic from trucks and residential vehicles, additional EV parking spaces, improvements to the pedestrian network, bike rack and potential Class IV bike lane on Artesia Boulevard or a Dominguez Channel bike path
- **Utilities and Service Systems** – adequate wastewater flow

This EIR focuses on all potential environmental impacts, including the comments received in response to the NOP.

ES.6 Required Permits and Approvals

The City is the lead agency for the proposed Project pursuant to CEQA Guidelines Section 15367. The Applicant would obtain all permits and approvals, as required by law. A list of permits or other forms of approval required of the proposed Project is provided in Table ES-1.

Table ES-1. Permits or Other Actions Required

Agency	Jurisdiction	Permit Regulatory Requirement/Approval
State		
State Water Resources Control Board	Responsible Agency	General Construction Activity National Pollutant Discharge Elimination System (NPDES) Permit

Table ES-1. Permits or Other Actions Required

Agency	Jurisdiction	Permit Regulatory Requirement/Approval
Los Angeles County Fire Department	Responsible Agency	Plan check
Local		
City of Gardena	Lead Agency	<ul style="list-style-type: none">▪ Adoption of the 1450 Artesia Specific Plan▪ Zone Text Amendment▪ Development Agreement▪ Site Plan Review▪ Lot Merger

ES.7 Summary of Environmental Impacts and Mitigation Measures

Table ES-2 provides a summary of the impact analysis related to the Project. Table ES-2 identifies a summary of the significant environmental impacts resulting from the Project pursuant to the CEQA Guidelines Section 15123(b)(1). For more detailed discussion, please see Chapter 3 of this Draft EIR. Table ES-2 lists the applicable mitigation measures related to potentially significant impacts, as well as the level of significance after mitigation.

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Air Quality			
AQ-1. Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant	N/A	N/A
AQ-2. Would the project result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less than Significant	N/A	N/A
AQ-3. Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant	<p>MM-AQ-1. Clean Construction Equipment</p> <p>Prior to issuance of grading permits, the Applicant shall prepare and submit documentation to the City of Gardena that demonstrate the following:</p> <ul style="list-style-type: none"> All off-road diesel-powered construction equipment greater than 50 horsepower meets California Air Resources Board (CARB) Tier 4 Final off-road emissions standards or, if not commercially available, meet Tier 4 Interim off-road emission standards (as shown in CARB's 2017 Off-Road Diesel Emission Factor Update for NO_x and PM). A copy of each unit's Best Available Control Technology (BACT) documentation (certified tier 	Less than Significant

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>specification or model year specification), and CARB or South Coast Air Quality Management District operating permit (if applicable) shall be provided to the City at the time of mobilization of each applicable unit of equipment.</p> <ul style="list-style-type: none">▪ Construction equipment shall be properly maintained according to manufacturer specifications.▪ All construction equipment and delivery vehicles shall be turned off when not in use, or limit on-site idling for no more than 5 minutes in any 1 hour.▪ On-site electrical hook ups to a power grid shall be provided for electric construction tools including saws, drills, and compressors, where feasible, to reduce the need for diesel powered electric generators. <p>MM-AQ-2. Electric Cargo Handling Equipment</p> <p>All outdoor cargo handling equipment (such as yard trucks, hostlers, yard goats, pallet jacks, and forklifts) shall be zero emission (i.e., powered by electricity or other alternative fuels). The warehouse building shall include the necessary charging stations for cargo handling equipment. The building manager or</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>their designee shall be responsible for enforcing these requirements.</p> <p>MM-GHG-1. Establish On-Site Solar Power</p> <p>Prior to the issuance of a Building permit, the Project Applicant shall provide written proof to the City of Gardena Community Development Director that the total annual electricity demand from on-site operations does not exceed 2,226,107 kWh/year. On-site electrical demand exceeding 2,226,107 kWh/year shall be supplied by on-site renewable sources (e.g., solar photovoltaic panels). Further, the Project will be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every 3 years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10) require buildings to be designed to have 15% of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.	
AQ-4. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant	N/A	N/A
Cultural Resources			
CUL-1. Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	Less than Significant	N/A	N/A
CUL-2. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	Potentially Significant	MM-CUL-1. Workers Environmental Awareness Program Prior to the start of construction activities, all construction personnel and monitors shall be trained regarding identification and treatment protocol for inadvertent discoveries of cultural resources (archaeological and tribal) and human remains. A basic presentation and handout or pamphlet shall be prepared in order to ensure proper identification and treatment of inadvertent discoveries of cultural resources and human remains. The purpose of the Workers Environmental Awareness Program (WEAP) training is to provide specific details on the kinds of	Less than Significant

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>materials that may be identified during ground disturbing activities and explain the importance of and legal basis for the protection of human remains and significant cultural resources. Each worker shall also be trained in the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground disturbing activities. These procedures include but are not limited to work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitoring staff.</p> <p>MM-CUL-2. Retention of an On-Call Qualified Archaeologist</p> <p>A qualified archaeologist shall be retained and on-call to respond and address any inadvertent discoveries identified Project implementation. Additionally, in consideration of the potential to encounter intact cultural deposits beneath fill soils, the qualified archaeologist shall survey the proposed Project site once fill soils have been removed to ensure no cultural deposits underly the fill layer. If is determined, based on the aforementioned survey, that cultural resources are present or may be present and may be impacted during Project construction,</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>monitoring may be warranted. Additionally, any identified cultural resources shall be assessed and evaluated pursuant to CEQA. If it is determined that monitoring is warranted, a qualified archaeological principal investigator, meeting the Secretary of the Interior’s Professional Qualification Standards, shall oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor will be responsible for maintaining daily monitoring logs.</p> <p>MM-CUL-3. Inadvertent Discovery Clause</p> <p>In the event that potential archaeological resources (sites, features, or artifacts) are exposed during ground disturbing, all construction work occurring not less than 100 feet of the find shall immediately stop and the qualified archaeologist that has been retained on call must be notified immediately to assess the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the CEQA, the archaeologist may simply record the find and allow work to</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		continue. If the discovery proves significant under CEQA, additional work (e.g., preparation of an archaeological treatment plan, testing, data recovery, or monitoring) may be warranted if the resource cannot be feasibly avoided. If the discovery is Native American in nature, consultation with and/or monitoring by a tribal representative may be necessary.	
CUL-3. Would the project disturb any human remains, including those interred outside of formal cemeteries?	Less than Significant	N/A	N/A
Energy			
ENG-1. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than Significant	N/A	N/A
ENG-2. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than Significant	N/A	N/A
Geology and Soils			
GEO-1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake	No Impact	N/A	N/A

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?			
ii. Strong seismic ground shaking	Less than Significant	N/A	N/A
iii. Seismic-related ground failure, including liquefaction	Less than Significant	N/A	N/A
GEO-2. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than Significant	N/A	N/A
GEO-3. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than Significant	N/A	N/A
GEO-4. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant	MM-GEO-1. Inadvertent Discovery In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and	Less than Significant

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find. Salvaged fossils deemed to be significant shall be donated to an accredited repository with retrievable storage such as a museum. Costs for preparing the fossils for accessioning into the accredited repository and any associated curation fees shall be paid by the Project Applicant.	
Greenhouse Gas Emissions			
<p>GHG-1. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</p> <p>GHG-2. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</p>	Potentially Significant	<p>PDF-GHG-1.</p> <p>The Project shall be designed to be all-electric and prohibit connection to natural gas infrastructure. Using electric instead of natural gas-powered appliances replaces a more emissions-intensive fossil fuel source of energy with a less emissions-intensive source of energy as electricity from the grid is increasingly transitioning to renewable sources.</p> <p>MM-GHG-1. Establish On-Site Solar Power</p> <p>Prior to the issuance of a Building permit, the Project Applicant shall provide written proof to the City of Gardena Community Development Director that the total annual electricity demand from on-site operations does not</p>	Less than Significant

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>exceed 2,226,107 kWh/year. On-site electrical demand exceeding 2,226,107 kWh/year shall be supplied by on-site renewable sources (e.g., solar photovoltaic panels). Further, the Project will be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every 3 years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10) require buildings to be designed to have 15% of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.</p> <p>See MM-AQ-2 listed above.</p>	
Hazards and Hazardous Materials			
HAZ-1. Would the project create a significant hazard to the public or the environment through the routine	Potentially Significant	PDF-HAZ-1. Remedial Action of the Gardena Sumps Site	Less than Significant

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
transport, use, or disposal of hazardous materials?		ARC will coordinate with the Applicant to implement the Final RAP. The Final RAP includes: (a) excavation of degraded and soil-sludge mixture; (b) consolidation of this excavated mixture above the Cooper North and Cooper South Sumps; (c) grading for excavated areas; (d) grading and installation, maintenance, and repair of an engineered cap over the Cooper North and Cooper South sumps, including stabilization, foundation, low hydraulic conductivity and erosion resistance layers; (e) installation of a retaining wall system along the north side of the Haack sump; (f) installation, operation, maintenance and repair of a soil vapor control and monitoring system that will include soil vapor probes and associated infrastructure; (g) installation, operation, maintenance and repair of a groundwater monitoring system; and (h) restoration of vegetation and site conditions. The Final RAP will be implemented before the Applicant commences construction of the proposed Project. The portion of the proposed Project site that overlaps the sump areas and the top of the engineered cap will be paved and utilized as a parking lot. The Applicant will undertake measures to protect the remedy during site operation. As part of the Final RAP, a land use covenant will be	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>established for the site to prohibit sensitive uses thereon, such as residential uses, but will permit the proposed Project's commercial and industrial uses, as well as the City's temporary uses. The Applicant will comply with all institutional controls that DTSC may require as part of the ongoing use of the site, except for those assigned to ARC as part of its Final RAP.</p> <p>MM-HAZ-1. Pre-Demolition Hazardous Materials Abatement</p> <p>Demolition or renovation plans and contract specifications shall incorporate abatement procedures for the survey and removal of materials containing asbestos, lead, polychlorinated biphenyls, hazardous materials, hazardous wastes, and universal waste items. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District.</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>MM-HAZ-2. Soil Management Plan</p> <p>Prior to commencement of any earthmoving activities, a Soil Management Plan (SMP) shall be developed that addresses potential impacts in soil and soil vapor from releases on or near the Project site. The SMP shall include training procedures for identification of contamination. The SMP shall describe procedures for assessment, characterization, management, and disposal of contaminated soils in accordance with all applicable state and local regulations, including SCAQMD Rules 1466, 403, and 1166. The SMP shall include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. The Applicant or its designee shall implement the SMP during construction activities for the proposed Project. As the site is currently under regulatory oversight by DTSC and shall likely have a land use covenant in place at the time of construction, the SMP shall be submitted to DTSC for review and approval prior to earthmoving activities.</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
HAZ-2. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Potentially Significant	<p>PDF-HAZ-2. Vapor Intrusion Mitigation</p> <p>The Applicant will install a soil vapor barrier and ventilation systems beneath the proposed structure to protect building occupants against indoor soil vapor intrusion. Vapor barrier systems will meet guidelines described in the Vapor Intrusion Mitigation Advisory published by DTSC and CalEPA in 2011 (VIMA). Vapor barriers will be designed to meet the standards outlined in the VIMA and will be in general conformance with General Construction, Membrane Installation, and Ventilation Trench for Passive Gas Control System Requirements of the Los Angeles County Methane Gas Mitigation Standards. The system will include a vapor barrier membrane and passive sub-slab venting system. The system will be designed by a California-licensed engineer. Monitoring probes will be installed below the barrier system, to evaluate the effectiveness of the system. An OM&M Plan will be prepared to define the ongoing sampling required to confirm the vapor intrusion mitigation system (VIMS) is operating as designed. The OM&M Plan will include a decision tree and contingency plans in the event unexpected conditions are identified.</p>	Less than Significant

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		Also see PDF-HAZ-1, MM-HAZ-1, and MM-HAZ-2 above.	
HAZ-3. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Potentially Significant	See PDF-HAZ-1, PDF-HAZ-2, MM-HAZ-1, and MM-HAZ-2 above.	Less than Significant
HAZ-4. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would it create a significant hazard to the public or the environment?	Potentially Significant	See PDF-HAZ-1, PDF-HAZ-2, and MM-HAZ-2 above.	Less than Significant
Hydrology and Water Quality			
HYD-1. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin?	Less than Significant	N/A	N/A
HYD-2. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:			
i. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater	Less than Significant	N/A	N/A

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
drainage systems or provide substantial additional sources of polluted runoff?			
HYD-3. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant	N/A	N/A
Land Use and Planning			
LU-1. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less than Significant	N/A	N/A
Noise			
NOI-1. Would the Project generate 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	MM-NOI-1. Construction Noise Prior to issuance of a Demolition Permit, the Applicant shall demonstrate, to the satisfaction of the City of Gardena Building Official, that the construction contracts include at least an 8-foot-high temporary noise barrier along the western Project boundary. The temporary noise barrier shall have a sound transmission class (STC) of 25 or greater in accordance with the ASTM Test Method E90, or at least 2 pounds per square foot to ensure adequate transmission loss	Significant and Unavoidable (Construction)

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>characteristics. To achieve this, the barrier may consist of steel tubular framing, welded joints, a layer of 18-ounce tarp, a 2-inch thick fiberglass blanket, a 1/2-inch thick weatherwood asphalt sheathing, and 7/16-inch sturdy board siding. The barrier must be free of degrading holes or gaps and shall be designed to prevent structural failure due to factors such as wind, shear, shallow soil failure, earthquakes, and erosion.</p> <p>MM-NOI-2. Special Event Noise</p> <p>All City-sponsored special events shall be subject to the following requirements:</p> <ul style="list-style-type: none">▪ Special Events shall be restricted to the hours of 7:00 a.m. to 10:00 p.m.▪ Amplified noise sources (e.g., speakers, bandstands) shall be directed away from the nearest noise-sensitive receptors.▪ Amplification systems will be positioned so that the tilt of the systems is downwards slightly to focus sound on the ground and prevent it from traveling up towards noise-sensitive receptors. Amplification systems will also be distributed to minimize sound levels closest to individual sources.	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
NOI-2. Would the Project generate excessive ground-borne vibration or ground-borne noise levels?	Potentially Significant	<p>MM-NOI-3. Construction Vibration</p> <p>The Project Applicant will require contractor(s) to comply with a Vibration Management Plan and implement minimum allowable setbacks from nearby buildings/structures to the west for heavy machinery. For all new construction, the contractor(s) will not use pile drivers, pavement breakers, or blasting equipment. In addition, when construction is required in direct proximity to the residences immediately west of the Project site, the contractor(s) will observe the following minimum allowable setbacks for specified construction equipment:</p> <ul style="list-style-type: none"> ▪ Small bulldozer/tractors shall not be used within 11 feet of buildings to the west; ▪ Jackhammers shall not be used within 54 feet of any buildings to the west; ▪ Loaded trucks shall not be used within 95 feet of buildings to the west; and ▪ Large bulldozers shall not be used within 105 feet of any buildings to the west. 	Less than Significant
Transportation			
TRA-1. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system,	Less than Significant	N/A	N/A

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
including transit, roadway, bicycle and pedestrian facilities?			
TRA-2. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less than Significant	N/A	N/A
TRA-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)?	Less than Significant	N/A	N/A
Tribal Cultural Resources			
TCR-1. 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 listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	Less than Significant	N/A	N/A

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
TCR-2. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Potentially Significant	<p>MM-TCR-1. Native American Monitoring</p> <p>A. Prior to commencement of ground-disturbing activities, the Project Applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any “ground-disturbing activity” for the subject Project at all Project locations (i.e., both on-site and any off-site locations that are included in the Project Description/definition and/or required in connection with the Project, such as public improvement work). “Ground-disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.</p> <p>B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity or the issuance of any permit necessary to commence a ground-disturbing activity.</p>	Less than Significant

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the tribe. Monitoring logs will identify and describe any discovered Tribal Cultural Resources (TCRs), including, but not limited to, Native American cultural and historical artifacts, remains, and places of significance, as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitoring logs will be provided to the Project Applicant/lead agency upon written request to the tribe.</p> <p>D. On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the monitor from a designated point of contact for the Project Applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the Project site</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>or in connection with the Project are complete; or (2) a determination and written notification by the monitor to the Project Applicant/lead agency that no future planned construction activity and/or development/construction phase at the Project site possesses the potential to impact TCRs.</p> <p>MM-TCR-2. Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)</p> <p>Management strategies stipulated in MM-CUL-1 through MM-CUL-3 shall be implemented in the event that Project activities encounter cultural resources. In addition, the following TCR-specific measures shall be implemented. Upon discovery of any TCRs or archaeological resources, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the monitor and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983).</p> <p>A. If the resources are Native American in origin, the Kizh will recover and retain</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>all discovered TCRs in the form and/or manner the tribe deems appropriate, in the tribe’s sole discretion, and for any purpose the tribe deems appropriate, including for educational, cultural and/or historic purposes.</p> <p>B. If the archaeologist determines that the resource meets the criteria as a “historical resource” or “unique archaeological resource” under CEQA, time allotment and funding sufficient to allow for the implementation of avoidance measures or appropriate mitigation shall be made available. The treatment plan shall be in accordance with CEQA Guidelines § 15064.5(f) for historical resources and Public Resources Code § 21083.2(b) for unique archaeological resources. If not left in place, any historic or archaeological material that is not Native American in origin shall be curated at a public, nonprofit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum at the University of California Los Angeles, if such an institution agrees to accept the</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society for educational purposes.</p> <p>MM-TCR-3. Unanticipated Discovery of Human Remains and Associated Funerary Objects</p> <p>A. Native American human remains are defined in California Public Resources Code (PRC) Section 5097.98(d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC Section 5097.98, are also to be treated according to this statute.</p> <p>B. If human remains and/or grave goods are discovered or recognized on the Project site, then all construction activities shall immediately cease within 200 feet of the discovery and PRC Section 5097.9 and California Health and Safety Code Section 7050.5 shall be followed. This includes among other required measures, the immediate contact of the County Coroner, the principal archaeologist retained for the Project and if the remains are potentially Native</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>American in origin, the Gabrieleno Band of Mission Indians-Kizh Nation.</p> <p>C. Human remains and grave/burial goods found with such remains shall be treated alike per PRC Sections 5097.98(d)(1) and (2).</p> <p>D. Construction activities may resume in other parts of the Project site at a minimum of 200 feet away from discovered human remains and/or burial goods. This determination will be made by the construction monitor in consultation with the principal archaeologist and if the remains are potentially Native American in origin, the Gabrieleno Band of Mission Indians-Kizh Nation. No further constriction shall occur until the construction monitor and/or principal archaeologist has given expressed consent of that determination (along with any other mitigation measures the monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5[f]).</p> <p>E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>MM-TCR-4. Unanticipated Discovery of Human Remains and Associated Funerary Objects</p> <p>This mitigation measure shall only apply if the Gabrieleno Band of Mission Indians-Kizh Nation is designated as the Most Likely Descendant (“MLD”) by the NAHC.</p> <p>A. The Koo-nas-gna Burial Policy shall be implemented. To the tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, tribal traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.</p> <p>B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.</p> <p>C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.</p> <p>D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The tribe will make every effort to recommend diverting the Project and keeping the remains in situ and protected. If the Project cannot be diverted, it may be determined that burials will be removed.</p> <p>E. In the event preservation in place is not possible despite good faith efforts by the Project Applicant/developer and/or landowner, before ground-</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>disturbing activities may resume on the Project site, the landowner shall arrange a designated site location within the footprint of the Project for the respectful reburial of the human remains and/or ceremonial objects.</p> <p>F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within 6 months of recovery. The site of reburial/repatriation shall be on the Project site but at a location agreed upon between the tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered</p> <p>G. The tribe will work closely with the Project’s qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the tribe, documentation shall be prepared and shall include (at a minimum) detailed</p>	

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		<p>descriptive notes and sketches. All data recovery data recovery related forms of documentation shall be approved in advance by the tribe. If any data recovery is performed, once complete, a final report shall be submitted to the tribe and the NAHC. The tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.</p> <p>Also see MM-CUL-1, MM-CUL-2, and MM-CUL-3 above.</p>	
Utilities and Service Systems			
UTL-1. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects?	Less than Significant	N/A	N/A
UTL-2. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than Significant	N/A	N/A

Table ES-2. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
UTL-3. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant	N/A	N/A
UTL-4. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant	N/A	N/A
UTL-5. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than Significant	N/A	N/A

ES.8 Summary of Project Alternatives

Section 15126.6 of the CEQA Guidelines identifies the parameters within which consideration and discussion of alternatives to the Project should occur. As stated in this section of the Guidelines, alternatives must focus on those that are reasonably feasible and that attain most of the basic objectives of the Project. Each alternative should be capable of avoiding or substantially lessening any significant impacts of the Project. The rationale for selecting the alternatives to be evaluated and a discussion of the No Project Alternative are also required, per Section 15126.6.

ES.8.1 Alternatives Evaluated

This section discusses the alternatives to the Project, including the No Project Alternative, under consideration. The No Project (No Development) Alternative, which is a required element of an EIR pursuant to Section 15126.6(e) of the CEQA Guidelines, examines the environmental effects that would occur if the Project were not to proceed and no development activities were to occur. The other alternatives are discussed as part of the “reasonable range of alternatives” selected by the lead agency. The following alternatives are addressed in this section, followed by a more detailed discussion of each:

- **Alternative 1** – No Project Alternative
- **Alternative 2** – Reduced Density Alternative
- **Alternative 3** – Self-Storage Only Alternative
- **Alternative 4** – Truck-Storage Lot Alternative

Alternative 1 – No Project Alternative

Under Alternative 1, development of the Project site would not occur as discussed in Chapter 2 of this Draft EIR, and no new permanent development or land uses would be introduced. However, Alternative 1 assumes that remediation of the site as stipulated in the Final RAP would proceed as that document has been approved by DTSC and the remediation process would occur absent the proposed Project, which would include demolition of two existing structures. The other two existing structures would remain as nonconforming uses.

Alternative 2 – Reduced Density Alternative

Alternative 2 consists of a Project with the same elements as the proposed Project but reduced in square footage and development footprint by 50%. Therefore, this Alternative assumes 93,000 square feet of self-storage uses consisting of 740 storage units, 36,000 square feet of industrial warehouse/distribution uses, and 5,000 square feet of office/mezzanine uses, which would be developed on the western half of the Project site. Operations would be proportionately less under this Alternative. Special events would remain unchanged from the proposed Project under Alternative 2.

Alternative 3 – Self-Storage Only Alternative

Alternative 3 consists of self-storage only development at the Project site. Like the proposed Project, this Alternative assumes a single building totaling 268,000 square feet. However, under this

Alternative, the building would be entirely self-storage, except for 2,000 square feet for office/lease space. Assuming a similar proportion of self-storage units to overall square footage, this Alternative assumes 2,100 self-storage units.

Alternative 3 would include similar construction activities as the Project, given the same parking, square footage, and landscaping would be constructed. Operation of Alternative 3 would result in fewer employees, given self-storage uses require fewer employees than industrial warehouse/distribution uses. City-sponsored special events would remain unchanged under this Alternative.

Alternative 4 – Truck-Storage Lot Alternative

Alternative 4 would replace the Project's self-storage, industrial, and office/mezzanine use building (totaling 268,000 square feet) with a truck parking and storage lot. Alternative 4 would include 165 trailer parking stalls for heavy-duty trucks to drop off and store trailers as well as a security check-in station at the northwest corner at the entrance/exit. Alternative 4 would include demolition of all on-site structures and paving of the entire Project site. A conceptual site plan for Alternative 4 is depicted on Figure 5-1.

Operations would result in an estimated two employees for nighttime security purposes only. Heavy-duty trucks would drive onto the site via Artesia Boulevard and store trailers, typically for up to 48 hours. Some heavy-duty trucks may drop off their trailers and containers at the site, which could be stored at the site for longer periods of time up to 1 month. Special events would not occur under Alternative 4 because the entire Project site would be needed for trailer and container storage on a 24-hour, 7-day-per-week basis with all tractor trailer spaces available due to the unpredictability of the number of spaces needed at any given time.

ES.8.2 Environmentally Superior Alternative

A summary of the environmental impacts associated with each alternative is provided in Table ES-3. As shown, Alternative 1 (No Project Alternative) would be the environmentally superior alternative, because it would avoid all of the environmental impacts of the proposed Project.

The environmental impacts of Alternative 2 (Reduced Density Alternative) would be reduced compared to the proposed Project in the areas of construction and operational air quality, greenhouse gas emissions and energy because construction and operational activity would be reduced by half. It would also reduce demand on utilities and water supplies by half and generate half the solid waste of the proposed Project. Alternative 2 would also avoid construction and operation over the engineered cap on the eastern half of the Project site, which would reduce potential exposure to the most contaminated portion of the site. Alternative 2 would also result in half the amount of vehicle trips when compared to the proposed Project. However, these reductions in impacts would not result in any different impact determinations than the determinations for the proposed Project. Additionally, Alternative 2 would not reduce or avoid the significant and unavoidable construction noise impact generated by the proposed Project.

The environmental impacts of Alternative 3 (Self-Storage Only Alternative) would be essentially the same as the proposed Project because the Project would be the same size and on the same footprint, with the exception of operational air quality and transportation impacts, which would be reduced

when compared to the proposed Project because the trip generation would be reduced. Some reductions in demand on utilities and solid waste generation could occur with the removal of the industrial warehouse/distribution use but they would not be substantial and would not result in any different impact determinations than the determinations for the proposed Project. Additionally, Alternative 3 would not reduce or avoid the significant and unavoidable construction noise impact generated by the proposed Project.

The environmental impacts of Alternative 4 (Truck Storage Alternative) would be reduced compared to the proposed Project areas of construction and operational air quality, greenhouse gas emissions and energy because construction and operational activity would be greatly reduced as both constructing and operating a truck storage facility would be much less intensive than constructing and operating the proposed Project. It would also significantly reduce demand on utilities and water supplies and generate much less solid waste than the proposed Project. Alternative 4 would greatly reduce the number of vehicle trips when compared to the proposed Project, from 578 total daily trips under the proposed Project to 4 total daily trips under Alternative 4. However, Alternative 4 would not reduce or avoid the significant and unavoidable construction noise impact generated by the proposed Project.

For these reasons, other than the No Project Alternative, Alternative 4 would be considered the environmentally superior alternative.

Table ES-3. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Project	No Project Alternative (Alternative 1)	Reduced Density Alternative (Alternative 2)	Self-Storage Only Alternative (Alternative 3)	Truck-Storage Lot Alternative (Alternative 4)
Air Quality	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Cultural Resources	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Energy	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Geology and Soils	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Greenhouse Gas Emissions	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Hazards and Hazardous Materials	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

Table ES-3. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Project	No Project Alternative (Alternative 1)	Reduced Density Alternative (Alternative 2)	Self-Storage Only Alternative (Alternative 3)	Truck-Storage Lot Alternative (Alternative 4)
Hydrology and Water Quality	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Land Use and Planning	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Noise	Significant and Unavoidable	No Impact	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
Transportation	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Tribal Cultural Resources	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Utilities and Service Systems	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant

ES.9 References

Randymajors Research Hub. 2024. Randymajors Research Hub, Section Township Range. Accessed June 25, 2024. <https://www.randymajors.org/township-range-on-google-maps?x=-118.3001470&y=33.8718862&cx=-118.3024472&cy=33.8666410&zoom=13&labels=show&plss=show>.

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1 Introduction

This environmental impact report (EIR) has been prepared by the City of Gardena (City) to evaluate potential environmental effects that would result from development of the 1450 Artesia Specific Plan Project (Project or proposed Project). This EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (California Public Resources Code, Section 2100 et. seq., as amended) and its implementing guidelines (14 CCR 15000 et. seq.). The City is identified as the lead agency for the proposed Project under CEQA.

1.1 Summary of the Proposed Project

The proposed Project would involve the construction and operation of a mixed-use development with a total building area of 268,000 square feet and an approximate height of 75 feet, including a self-storage use (three levels totaling 186,000 gross square feet [GSF] with 1,480 storage units over ground floor warehouse/distribution use and a 1,000-square-foot leasing office), a warehouse/distribution use (one level totaling 72,000 GSF with 10 loading docks), and an office/retail use (a mezzanine totaling 10,000 GSF). The Project's proposed 72,000 GSF of warehouse/distribution use includes 10,000 GSF of potential future square footage to account for the potential future acquisition of a 0.23-acre parcel currently occupied by a single residential dwelling unit. Additionally, proposed associated facilities and improvements include perimeter fencing, on-site and perimeter landscaping, lighting, exterior sidewalks, and pavement for on-site parking spaces. Under the Specific Plan, the parking lot area would be used periodically for City-sponsored outdoor events outside of the Project's warehouse/distribution component operating hours. The Project includes construction of a 200 GSF, non-habitable structure on the eastern side of the Project site for storage of special event-related materials by the City.

The Applicant is coordinating with the Atlantic Richfield Company (ARC), which is a responsible party working under the direction of the California Department of Toxic Substances Control (DTSC) to implement a Remedial Action Plan (RAP) by installing an engineered cap, soil vapor probes, and associated infrastructure on part of the Project site before the Applicant commences construction of the proposed Project. The Applicant will undertake measures to protect this remedy and avoid an unreasonable risk of harm to human health and the environment, such as installing soil vapor barrier and ventilation systems beneath the structure to protect building occupants against indoor soil vapor intrusion; recording a land use covenant on the site to prohibit sensitive uses thereon, such as residential uses, but which would permit the proposed Project's commercial and industrial uses; complying with all institutional controls that DTSC may require; and undertaking long-term monitoring and maintenance of the soil vapor barrier and ventilation systems for the proposed Project's building.

Construction of the proposed Project is expected to last approximately 18 months beginning in the spring of 2024 and ending in the fall of 2025. The proposed Project is anticipated to begin operations in Fall of 2025. The Applicant's timing for construction would not interfere with the implementation of the RAP by ARC, nor will ARC's implementation of the RAP interfere with the Applicant's construction and operation of the proposed Project.

1.2 CEQA Environmental Process

CEQA requires preparation of an EIR when there is substantial evidence supporting a fair argument that a proposed Project may have a significant effect on the environment. The purpose of an EIR is to provide decision makers, public agencies, and the general public with an objective and informational document that fully discloses the environmental effects of a proposed Project. The EIR process is intended to facilitate the objective evaluation of potentially significant direct, indirect, and cumulative impacts of a proposed Project, and to identify feasible mitigation measures and alternatives that would reduce or avoid the proposed Project's significant effects. In addition, CEQA specifically requires that an EIR identify those adverse impacts determined to be significant after mitigation.

In accordance with the CEQA Guidelines, an Initial Study (IS) and Notice of Preparation (NOP) were prepared and distributed to public agencies and organizations. The purpose of the NOP was to provide notification that City plans to prepare an EIR and to solicit input on the scope and content of the EIR. In accordance with CEQA Guidelines Section 15082, the City distributed the IS/NOP to 21 agency and organization contacts. The IS/NOP was also filed with the State Clearinghouse and the County Clerk on June 8, 2023. Additionally, the City sent the IS/NOP to addresses within a 300-foot buffer of the Project site. An electronic copy of the IS/NOP was also made available on the City's website. In response to the IS/NOP, eight written comment letters were received by the City. These letters and the IS/NOP are included in Appendix A of this EIR.

A public scoping meeting was held on June 22, 2023 at 6:00 p.m. at the City of Gardena City Council Chambers, located at 1700 West 162nd Street, Gardena, California 90247. Information regarding the scoping meeting was included in the NOP, which was widely distributed, as described above. The purpose of this meeting was to share information regarding the proposed Project and the environmental review process and to receive written comments regarding the scope and content of the environmental analysis to be addressed in the EIR. Approximately seven people attended the scoping meeting. A summary of the proposed Project and the CEQA process was presented at the meeting. Attendees at the scoping meeting were informed that verbal comments would not be recorded at the meeting and were encouraged to also submit written comments. Therefore, only written comments received during the scoping period were entered into the record.

The Initial Study prepared for the Project (Appendix A) determined that the following resource areas did not have the potential to result in significant impacts: aesthetics, agriculture and forestry resources, biological resources, mineral resources, population and housing, public services, recreation, and wildfire. As such, these issue areas are not discussed in this EIR. The issue areas analyzed in detail in this EIR consist of air quality, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation, tribal cultural resources, and utilities and service systems.

This draft EIR is being circulated for 45 days for public review and comment. The timeframe of the public review period is identified in the notice of availability attached to this draft EIR. During this period, comments from the general public, organizations, and agencies regarding environmental issues analyzed in the draft EIR and the draft EIR's accuracy and completeness may be submitted to:

Amanda Acuna, Senior Planner
City of Gardena Community Development Department
1700 West 162nd Street
Gardena, California 90247
Email: aacuna@cityofgardena.org.
(Enter "1450 Artesia Specific Plan EIR Public Comments" in the subject line.)

General questions about this EIR and the EIR process should also be directed to the email address above. The City will prepare written responses to comments received that raise significant environmental issues, if the comments are submitted in writing and postmarked or emailed during the comment period identified in the notice of availability.

Prior to approval of the proposed Project or an alternative to the proposed Project, the City, as the lead agency and decision-making entity for the Project, is required to certify that this EIR has been completed in accordance with CEQA, that the proposed Project has been reviewed and the information in this EIR has been considered, and that this EIR reflects the independent judgment of the City. CEQA also requires the City to adopt "findings" with respect to each significant environmental effect identified in the EIR (California Public Resources Code, Section 21081; CEQA Guidelines Section 15091). For each significant effect, CEQA requires the approving agency to make one or more of the following findings:

- The proposed Project has been altered to avoid or substantially lessen significant impacts identified in the Final EIR.
- The responsibility to carry out such changes or alterations is under the jurisdiction of another agency.
- Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or alternatives identified in the Final EIR.

If the City concludes that the proposed Project or an alternative to the proposed Project will result in significant effects that cannot be substantially lessened or avoided by feasible mitigation measures and alternatives, the City must adopt a "statement of overriding considerations" prior to approval of the proposed Project (California Public Resources Code, Section 21081[b]; CEQA Guidelines Section 15093). Such statements are intended under CEQA to provide a written means by which the lead agency balances in writing the benefits of the proposed Project and the significant and unavoidable environmental impacts. Where the lead agency concludes that the economic, legal, social, technological, or other benefits outweigh the unavoidable environmental impacts, the lead agency may find such impacts acceptable and approve the proposed Project.

In addition, the City must also adopt a mitigation monitoring and reporting program describing the changes that were incorporated into the proposed Project or made a condition of Project approval in order to mitigate or avoid significant effects on the environment (California Public Resources Code,

Section 21081.6). The mitigation monitoring and reporting program is adopted at the time of Project approval and is designed to ensure compliance during Project implementation. Upon approval of the proposed Project, the lead agency will be responsible for implementation of the proposed Project's mitigation monitoring and reporting program. This document will be attached to the final EIR.

1.3 Organization of the EIR

This EIR is organized as follows:

Executive Summary, summarizes the Project, environmental impacts associated with the Project as well as mitigation measures required to reduce any identified potentially significant impacts.

Chapter 1, Introduction, serves as a forward to this EIR, introducing the Project, the applicable environmental procedures, and the organization of the EIR.

Chapter 2, Project Description, provides a thorough description of the proposed Project elements, the purpose and need for the Project, Project objectives, and required discretionary approvals. This chapter also includes a description of the intended uses of the EIR and public agency actions.

Chapter 3, Environmental Analysis, describes the potential environmental effects of the proposed Project, as well as proposed mitigation measures to reduce or avoid any potentially significant impacts. The discussion in Chapter 3 is organized by 12 environmental issue areas:

- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

For each environmental issue area, the analysis and discussion are generally organized into eight subsections as described below:

- **Environmental Setting** – This subsection describes the physical environmental conditions in the vicinity of the proposed Project at the time of publication of the NOP. The environmental setting establishes the baseline conditions, which were used by the City to determine whether specific Project-related impacts would be significant.
- **Relevant Plans, Policies, and Ordinances** – This subsection describes the regulatory setting applicable to the environmental issue area and the proposed Project at the time of publication of the NOP.
- **Thresholds of Significance** – This subsection identifies a set of thresholds by which the level of impact is determined.
- **Methodology** – This subsection describes how the analysis was conducted.

- **Impact Analysis** – This subsection provides a detailed analysis regarding the environmental effects of the proposed Project and whether the impacts of the proposed Project would meet or exceed the significance thresholds.
- **Mitigation Measures** – This subsection identifies potentially feasible mitigation measures that would avoid or substantially reduce significant adverse Project impacts.
- **Level of Significance After Mitigation** – This subsection discusses whether Project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse effects of the proposed Project that would result even with implementation of mitigation measures.
- **Cumulative Effects** – This subsection assesses whether the impact of the proposed Project taken together with other projects in the area may contribute to a larger impact/effect.
- **References** – In addition to the eight subsections listed above, full citations for all referenced documents are included at the end of each section or chapter.

Chapter 4, Other CEQA Considerations, addresses effects found not to be significant, significant environmental effects that cannot be avoided, significant irreversible environmental changes that would result from implementation of the proposed Project, and growth-inducing impacts.

Chapter 5, Alternatives, discusses alternatives to the proposed Project, including a No Project Alternative. This chapter describes the rationale for selecting the range of alternatives discussed in the EIR and identifies the alternatives considered by the City that were rejected from further discussion as infeasible during the scoping process. Chapter 5 also includes a discussion of the environmental effects of the alternatives that were carried forward for analysis and identifies the environmentally superior alternative.

Chapter 6, List of Preparers, gives names and contact information of those responsible for writing this EIR.

Appendices include various technical studies prepared for the proposed Project, as listed in the Table of Contents.

The City, as the lead agency for the proposed Project, is responsible for enforcing and verifying that each mitigation measure is implemented as required. As part of the final EIR process, a mitigation monitoring and reporting program will be prepared.

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2 Project Description

This chapter provides a description of the proposed 1450 Artesia Specific Plan Project, referred to in this document as the proposed Project or Project. Pursuant to Section 15124 of the California Environmental Quality Act (CEQA) Guidelines, this chapter describes the location, objectives, and characteristics of the proposed Project, followed by a statement describing the intended uses of this environmental impact report (EIR).

2.1 Project Overview

The Project is proposed to be developed at 1450 Artesia Boulevard in the City of Gardena (City). The Project would involve the approval of the 1450 Artesia Specific Plan as well as construction and operation of a mixed-use development with a total building area of 268,000 square feet (SF) and an approximate height of 75 feet. The development would include a self-storage use (three levels totaling 186,000 gross square feet (GSF) with 1,480 storage units over the bottom floor warehouse/distribution use and leasing office), an industrial warehouse/distribution use (one level totaling 72,000 GSF with 10 loading docks), and an office/retail use (a mezzanine totaling 10,000 GSF). Additionally, associated facilities and improvements would include perimeter fencing, on-site and perimeter landscaping, lighting, exterior sidewalks, and pavement for on-site parking spaces. Under the Specific Plan, the parking lot area would be used periodically for City-sponsored outdoor events outside of the Project's warehouse/distribution component operating hours ("special events"). The Project includes construction of a 200 GSF, non-habitable structure on the eastern side of the Project site for storage of special event-related materials by the City.

The Project Applicant is coordinating with the Atlantic Richfield Company (ARC), which is a responsible party working under the direction of the California Department of Toxic Substances Control (DTSC) to implement a Remedial Action Plan (RAP) by installing an engineered cap, soil vapor probes, and associated infrastructure on part of the Project site before the Applicant commences construction of the proposed Project. The Applicant will undertake measures to protect this remedy and avoid any unreasonable risk of harm to human health and the environment, including installing soil vapor barrier and ventilation systems beneath the structure to protect building occupants against indoor soil vapor intrusion; recording a land use covenant on the Project site to prohibit sensitive uses thereon, such as residential uses, but which would permit the Project's commercial and industrial uses; complying with all institutional controls that DTSC may require; and undertaking long-term monitoring and maintenance of the soil vapor barrier and ventilation systems for the Project's building. The new structure on the Project site would only overlap with the remediated Haack Rework area. The portion of the Project that overlaps the Haack and Cooper sumps areas would be paved and utilized as a parking lot, which would be located atop ARC's engineered cap.

For analysis purposes, construction of the Project is expected to last approximately 18 months beginning in the Spring of 2024 and ending in the Fall of 2025. The Project is anticipated to be operational in Fall of 2025. The Applicant's timing for construction would not interfere with the implementation of the RAP by ARC, nor will ARC's implementation of the RAP interfere with the Applicant's construction and operation of the Project.

2.2 Project Location

The Project site is located in Gardena, California (City) and is located at the corner of Artesia Boulevard and Normandie Avenue, two major thoroughfares within the City (Figure 2-1, Project Location). The 1450 Artesia Specific Plan would cover approximately 6.33 acres collectively consisting of the sites located on Assessor Parcel Numbers 6106-036-010, 6106-036-012, 6106-036-034, 6106-036-035, 6106-036-036, 6106-036-037 (collectively, the “Project site”). The Project site currently contains three industrial structures (8,080 SF, 825 SF, and 3,159 SF), a paved, open area along Artesia Boulevard (APN 6106-036-034), and one occupied residential dwelling unit behind the industrial properties adjacent to the Dominguez Channel located at 1472 West Artesia Boulevard (APN 6106-036-010) (Figure 2-2, Project Footprint).

2.3 Environmental Setting

City of Gardena

The City is approximately 5.9 square miles with a population of approximately 60,000 residents. The City’s sphere of influence is limited to the boundaries of the City itself (City of Gardena 2006). The City is located in the inland South Bay region of the Los Angeles metropolitan area and is a transit-oriented city that is regionally accessible by several major freeways including Interstate (I) 405, I-110, I-105 and State Route (SR) 91 (Artesia Boulevard). Artesia Boulevard, an east-west street forming the northern boundary of the Plan area, delivers direct access to the Specific Plan area. Local access to the Project site is also provided from Normandie Avenue, traveling north-south just east of the Project site and Western Avenue, traveling north-south within the vicinity to the west of the Project site (Figure 2-1). Additionally, the City has close proximity to downtown Los Angeles (12 miles), Los Angeles and Long Beach Ports (7 miles), and Los Angeles International Airport (6 miles). The City is bordered by the unincorporated West Athens community and the City of Hawthorne to the north, the cities of Los Angeles and Torrance to the south, the city of Los Angeles to the east, and the cities of Torrance and Hawthorne and Los Angeles County to the west.

Historical Land Uses

Historical use of the Project site began in the 1920’s with portions of the site being leased by Moneta Brick Company. Multiple sumps were constructed in support of clay mining operations. By the late 1920’s, some of the site was used for growing crops and some residential uses were present. The sumps were filled with sludge consisting of disposal material through the 1950s, including refinery wastes, tank bottom sludges, and rinse water acids and were known as the Copper and Haack properties or Gardena Sumps. The Gardena Sumps include four areas defined as the Cooper North Sump, Cooper South Sump, Haack Sump and Haack Rework Area, as shown in Figure 2-3, Site Contamination. These sumps are the source of the contamination subject to cleanup by ARC under DTSC oversight. Development continued over portions of the sump areas in the following years, including excavations that changed the grade and elevation of the site, as well as construction of parking lots and buildings. The Dominguez Channel was channelized and relocated from north of the Project site to south of the Project site between 1956 and 1958.

Starting in the 1980s, the Department of Health Services (DHS) and Environmental Protection Agency (EPA) Technical Assistance Team (TAT) confirmed the presence of hazardous materials and issued a Remedial Action Order on March 3, 1988. By 1993, the eastern property was capped with a liner under the direction of DTSC. The Cooper sump area (northeastern portion of the Project site) remains vacant and undeveloped while several structures are present on the Haack property (northwestern portion of the Project site) (Stantec 2008).

Existing Conditions

Currently, multiple monitoring wells and a cap are located on the Gardena Sumps portion of the Project site as an engineering control, limiting redevelopment options. Remediation and monitoring efforts have been ongoing with the approved Final Remedial Action Plan (RAP) for the site, dated June 30, 2022. The Final RAP details excavation of impacted soils on a portion of the site, known as the Haack Rework Area, relocation of those contaminated soils to another portion of the site, known as the Cooper Sumps area, and installation of an engineered cap with a specialized geosynthetic cover and clean soil cover over the Haack Sump and Cooper Sumps. The remediation will be completed prior to the start of Project construction. The Final RAP includes provisions for a legal land use covenant to limit future uses of the site as well as long-term monitoring and maintenance of the cap and underlying groundwater. The Project structure would only overlap with the remediated Haack Rework area. The portion of the Project site that overlaps the Haack and Cooper sumps areas would be paved and utilized exclusively as a parking lot, which would be located atop the cap implemented as part of the DTSC-approved Final RAP.

The northwestern portion of the Project site, which overlaps with the Haack property, currently contains three warehouses (8,080 SF, 825 SF, and 3,159 SF) and a variety of trailer-type storage structures that house several small businesses, including a U-Haul rental agency, a metal fabricating shop, a sandblasting and painting company and an auto body repair shop (Appendix G3). The southern portion of the Project site contains one occupied residential dwelling unit.

Surrounding Land Uses

Land uses surrounding the Project site include a strip mall with a variety of retail and fast-casual restaurant uses to the north of the Project site across Artesia Boulevard with multi-family and single-family residential uses located north of the strip mall. The eastern edge of the Project site is bounded by a Southern Pacific Railroad line. To the east of the Project site across Normandie Avenue is another strip mall with a variety of retail, fast food and fast-casual restaurant uses. A row of single-family homes is located south of this strip mall across Normandie Boulevard. Residential townhome units are located to the west of the Project site with another strip mall farther west. The southern side of the Project site is bounded by the Los Angeles County Department of Public Works Dominguez Flood Channel. An equestrian stable is located south of the channel, which does not abut the Project site. Properties to the north of the Project site, across Artesia Boulevard, are zoned C-3, General Commercial. Properties to the west are zoned Artesia Mixed Use and properties to the south and the immediate east along Normandie Avenue are zoned O, Official (City of Gardena 2023).

Surrounding Circulation Network

Roadways

The Project site is located at the southwest corner of Artesia Boulevard and Normandie Avenue. Within the City, Artesia Boulevard is an east-west six-lane major arterial. At the eastern edge of the City, Artesia Boulevard becomes the Artesia Freeway (SR-91), which is an east-west freeway that connects the South Bay to north Orange County and the Inland Empire. West of the City, Artesia Boulevard continues toward the coast where it eventually intersects with Highway 1 in the City of Hermosa Beach. In the Project area, sidewalks are provided on both sides of the road.

Normandie Avenue is a north-south four-lane major collector that has its northern terminus at Franklin Avenue near Griffith Park. Its southern terminus occurs where it forks into Palos Verdes Drive North and North Gaffey Street in Harbor City.

Transit

GTrans provides local bus service within the City, with several routes operating near the Project site. Torrance Transit, Beach Cities Transit, Long Beach Transit and Culver City Bus offer connections to GTrans lines. Regional bus lines operated by LA County Metro (Metro) also offer connections to GTrans (GTrans 2023a). The Harbor Gateway Transit Center along the Metro J line busway is located approximately 0.75 miles east of the Project site. Bus routes near the Project site run north and south along South Western Avenue and Vermont Avenue in a loop (Line 2). No bus stops are located along the Project frontage. The nearest bus stop is located west of the Project site at Artesia Boulevard and Denker Avenue or north along Normandie Avenue north of the Artesia Boulevard intersection. GTrans also offers curb-to-curb transportation, using a fleet of wheelchair-accessible vans, for elderly and disabled residents of Gardena, Hawthorne, Alondra Park and Del Aire (GTrans 2023b).

Pedestrian and Bicycle Facilities

The Project area is served by pedestrian and bicycle facilities. Sidewalks are provided on all major streets surrounding the Project site. The City follows the California Department of Transportation's (Caltrans) standards and recognizes four distinct class-types of bikeway facilities: Class I – Off-Street Paved Bicycle Paths or Trails, Class II – On-Street Striped Bicycle Lanes, Class III – On-Street Shared-Lane Bicycle Routes, and Class IV – Protected Bike Lanes (cycle tracks). A Class III Bike Route is located along Normandie Avenue adjacent to the Project site and connects to other Class III Bike Routes throughout the City (City of Gardena 2020).

2.4 Project Objectives

CEQA Guidelines Section 15124(b) states that the project description of an EIR shall contain “a statement of the objectives sought by the proposed project.” Section 15124(b) further states that “the statement of objectives should include the underlying purpose of the project.” The underlying purpose of the Project is to develop a warehouse/distribution space, office/retail and self-storage development at an infill location that is being remediated for occupation within a commercial, urbanized area of the City. The proposed Project's specific objectives are as follows:

- Redevelop an underutilized, blighted and environmentally impacted property with economically vibrant industrial and commercial uses along a major development corridor within the City.
- Develop appropriate uses in an area with a legacy of contamination in a manner that protects human health and the environment and allows for continued monitoring of remediated areas
- Produce short-and long-term jobs during the Project's construction and operations phases
- Generate property and sales tax revenues for the City to enhance its services to the community and infrastructural improvements
- Provide the City a substantial monetary public benefit to the City's General Fund
- Provide the City with an outdoor venue to hold community events

2.5 Proposed Project

The following sections describe the proposed Project, including Project components, construction schedule and operations as well as a discussion of post-remediation safeguards and monitoring.

2.5.1 Project Components

The Project includes redevelopment of mixed-use property comprised of a 268,000 gross-square-foot (GSF) building with associated surface parking and landscaping and circulation improvements. The proposed development would contain a self-storage use of three levels totaling 186,000 GSF with up to 1,480 storage units over ground floor warehouse and 1,000-square-foot leasing office), an industrial warehousing use (one level totaling 72,000 GSF plus 10 loading docks), and an office/retail use (a mezzanine totaling 10,000 GSF). Other Project improvements include perimeter fencing, on-site and perimeter landscaping, lighting and exterior sidewalks, a 90-foot driveway with a raised separation median on Artesia Boulevard and 124 automobile parking stalls, including six accessible spaces, five electric vehicle (EV) charging station spaces, and 19 electric vehicle (EV)-ready spaces. The proposed Project components are shown on Figure 2-4, Site Plan.

Building/Uses

The Project includes construction of a 268,000-GSF building with a maximum height of 75 feet, which would contain self-storage, warehouse/distribution and office/retail uses. Architectural renderings of the building are shown in Figure 2-5, Architectural Features. The self-storage use would be located on the top three levels with a total of 186,000 GSF and up to 1,480 storage units. The warehouse/distribution use would be located on the ground floor with a total of 72,000 GSF and 10 loading docks. A 10,000-GSF mezzanine would contain office/retail use. The building would be designed in compliance with the California Green Building Standards Code (CALGreen).

Because the distribution use and warehouse use would utilize the same 72,000 GSF, for convenience sake the term "warehouse" is used throughout the document to refer to both types of uses of the space.

Parking

Parking would be located along the northeastern portion of the Project site. CalGreen includes specific parking requirements for bicycle parking, designated parking for clean air vehicles, EV charging stations, and other parking requirements. The Project would include a total of 124 automobile parking stalls.

Landscape and Streetscape

The Project would include aesthetically pleasing and drought-tolerant landscaping (Figure 2-6, Landscape Plan). The Project's streetscape improvements would include a combination of shrubs and trees along the frontage of both Artesia Boulevard and the eastern edge of the property as well as within the Project site.

The landscaping would be layered with regionally adapted plants that minimizing water use. The Project would be consistent with the state and City water efficient landscape ordinances, and a minimum of 75% of the plantings would be water efficient. The total landscaped area is approximately 32,473 SF (or approximately 12% of the total Project site area) and 66% of the total paved area utilized for driveways and open parking areas. Water-wise landscaping principles, including a low percentage of water-thirsty plants, smart irrigation controllers, drip irrigation, and bark mulch to slow evapotranspiration and weed germination would be employed.

Circulation Improvements and Pedestrian Access

The Project would include two curb-cuts – one for right turn in, and one for right turn out driveways along Artesia Boulevard located approximately at the northwest corner of the Project site. Local vehicular access to the Project site would be provided via one 35-foot driveway from Artesia Boulevard. A separate 35-foot exit driveway travel lane would be adjacent to the entrance divided by a 20-foot landscape divide (Figure 2-7, Circulation Plan: Vehicular Access). The Project driveway would only serve the Project. Trucks would access the Project similar to vehicular access with ingress within the northwest portion of the Project with circulation continuing along the western to southern edge of the property and into the loading docks. Trucks would exit the loading dock area heading north within the parking lot with egress back through the northwest of Project (Figure 2-8a, Circulation Plan: Truck Access). The truck circulation would be a loop around the proposed building with an aim to ease flow of on-site traffic. Per Los Angeles County Fire Department requirements, a 26-foot-wide fire access lane would surround the property structure with direct access to Artesia Boulevard.

During special events, barriers would be erected to separate truck and vehicular traffic. Trucks would exit the same way they come in during special events (Figure 2-8b, Circulation Plan: Truck Access during Special Events).

Pedestrian access to the Project site would be provided from sidewalks located along Artesia Boulevard. Primary pedestrian access would connect to the building lobby on the northern portion of the Project site and to the parking lot within the northeastern portion of the Project site. Areas with loading docks would be gated to prohibit pedestrian access for safety reasons.

Utilities

Stormwater and drainage improvements would include the installation of five storm drain inlets leading to a poly-coated corrugated metal pipe cistern located within the western portion of the Project site. Collected stormwater would be carried to a subsurface retention basin installed downstream of storage for additional volume control and treatment. The basin would screen, separate, and act as biofiltration treatment for Low Impact Development (LID) solution prior to off-site release. No storm drain piping, inlets or supporting infrastructure would be included near the former sumps.

The City Public Works Department is responsible for maintaining the existing sewer lines that provide wastewater collection, conveyance, and management surrounding the property. The Project would include construction of an on-site sewer lateral that would connect to an existing main line within Artesia Boulevard.

Water and fire services are provided to the Project site by a 21-inch cast iron line owned and maintained by the Golden State Water Company. An 8-inch fire water line, 3-inch domestic water line and an irrigation line would be installed on the Project site, which would connect to the existing main line.

2.5.2 Project Construction

Construction of the proposed Project is expected to last approximately 18 months beginning in the Spring of 2024 and ending in the fall of 2025. Construction would occur in phases as shown in Table 2-1, Construction Phasing.

Table 2-1. Construction Phasing

Phase Number	Construction Phase	Number of Days
1	Demolition	66
2	Site Preparation	21
3	Grading	65
4	Building Construction	219
5	Architectural Coating (will overlap Phase 4 by approximately 1 month)	65
6	Paving (will overlap Phase 5 by approximately 1 month)	22

Source: Appendix B1.

2.5.3 Daily Operations

The proposed Project is anticipated to begin operations in fall 2025. The hours of operation would be from 6:00 a.m. to 10:00 p.m. for the self-storage facilities and from 6:00 a.m. to 10:00 p.m. weekdays for the warehouse/distribution. The Project is expected to support approximately 40 employees. Daily activities associated with the warehouse/distribution use would include maneuvering forklifts, lift equipment, and large semi-trucks through and around the site and backing into the loading docks. The dock doors would be oriented to face east.

Operations associated with the self-storage office/retail uses would include passenger cars, moving vans, and delivery truck arrivals and departures. The Project is forecast to generate 725 daily trips including 86 AM peak hour trips and 85 PM peak hour trips (Appendix J3).

2.5.4 City Special Events

Under a proposed Development Agreement between the Applicant and the City, the City would be allowed to host various special events on an approximately 36,000-square-foot (0.8-acre) portion of the Project's parking area (over approximately 63 parking spaces) (Figure 2-9, Special Events Site Plan). Special events would occur outside of the Project's warehouse/distribution operation hours when the parking area is not in use, including weekday evening events (between 6:00 p.m.–10:00 p.m.) and weekend events from 7:00 a.m.–10:00 p.m.. The City anticipates hosting several types of medium-size special events, such as food trucks, farmer's markets, car shows, live entertainment, food giveaways, community meetings, health fairs, and mobile vaccination events.

The special events would be held approximately two to three times per month and include up to 250 attendees (Appendix J3).

2.5.5 Site Remediation Protections and Monitoring

As discussed above in Section 2.3, Environmental Setting, the eastern portion of the Project site is contaminated with oil sludge from three sumps, which will be remediated per a DTSC-approved RAP prior to construction and operation of the proposed Project. The RAP proposes excavation of impacted soils on a portion of the site, known as the Haack Rework Area, relocation of those contaminated soils to another portion of the site, known as the Cooper Sumps area, installation of an engineered cap with a specialized geosynthetic cover and clean soil cover over the Haack Sump and Cooper Sumps, and installation of soil vapor probes.

The Project structure would only overlap with the remediated Haack Rework area and would include a soil vapor barrier and ventilation system beneath the structure to protect building occupants against indoor soil vapor intrusion. There would be long-term monitoring and maintenance of the soil vapor barrier and ventilation system. The portion of the Project site that overlaps the Haack and Cooper sumps areas would be paved and utilized as a parking lot, which would be located atop the cap implemented as part of the DTSC-approved RAP.

2.5.6 General Plan and Zoning

In 2004, the City completed a citywide retail analysis that examined retail opportunities within and surrounding the City and summarized the opportunity for retail development at distinct locations within the City. The report found Artesia Boulevard offered a prime location for commercial development to attract quality commercial uses.

The City subsequently changed the General Plan land use designation for the majority of these properties from Industrial to General Commercial during the 2006 General Plan update. Additionally, in 2006 the City adopted the Artesia Corridor Specific Plan (referred to as the Artesia Corridor), to promote revitalization efforts. The Artesia Corridor Specific Plan provided for a mix of residential and

commercial uses. The Project site was designated as the eastern part of Planning Area 4 and Planning Area 5 of the Artesia Corridor Specific Plan. Mixed use residential and commercial has been developed within parts of the Artesia Corridor. However, the Project site was never developed per the Artesia Corridor Specific Plan.

On February 15, 2023, the City Council adopted the 6th Cycle Housing Element for 2021–2029. At the same time, it also adopted Resolution No. 6620 updating the Land Use Plan (Figure 2-10, General Plan Land Use), including changes to the Land Use Map, Urgency Ordinance No. 1847¹ amending the Zoning Code and revising the Zoning, and Resolution No. 6621 adopting a color palette for buildings, fences, and walls. The Resolution and Ordinance also rescinded the Artesia Corridor Specific Plan, changed the land use designation for five of the six areas in the Specific Plan, and rezoned all six Specific Plan areas (Figure 2-11, Zoning). The Project site retained its Specific Plan land use designation, and the zoning has been changed to 1450 Artesia Specific Plan. The Land Use Plan notes that the specific plan will allow for industrial and commercial development. The zoning requires adoption of a specific plan before any development can take place.

2.6 Intended Uses of this EIR

An EIR is a public document used by a public agency to analyze the potential environmental effects of a project and to disclose possible ways to reduce or avoid potentially significant environmental impacts, including alternatives to the proposed project. As an informational document, an EIR does not make recommendations for or against approving a project. The main purpose of an EIR is to inform public agency decision makers and the public about potential environmental impacts of the project (CEQA Guidelines Section 15121). This EIR will be used by the City, as the lead agency under CEQA, in making decisions with regard to the proposed Project described above and the related approvals required for the Project.

Permits and Approvals

The Applicant would obtain all permits and approvals, as required by law. A list of permits or other forms of approval required of the proposed Project is provided in Table 2-2.

Table 2-2. Permits or Other Actions Required

Agency	Jurisdiction	Permit Regulatory Requirement/Approval
State		
State Water Resources Control Board	Responsible Agency	General Construction Activity National Pollutant Discharge Elimination System (NPDES) Permit
Los Angeles County Fire Department	Responsible Agency	Plan check

¹ In addition to the Urgency Ordinance, the same provisions were adopted through the regular zoning procedures as Ordinance No. 1848.

Table 2-2. Permits or Other Actions Required

Agency	Jurisdiction	Permit Regulatory Requirement/Approval
Local		
City of Gardena	Lead Agency	<ul style="list-style-type: none"> ▪ Adoption of the 1450 Artesia Specific Plan ▪ Zone Text Amendment ▪ Development Agreement ▪ Site Plan Review Lot Merger

2.7 References

City of Gardena. 2006. City of Gardena General Plan 2006, Introduction. April 25, 2006. Accessed July 26, 2023. <https://cityofgardena.org/wp-content/uploads/2016/04/generalplan1.pdf>.

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Stantec. 2008. *Gardena Pump Site Revised Draft 2006 Remedial Investigation Report*.

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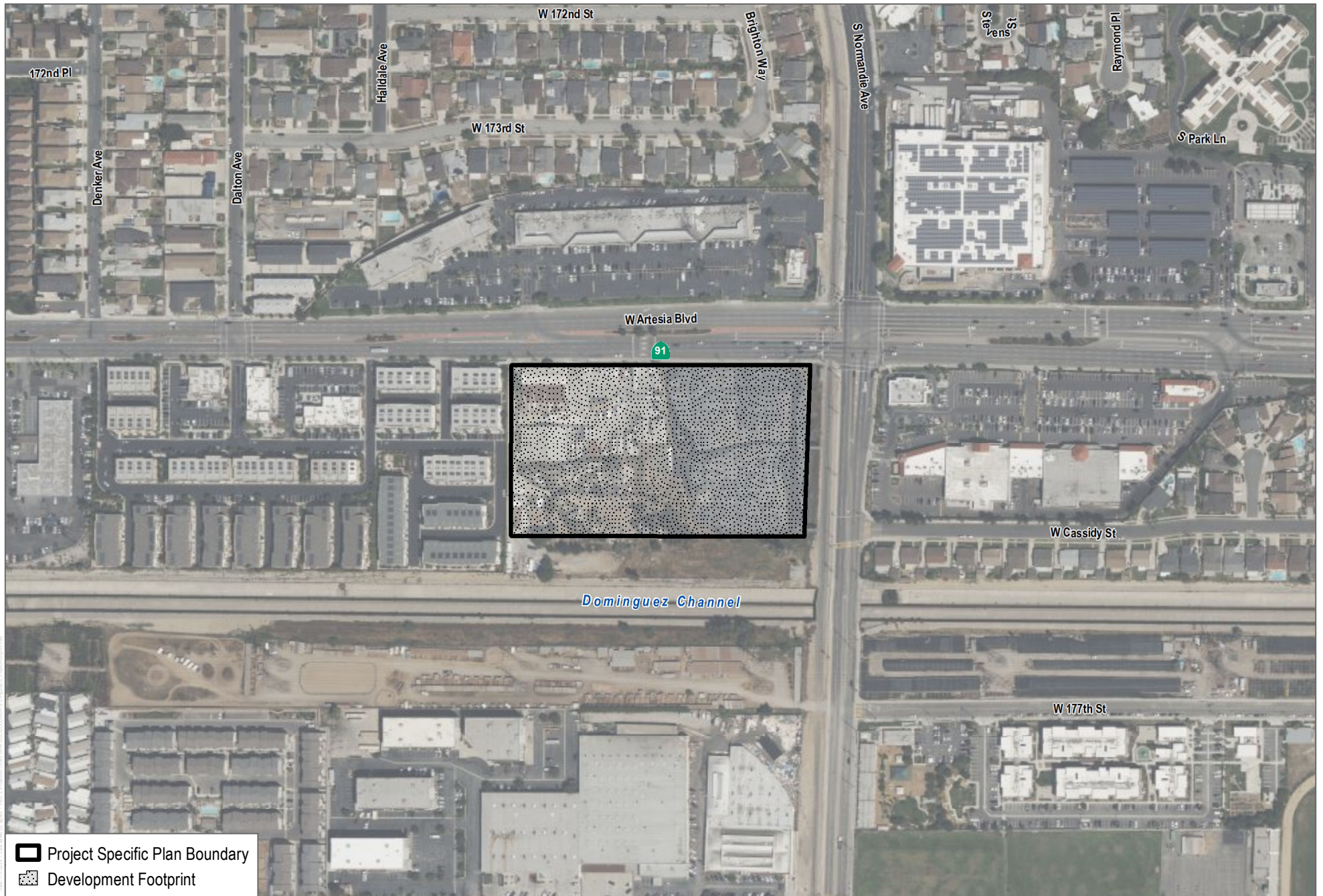
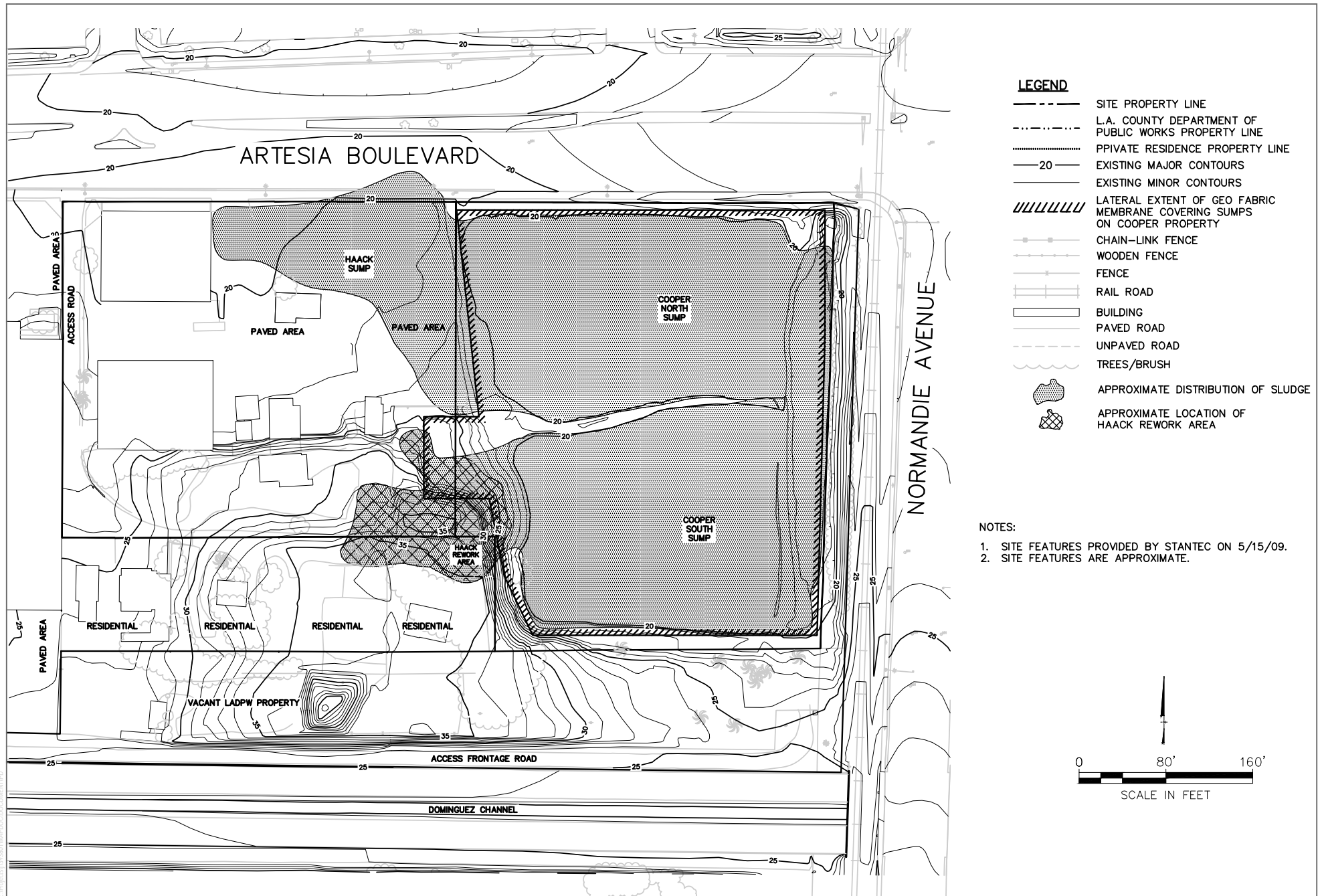


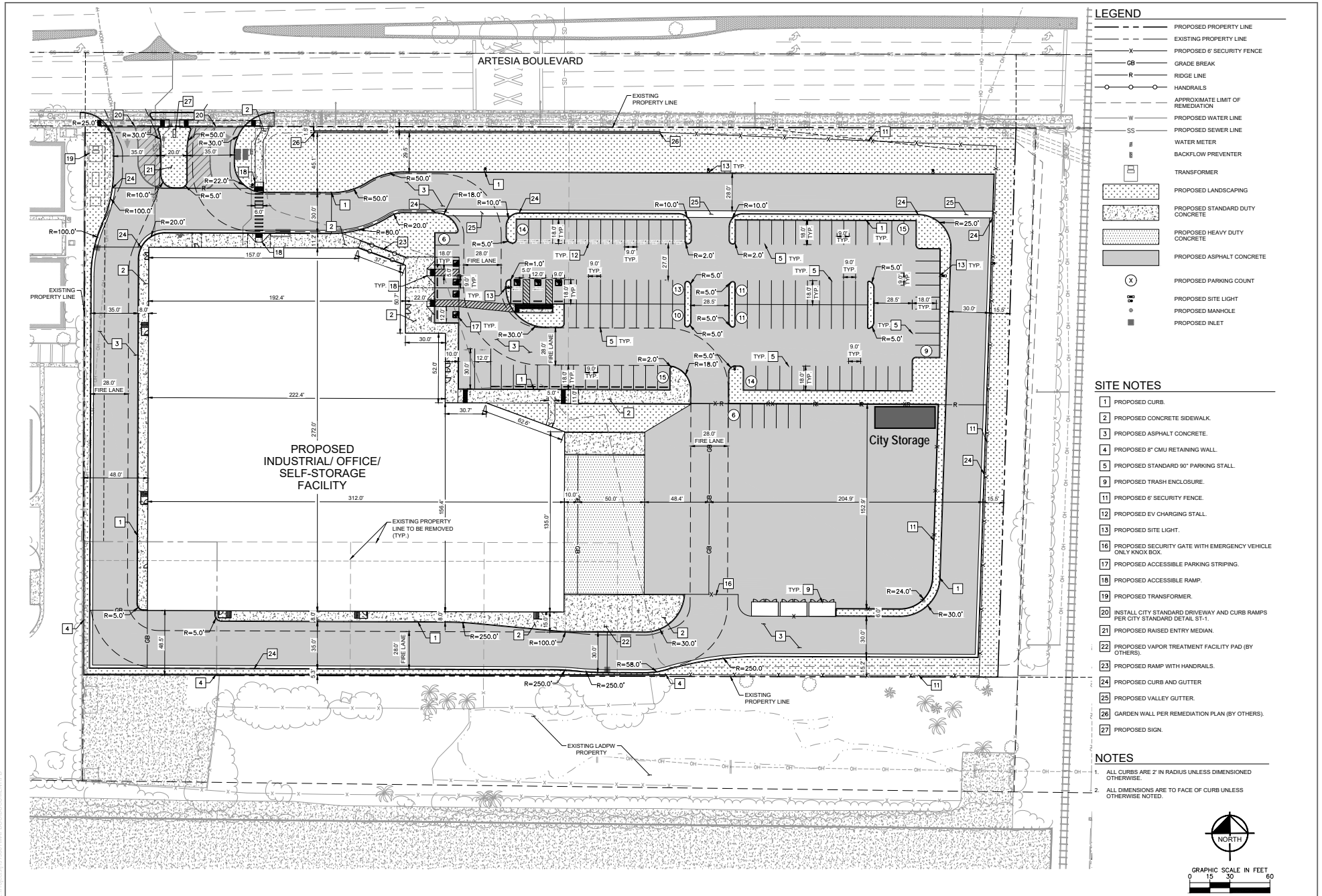
FIGURE 2-2
Project Footprint
 1450 Artesia Specific Plan Draft EIR

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SOURCE: Geosyntec Consultants, Nov. 2020

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SOURCE: Kimley-Horn

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FIGURE 2-4

Site Plan

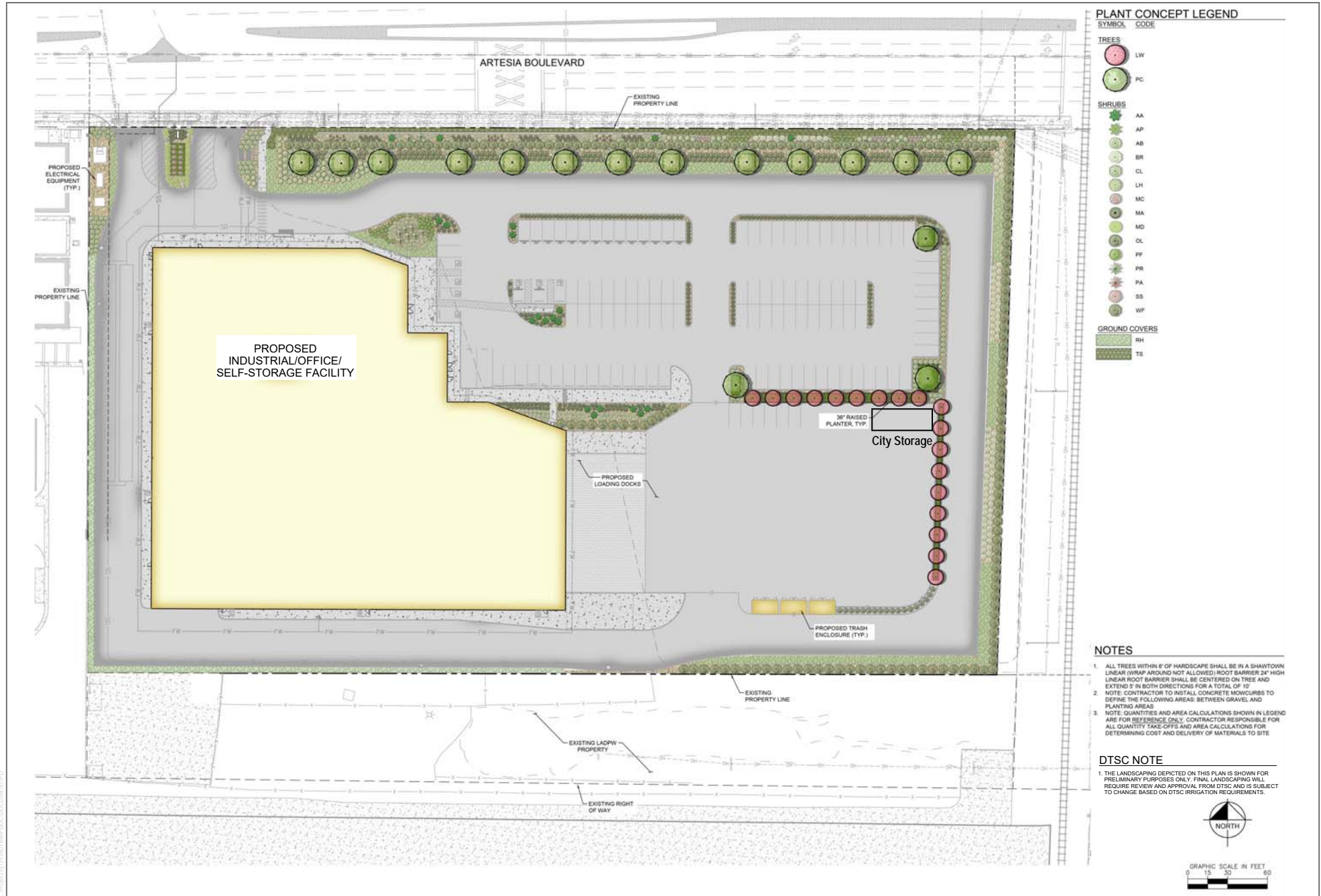
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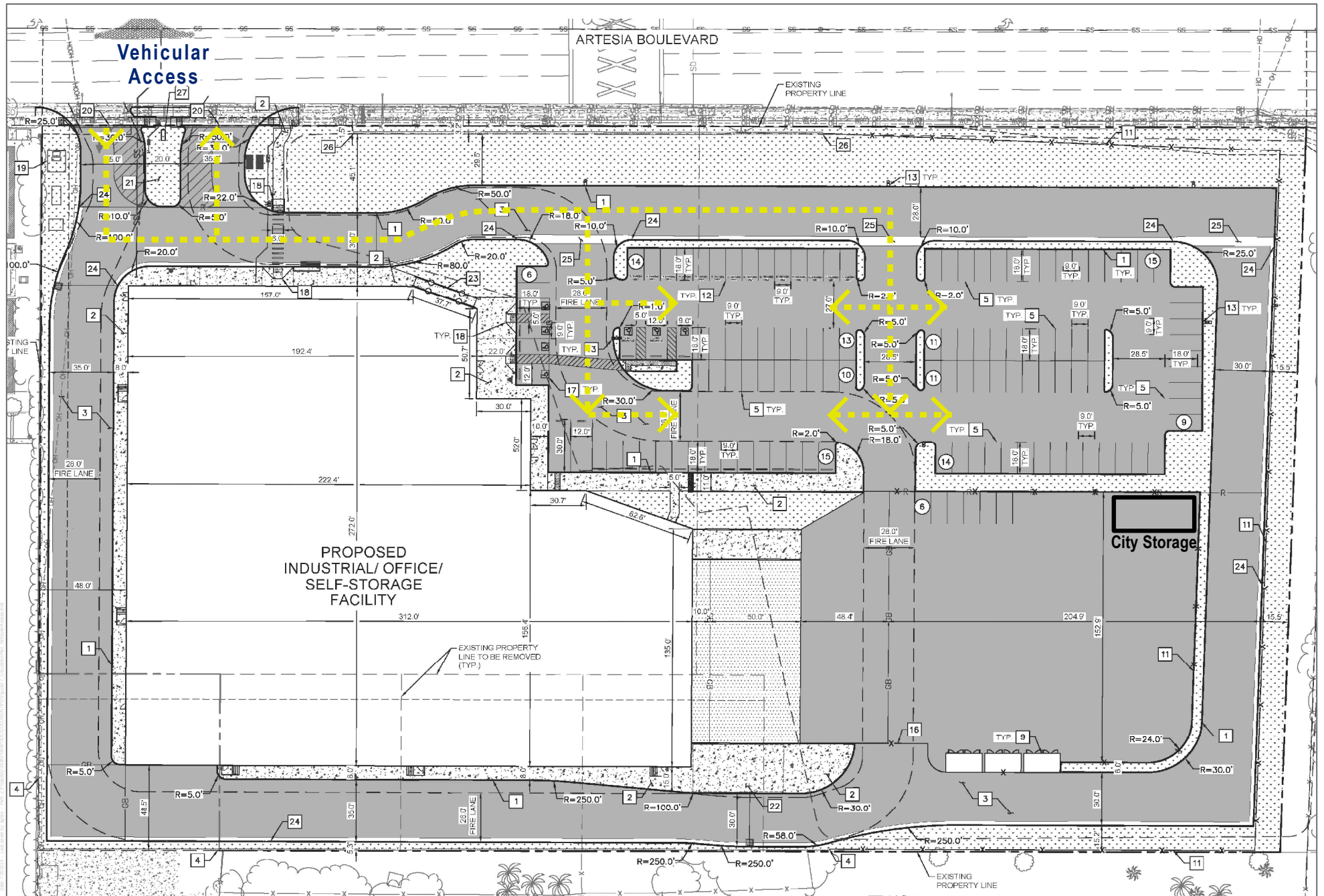
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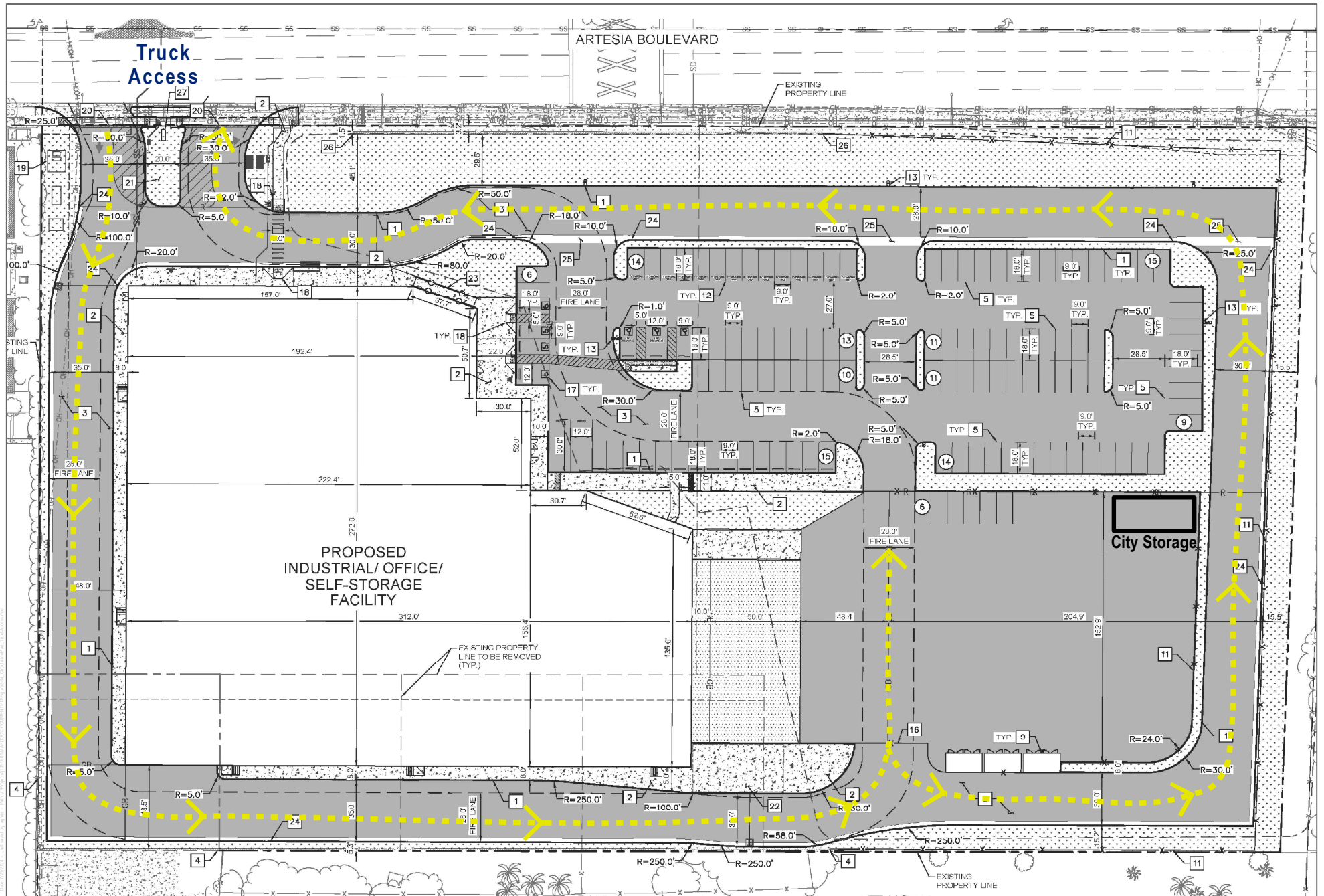
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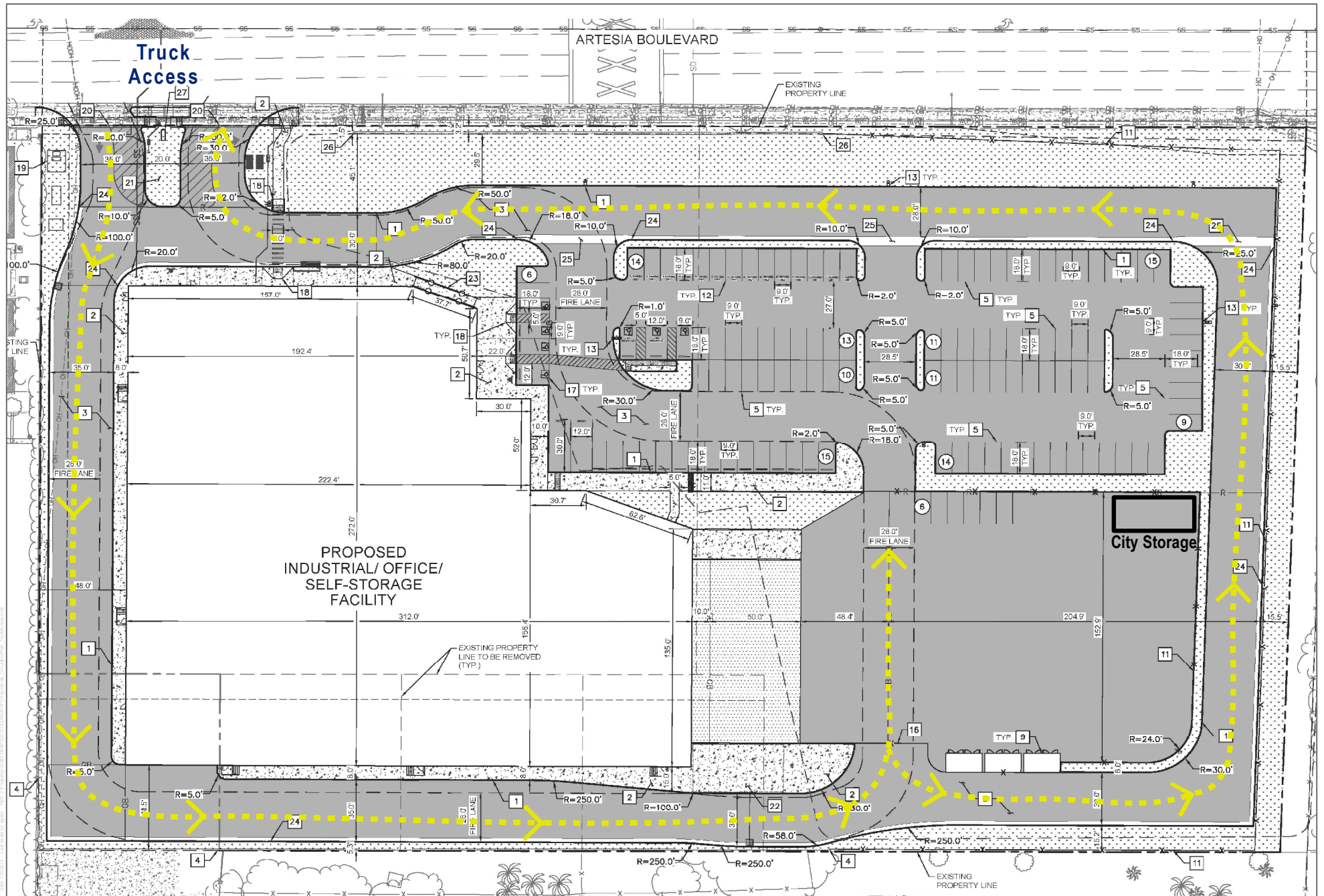
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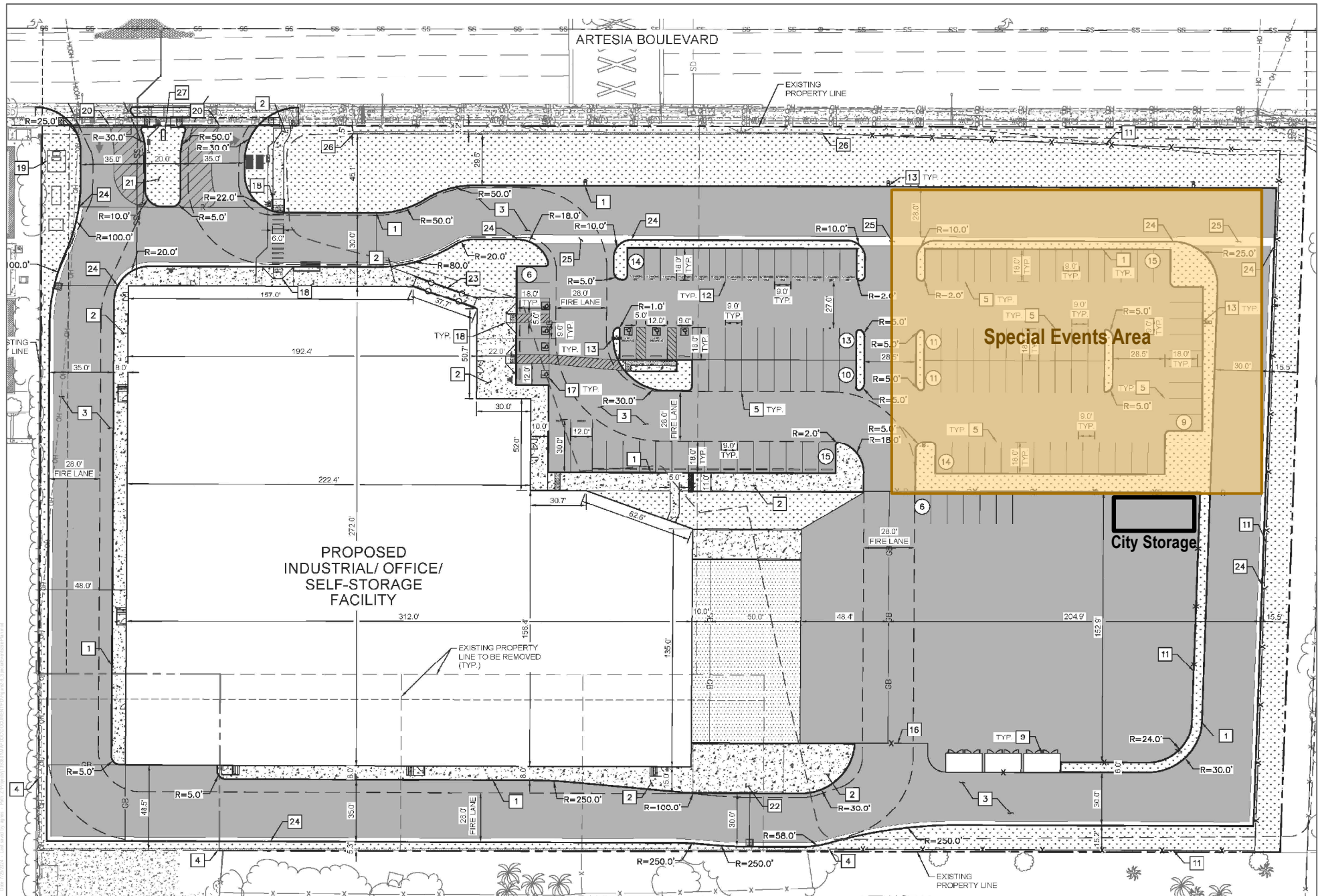
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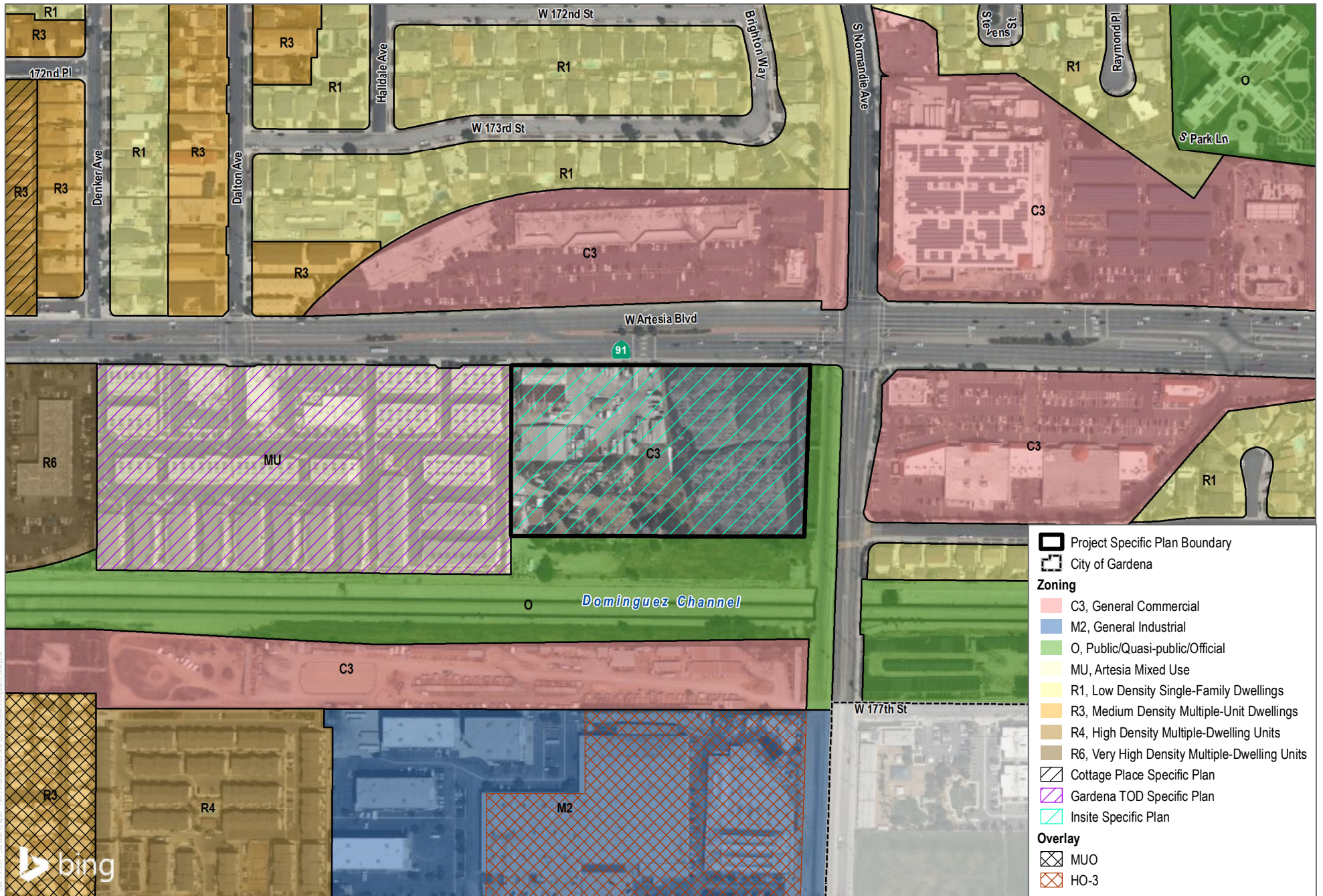
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SOURCE: County of Los Angeles; City of Gardena General Plan 2023; Open Street Map; USGS NHD; Bing Maps

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SOURCE: County of Los Angeles; City of Gardena General Plan 2023; Open Street Map; USGS NHD; Bing Maps

FIGURE 2-11

Zoning

1450 Artesia Specific Plan Draft EIR

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3 Environmental Analysis

The purpose of this Environmental Impact Report (EIR) is to evaluate the potential environmental effects of the proposed 1450 Artesia Specific Plan (Project). Full buildout of the Project, as discussed throughout Chapter 2, Project Description, of the EIR, is assumed in the analysis herein. As such, this EIR evaluates implementation of the Specific Plan at a Project level.

The City of Gardena (City) circulated a Notice of Preparation (NOP) beginning on June 8, 2023, with the public review period ending on July 10, 2023. The NOP was transmitted to the State Clearinghouse, responsible agencies, other affected agencies, and interested parties to solicit issues or potential environmental effects related to the Project. The NOP, Initial Study, and comment letters are contained in Appendix A. Sections 3.1 through 3.12 of the EIR contain the potential environmental impacts analysis associated with implementation of the Project and focus on the following issues:

- 3.1 Air Quality
- 3.2 Cultural Resources
- 3.3 Energy
- 3.4 Geology and Soils
- 3.5 Greenhouse Gas Emissions
- 3.6 Hazards and Hazardous Materials
- 3.7 Hydrology and Water Quality
- 3.8 Land Use and Planning
- 3.9 Noise
- 3.10 Transportation
- 3.11 Tribal Cultural Resources
- 3.12 Utilities and Service Systems

During preparation of the Initial Study/NOP for this EIR, other potential environmental impact areas, such as aesthetics, agriculture/forestry resources, biological resources, mineral resources, public services, recreation, and wildfire were found not to be significant based on the results of the Initial Study. These issues and the analysis for these issues are included in Appendix A, as well as Chapter 4, Other CEQA Considerations, of this EIR.

Technical Studies

Technical studies were prepared in order to accurately analyze air quality/health risk assessments, cultural and historical resources, energy resources, geology and soils/paleontological resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation impacts, and utilities and service systems and were used in the preparation of this EIR. These documents are identified in the discussions for the individual environmental issues and included as technical appendices to the EIR.

Analysis Format

For each environmental issue area, the analysis and discussion are generally organized into eight subsections as described below:

- **Environmental Setting** – This subsection describes the physical environmental conditions in the vicinity of the proposed Project at the time of publication of the NOP. The environmental setting establishes the baseline conditions, which were used by the City to determine whether specific Project-related impacts would be significant.
- **Relevant Plans, Policies, and Ordinances** – This subsection describes the regulatory setting applicable to the environmental issue area and the proposed Project at the time of publication of the NOP.
- **Thresholds of Significance** – This subsection identifies a set of thresholds by which the level of impact is determined.
- **Methodology** – This subsection describes how the analysis was conducted.
- **Impact Analysis** – This subsection provides a detailed analysis regarding the environmental effects of the proposed Project and whether the impacts of the proposed Project would meet or exceed the significance thresholds.
- **Mitigation Measures** – This subsection identifies potentially feasible mitigation measures that would avoid or substantially reduce significant adverse Project impacts.
- **Level of Significance After Mitigation** – This subsection discusses whether Project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse effects of the proposed Project that would result even with implementation of mitigation measures.
- **Cumulative Effects** – This subsection assesses whether the impact of the proposed Project taken together with other projects in the area may contribute to a larger impact/effect.
- **References** – In addition to the eight subsections listed above, full citations for all referenced documents are included at the end of each section or chapter.

Cumulative Setting

In many cases, the impact of an individual project may not be significant, but its cumulative impact may be significant when combined with impacts from other related projects. CEQA Guidelines Section 15355 defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” CEQA Guidelines Section 15130(b) states that “the discussion [of cumulative impacts] need not provide as great detail as is provided for the effects attributable to the project alone.” Section 15130(b) further states that a cumulative impacts discussion “should be guided by standards of practicality and reasonableness.” The cumulative projects considered for each resource area will differ as the cumulative context varies according to each issue area (for example, the cumulative context for aesthetic impacts would be limited to the surrounding area from which a project can be seen while the cumulative context for hydrology and water quality impacts would be much broader).

Cumulative impacts can also occur from the interactive effects of a single project. For example, the combination of noise and dust generated during construction activities can be additive and can have a greater impact than either noise or dust alone. However, substantial cumulative impacts more often result from the combined effect of past, present, and future projects located in proximity to a proposed project. Thus, it is important for a cumulative impacts analysis to be viewed over time and in conjunction with other related past, present, and reasonably foreseeable future projects, the impacts of which might compound or interrelate with those of the project under review.

As provided by CEQA Guidelines Section 15130(b), the following elements are necessary to an adequate discussion of cumulative impacts:

- Either: (A) a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the agency; or (B) a summary of projections contained in an adopted general plan or related planning document that is designed to evaluate regional or area wide conditions. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.
- A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available.
- A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable options for mitigating or avoiding any significant cumulative effects of the proposed projects.

Table 3-1 provides a list of these cumulative projects and their associated land use.

Table 3-1. Cumulative Projects

Type	Location	Description	Status	Non-Residential (SF)	Residential (DU)
Commercial	15106 South Western Avenue	Commercial building with drive-thru	Approved but not yet Constructed	3,720	
Residential	1333 West 168th Street	Condominiums	Entitlements have expired		3
Residential	1348 West 168th Street (Normandie Courtyard Project)	Dwelling units, Small Lot Subdivision, 3-story	Entitlements have expired		9
Residential	13919 Normandie Avenue	Dwelling units, Single-Room Occupancy	Under Construction		20
Residential	12850 Crenshaw Boulevard (Transit-	Apartment building	Under Construction		265

Table 3-1. Cumulative Projects

Type	Location	Description	Status	Non-Residential (SF)	Residential (DU)
	Oriented Development Specific Plan Project)				
Residential	1938 West 146th Street	Townhomes	Approved but not yet Constructed		6
Residential	13126 South Western Avenue	Dwelling units, Single-Room Occupancy	Approved but not yet Constructed		121
Residential	2545 Marine Avenue	Townhomes	Under Construction		22
Residential	1031 Magnolia Avenue	Dwelling units	Application Received		6
Live-work	2800 Rosecrans Avenue	Townhomes, 4 Live-work Units	Application Received		20
Industrial	1600 West 135th Street	Warehouse building	Approved but not yet Constructed	190,860	
Industrial	14206 Van Ness Avenue	Redevelopment of Self storage Facility to develop a new 177,573 SF Bldg. and 8,000 SF office Bldg.	Undergoing Environmental Review	185,573	
Residential	16911 South Normandie Avenue	Apartment and Townhomes	Undergoing Environmental Review		403
Mixed-Use	14600 Western Avenue	Apartment building with commercial	Application Received	3,000	196
Residential	1515 West 178th Street (Melia 178th Street Project)	Townhomes	Construction Completed in 2023		114

Table 3-1. Cumulative Projects

Type	Location	Description	Status	Non-Residential (SF)	Residential (DU)
Mixed-Use	1341 West Gardena Boulevard	Apartment building with commercial	Under Construction	3,385	14
Residential	1621 West 147th Street	Townhomes	Under Construction		6
Residential	1335 West 141st Street	Townhomes	Construction Completed in 2023		50
Residential	2129 West Rosecrans Avenue	Townhomes	Construction Completed in 2023		113
Residential	13615 South Vermont Avenue	Townhomes	Construction Completed in 2024		84
Residential	2500-2508 Rosecrans Avenue	Townhomes	Under Construction		53
Residential	15717 and 15725 Normandie Avenue	Townhomes	Under Construction		30
Residential	1610 West Artesia Boulevard	Apartment building	Approved but not yet Constructed		300

Notes: SF = square feet; DU = dwelling units.

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3.1 Air Quality

This section describes the existing air quality conditions of the 1450 Artesia Specific Plan Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed Project. Information contained in this section is based on California Emissions Estimator Model (CalEEMod), Version 2022.1, to estimate the Project's criteria air pollutant emissions from both construction and operations, as well as existing land use operation. For the relevant data, refer to the following appendices:

- Appendix B1, Air Quality Analysis, prepared by Kimley-Horn & Associates
- Appendix B2, Health Risk Assessment, prepared by Kimley-Horn & Associates

3.1.1 Existing Conditions

The Project site is located within the City of Gardena (City) within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, as well as all of Orange County. The SCAB is on a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean on the southwest and high mountains forming the remainder of the perimeter (SCAQMD 1993). Air quality in this area is determined by natural factors such as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors along with applicable regulations are discussed below.

3.1.1.1 Climate and Meteorology

The SCAB is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. This usually mild weather pattern is occasionally interrupted by periods of extreme heat, winter storms, and Santa Ana winds. The annual average temperature throughout the 6,645-square-mile SCAB ranges from low 60 to high 80 degrees Fahrenheit with little variance. With more oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

Contrasting the steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rainfall occurs between the months of November and April. Summer rainfall is reduced to widely scattered thundershowers near the coast, with slightly heavier activity in the east and over the mountains.

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

Wind patterns across the SCAB are characterized by westerly or southwesterly on-shore winds during the day and easterly or northeasterly breezes at night. Wind speed is typically 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 winter and fall, surface high-pressure systems over the SCAB, combined with other meteorological conditions, result in very strong, downslope Santa Ana winds. These winds normally continue for 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 concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

In addition to the characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two distinct types of temperature inversions control the vertical depth through which air pollutants are mixed. These inversions are the marine inversion and the radiation inversion. The height of the base of the inversion at any given time is called the “mixing height.” The combination of winds and inversions is a critical determinant leading to highly degraded air quality for the SCAB in the summer and generally good air quality in the winter.

3.1.1.2 Pollutants and Effects

Criteria Air Pollutants

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by state and federal laws. These regulated air pollutants are known as “criteria air pollutants” and are categorized into primary and secondary pollutants.

Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO_x), sulfur dioxide (SO₂), coarse particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead are primary air pollutants. Of these, CO, NO_x, SO₂, PM₁₀, and PM_{2.5} are primary criteria pollutants. ROG and NO_x are criteria pollutant precursors and form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O₃) is formed by a chemical reaction between ROG and NO_x in the presence of sunlight. O₃ and nitrogen dioxide (NO₂) are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in Table 3.1-1.

Table 3.1-1. Air Contaminants and Associated Public Health Concerns

Pollutant	Major Man-Made Sources	Human Health Effects
Particulate Matter (PM ₁₀ and PM _{2.5})	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Ozone (O ₃)	Formed by a chemical reaction between reactive organic gases/volatile organic	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain

Table 3.1-1. Air Contaminants and Associated Public Health Concerns

Pollutant	Major Man-Made Sources	Human Health Effects
	compounds (ROG or VOC) ¹ and nitrogen oxides (NO _x) in the presence of sunlight. Motor vehicle exhaust industrial emissions, gasoline storage and transport, solvents, paints and landfills.	when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Sulfur Dioxide (SO ₂)	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid, which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO ₂)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to O ₃ . Contributes to global warming and nutrient overloading, which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead (Pb)	Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ.

Table 3.1-1. Air Contaminants and Associated Public Health Concerns

Pollutant	Major Man-Made Sources	Human Health Effects
Sulfates	Sulfates are the fully oxidized form of sulfur, which are produced from reactions of SO ₂ in the atmosphere and typically occur in combination with metals or hydrogen ions.	Can result in respiratory impairment as well as reduced visibility.
Vinyl Chloride	A colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents.	Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.
Hydrogen Sulfide	A colorless and flammable gas that has a characteristic of rotten eggs. Sources include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants.	Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.
Visibility-Reducing Particles	Any particles in the air that obstruct the range of visibility. Sources are the same for PM _{2.5} .	Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism.
Volatile Organic Compounds	Organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O ₃ are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.	The primary health effects of VOCs result from the formation of O ₃ and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate ambient air quality standards for VOCs as a group.

Source: CAPCOA 2018.

Notes: Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROGs and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of

hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).

Non-criteria Air Pollutants

Toxic Air Contaminants. Toxic air contaminants (TACs) are airborne substances that can cause short-term (acute) or long-term (i.e., chronic, carcinogenic or cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes more than 200 compounds, including particulate emissions from diesel-fueled engines. In the state of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics “Hot Spots” Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Diesel Particulate Matter. CARB identified diesel particulate matter (DPM) as a toxic air contaminant. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

Odorous Compounds. Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person’s reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than is the general population. Sensitive receptors that are in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes (CARB 2005). Table 3.1-2 lists the sensitive receptors that will remain nearest the Project site, which include single- and multi-family residential and educational uses. At the time of the preparation of the technical report, there were also single-family homes to the immediate south of the Project site; two of these have been demolished because they were public nuisances and the third will be demolished as part of the Project. As indicated in Table 3.1-2, the nearest sensitive receptors are the Live/Work residential uses west of the Project site.

Table 3.1-2. Sensitive Receptors

Receptor Description	Distance and Direction from the Project ¹	Description
Live/Work and Townhome Residences	Adjacent to the west	Live/Work and Townhome Residences adjacent to Project, along Artesia Boulevard
Single-Family Residences	150 feet to the east	Southeast corner of W Cassidy Street and Normandie Avenue
Single-Family Residences	425 feet to the north	Along West 173rd Street
School	465 feet to the southeast	Gardena Early Education Center, southeast corner of West 177th Street and Normandie Avenue
Multi-Family Residences	1,080 feet to the south	Along West 179th Street

¹ Distances have been measured from the nearest Project site boundary to the property line of each receptor.

² The Project site is zoned 1450 Artesia Specific Plan. These are existing non-conforming uses.

3.1.2 Relevant Plans, Policies, and Ordinances

Federal

Federal Clean Air Act

Air quality is federally protected by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the United States Environmental Protection Agency (EPA) developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including O₃, NO₂, CO, SO₂, PM₁₀, PM_{2.5}, and lead. The EPA is also responsible for setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O₃ protection measures, and enforcement provisions.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O₃, NO₂, SO₂, PM₁₀, PM_{2.5}, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O₃, NO₂, SO₂, PM₁₀, and PM_{2.5} are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires each state to prepare a State Implementation Plan to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The EPA can withhold certain transportation funds from states that fail to comply with the planning requirements of the FCAA. If a state fails to correct these planning deficiencies within 2 years of Federal notification, the EPA is required to develop a Federal Implementation Plan for the identified nonattainment area or areas. The provisions of 40 Code of Federal Regulations Parts 51 and 93 apply in all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan. The EPA has designated enforcement of air pollution control regulations to the individual states. Applicable NAAQS are summarized in Table 3.1-3.

Hazardous Air Pollutants

The 1977 FCAA amendments required the EPA to identify national emission standards for HAPs to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 FCAA Amendments, which expanded the control program for HAPs, 188 substances and chemical families were identified as HAPs.

State

California Air Resources Board

The California Air Resources Board (CARB), which became part of the California Environmental Protection Agency in 1991, administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS), established in 1969 pursuant to the Mulford-Carrell Act, respond to FCAA and regulate emissions from motor vehicles and consumer products. These standards, included with the NAAQS in Table 3.1-3, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates.

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the State Implementation Plan for meeting federal clean air standards for the State of California. Like the EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous 3 calendar years. Exceedances that are affected by highly irregular or

infrequent events such as wildfires, volcanoes, etc. are not considered violations of a state standard, and are not used as a basis for designating areas as nonattainment. The applicable state standards are summarized in Table 3.1-3.

California air districts have based their thresholds of significance for California Environmental Quality Act (CEQA) purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Since an ambient air quality standard is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the ambient air quality standard, this means that the thresholds established by air districts are also protective of human health.

Table 3.1-3. State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a	National Standards ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
O ₃	1 hour	0.09 ppm (180 µg/m ³)	—	Same as primary standard ^f
	8 hours	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³) ^f	
NO ₂ ^g	1 hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	
CO	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None
	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	
SO ₂ ^h	1 hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m ³)
	24 hours	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ^g	—
	Annual	—	0.030 ppm (for certain areas) ^g	—
PM ₁₀ ⁱ	24 hours	50 µg/m ³	150 µg/m ³	Same as primary standard
	Annual arithmetic mean	20 µg/m ³	—	

Table 3.1-3. State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a	National Standards ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
PM _{2.5} ⁱ	24 hours	—	35 µg/m ³	Same as primary standard
	Annual arithmetic mean	12 µg/m ³	9.0 µg/m ³	15.0 µg/m ³
Lead ^{j,k}	30-day average	1.5 µg/m ³	—	—
	Calendar quarter	—	1.5 µg/m ³ (for certain areas) ^k	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m ³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m ³)	—	—
Vinyl chloride ^l	24 hours	0.01 ppm (26 µg/m ³)	—	—
Sulfates	24 hours	25 µg/m ³	—	—
Visibility reducing particles	8 hours (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016; EPA 2016.

Notes: O₃ = ozone; ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; NO₂ = nitrogen dioxide; CO = carbon monoxide; mg/m³ = milligrams per cubic meter; SO₂ = sulfur dioxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; PST = Pacific Standard Time.

^a California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended particulate matter (PM₁₀, PM_{2.5}), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

^b National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For PM_{2.5}, the 24-hour standard is

attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

- c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- d National primary standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- e National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- f On October 1, 2015, the national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- g To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- h On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- i On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.
- j CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- k The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 200 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. The Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions. TAC emissions from

individual facilities are quantified and prioritized. “High-priority” facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

In 2000, the CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment Program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. Several Airborne Toxic Control Measures that reduce diesel emissions including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

California Code of Regulations

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in Title 13 of the CCR states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location. In addition, Section 93115 in Title 17 of the CCR states that operations of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emissions standards.

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

Regional and Local

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties. The agency’s primary responsibility is ensuring that CAAQS and NAAQS are attained and maintained in the SCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public

education campaigns, and many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The SCAQMD is also the lead agency in charge of developing the AQMP, with input from the Southern California Association of Governments (SCAG) and CARB. The AQMP is a comprehensive plan that includes control strategies for stationary and area sources, as well as for on-road and off-road mobile sources. SCAG has the primary responsibility for providing future growth projections and the development and implementation of transportation control measures. CARB, in coordination with federal agencies, provides the control element for mobile sources.

The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017. The purpose of the 2016 AQMP is to set forth a comprehensive and integrated program that would lead the SCAB into compliance with the federal 24-hour PM_{2.5} air quality standard, and to provide an update to the SCAQMD's commitments towards meeting the 8-hour O₃ NAAQS. The 2016 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2016 *Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) and updated emission inventory methodologies for various source categories. As part of its air quality planning, SCAG has prepared the Regional Comprehensive Plan and Guide and the Connect SoCal – The 2020–2045 RTP/SCS (SCAG 2020). The 2020–2045 RTP/SCS was determined to conform to the federally mandated State Implementation plan (SIP) for the attainment and maintenance of the NAAQS. Both the Regional Comprehensive Plan and AQMP are based, in part, on projections originating with county and city general plans.

On October 1, 2015, the EPA strengthened the NAAQS for ground-level O₃. The 2022 AQMP, adopted by the SCAQMD Governing Board on December 2, 2022, was developed to address the requirements for meeting the 2015 8-hour O₃ standard. The 2022 AQMP builds upon measures already in place from previous AQMPs (SCAQMD 2022). It also includes various additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other FCAA measures to achieve the 2015 8-hour O₃ standard. The 2022 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2020–2045 RTP/SCS and updated emission inventory methodologies for various source categories.

The SCAQMD has published the *CEQA Air Quality Handbook* (approved by the SCAQMD Governing Board in 1993 and augmented with guidance for Localized Significance Thresholds [LST] in 2008). The SCAQMD guidance helps local government agencies and consultants to develop environmental documents required by California Environmental Quality Act (CEQA) and provides identification of suggested thresholds of significance for criteria pollutants for both construction and operation (see discussion of thresholds below). With the help of the *CEQA Air Quality Handbook* and associated guidance, local land use planners and consultants are able to analyze and document how proposed and existing projects affect air quality in order to meet the requirements of the CEQA review process. The SCAQMD periodically provides supplemental guidance and updates to the handbook on their website.

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. Under federal law, SCAG is designated as

a Metropolitan Planning Organization and under state law as a Regional Transportation Planning Agency and a Council of Governments. The state and federal attainment status designations for the SCAB are summarized in Table 3.1-4.

Table 3.1-4. South Coast Air Basin Attainment Classification

Pollutant	Designation/Classification	
	National Standards	California Standards
Ozone (O ₃), 1-hour	No national standard	Nonattainment
Ozone (O ₃), 8-hour	Extreme nonattainment	Nonattainment
Nitrogen Dioxide (NO ₂)	Attainment/maintenance	Attainment
Carbon Monoxide (CO)	Attainment/maintenance	Attainment
Sulfur Dioxide (SO ₂)	Unclassifiable/attainment	Attainment
Coarse Particulate Matter (PM ₁₀)	Attainment/maintenance	Nonattainment
Fine Particulate Matter (PM _{2.5})	Serious nonattainment	Nonattainment
Lead	Unclassifiable/attainment	Attainment
Hydrogen Sulfide	No national standard	Unclassified
Sulfates	No national standard	Attainment
Visibility-Reducing Particles	No national standard	Unclassified
Vinyl Chloride	No national standard	No designation

Sources: EPA 2022 (national); CARB 2022 (California).

In summary, the SCAB is currently designated as a nonattainment area for O₃, PM₁₀, and PM_{2.5} CAAQS, as well as the 8-hour O₃ and PM_{2.5} NAAQS. The SCAB is designated as attainment or unclassified for the remaining CAAQS and NAAQS (EPA 2022; CARB 2022).

Despite the current nonattainment status, air quality within the SCAB has generally improved since the inception of air pollutant monitoring in 1976. This improvement is mainly a result of lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by the SCAQMD. This trend toward cleaner air has occurred in spite of continued population growth. Despite this growth, air quality has improved significantly over the years, primarily because of the impacts of the region's air quality control program.

Applicable Rules

The following is a list of SCAQMD rules that are required of construction activities associated with the Project:

- **Rule 401 (Visible Emissions)** – This rule establishes the limit for visible emissions from stationary sources for a period or periods aggregating more than three minutes in any hour. This rule prohibits visible emissions dark or darker than Ringelmann No. 1 for periods greater than three minutes in any hour or such opacity which could obscure an observer's view to a degree equal or greater than does smoke.

- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to 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. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM₁₀ suppression techniques are summarized below.
 - a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
 - b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
 - c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
 - d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
 - e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.
- **Rule 431.2 (Sulfur Content of Liquid Fuels)** – The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose both of reducing the formation of SO_x and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile source applications.
- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

Local Ambient Air Quality

CARB monitors ambient air quality at approximately 250 air monitoring stations across the state. These stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. Existing ambient air quality levels, historical trends, and projections near the Project site are documented by measurements made by the SCAQMD, the air pollution regulatory agency in the SCAB that maintains air quality monitoring stations, which process ambient air quality measurements.

Pollutants of concern in the SCAB are O₃, PM₁₀, and PM_{2.5}. The air monitoring station nearest the Project site that monitors ambient concentrations of these pollutants is the Compton Monitoring

Station (located approximately 7.8 miles to the northeast). The Compton Monitoring Station did not include data for PM₁₀ therefore data from the Long Beach Monitoring Station (located approximately 8.7 miles to the southeast) was used also. Local air quality data for these stations from 2018 to 2020 are provided in Table 3.1-5, which lists the monitored maximum concentrations and number of exceedances of California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS) for each year.

Table 3.1-5. Local Ambient Air Quality Data

Criteria Pollutant	2020	2021	2022
Ozone (O₃)¹			
1-hour Maximum Concentration (ppm)	0.152	0.085	0.111
8-hour Maximum Concentration (ppm)	0.085	0.076	0.085
<i>Number of Days Standard Exceeded</i>			
CAAQS 1-hour (>0.09 ppm)	3	0	1
NAAQS 8-hour (>0.070 ppm)	4	1	1
Carbon Monoxide (CO)²			
1-hour Maximum Concentration (ppm)	4.537	4.331	3.437
<i>Number of Days Standard Exceeded</i>			
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1-hour (>20 ppm)	0	0	0
Nitrogen Dioxide (NO₂)¹			
1-hour Maximum Concentration (ppm)	0.0723	0.0682	0.0649
<i>Number of Days Standard Exceeded</i>			
NAAQS 1-hour (>0.10 ppm)	0	0	0
CAAQS 1-hour (>0.18 ppm)	0	0	0
Coarse Particulate Matter (PM₁₀)³			
National 24-hour Maximum Concentration	68.3	48.7	48.9
State 24-hour Maximum Concentration	68.7	49.7	50.3
State Annual Average Concentration (CAAQS=20 µg/m ³)	—	23.6	—
<i>Number of Days Standard Exceeded</i>			
NAAQS 24-hour (>150 µg/m ³)	0	0	—
CAAQS 24-hour (>50 µg/m ³)	3	0	—
Fine Particulate Matter (PM_{2.5})¹			
National 24-hour Maximum Concentration	67.5	102.1	52.8
State 24-hour Maximum Concentration	67.5	102.1	54.6
<i>Number of Days Standard Exceeded</i>			
NAAQS 24-hour (>35 µg/m ³)	19	12	6

Sources: Source: All pollutant measurements are from the CARB Aerometric Data Analysis and Management system database (<https://www.arb.ca.gov/adam>) except for CO, which were retrieved

from the CARB Air Quality and Meteorological Information System (<https://www.arb.ca.gov/aqmis2/aqdselect.php>).

Notes: ppm = parts per million by volume; – = not available; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; ND = insufficient data available to determine the value.

- ¹ Measurements taken at the Compton-700 North Bullis Road Monitoring Station (CARB# 70112).
- ² Measurements taken at the Compton-700 North Bullis Road Monitoring Station (CARB# 70112), which is the closet monitoring station that measures CO.
- ³ Measurements taken at the South Long Beach Monitoring (CARB# 33165).

City of Gardena General Plan

The City of Gardena General Plan Land Use Plan, Circulation Plan, and Environmental Justice Element identify the following air quality goals and policies that apply to the Project (City of Gardena 2021):

CI Goal 1: Promote a safe and efficient circulation system that benefits residents and businesses, and integrates with the greater Los Angeles/South Bay transportation system.

Policy 1.1: Prioritize long-term sustainability for the City of Gardena, in alignment with regional and State goals, by promoting infill development, reduced reliance on single-occupancy vehicle trips, and improved multi-modal transportation networks, with the goal of reducing air pollution and greenhouse gas emissions, thereby improving the health and quality of life for residents.

Policy 1.2: Minimize truck traffic through Gardena and minimize adverse impacts by regulating off-street truck parking, intrusions into neighborhoods, and noise levels.

CI Goal 3: Develop Complete Streets to promote alternative modes of transportation that are safe and efficient for commuters, and available to persons of all income levels and disabilities.

Policy 3.4: Maintain a citywide bicycle route and maintenance plan that promotes efficient and safe bikeways integrated with the MTA's regional bicycle system.

Policy 3.5: As roadways are repaved or otherwise improved, evaluate opportunities to enhance the quality and safety of the roadway by implementing new or improved walking, bicycling, or public transit infrastructure. If no walking, bicycling, or public transit improvements are being provided, a report to the City Council should provide an explanation for why such improvements are not needed along this roadway segment.

LU Goal 3: Provide high quality, attractive and well-maintained commercial, industrial, and public environments that enhance the image and vitality of the City.

Policy 3.6: New commercial and industrial developments shall meet or exceed local and State requirements pertaining to noise, air, water, seismic safety and any other applicable environmental regulations.

EJ Goal 1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.

Policy 1.2: Attract new clean industry to the City which do not emit smoke, noise, offensive odors, or harmful industrial wastes.

Policy 1.13: Reduce communitywide greenhouse gas emissions locally by actively supporting regional efforts to reduce greenhouse gases.

3.1.3 Thresholds of Significance

Based upon the criteria derived from State CEQA Guidelines Appendix G, a Project normally would have a significant effect on the environment if it would:

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

South Coast Air Quality Management District Thresholds

SCAQMD has established Air Quality Significance Thresholds, as revised in March 2023, that set forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality. The Project’s “regional” emission refers to emissions that will be evaluated based on regional significance thresholds established by SCAQMD, also known as the criteria pollutant mass daily thresholds. According to the SCAQMD, an air quality impact is considered significant if a Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality during construction and operational activities of land use development projects, as shown in Table 3.1-6.

Table 3.1-6. SCAQMD District Regional Emissions Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	Construction (pounds per day)	Operation (pounds per day)
VOCs	75	55
NO _x	100	55
CO	550	550
SO _x	150	150
PM ₁₀	150	150
PM _{2.5}	55	55
Lead ^a	3	3

Table 3.1-6. SCAQMD District Regional Emissions Thresholds

Criteria Pollutants Mass Daily Thresholds	
TACs and Odor Thresholds	
TACs ^b	Maximum incremental cancer risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic and acute hazard index ≥ 1.0 (project increment)
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402
Ambient Air Quality Standards for Criteria Pollutants ^c	
NO ₂ 1-hour average NO ₂ annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)
PM ₁₀ 24-hour average PM ₁₀ annual average	10.4 $\mu\text{g}/\text{m}^3$ (construction) ^d 2.5 $\mu\text{g}/\text{m}^3$ (operation) 1.0 $\mu\text{g}/\text{m}^3$
PM _{2.5} 24-hour average	10.4 $\mu\text{g}/\text{m}^3$ (construction) ^d 2.5 $\mu\text{g}/\text{m}^3$ (operation)

Source: SCAQMD 2023.

Notes: SCAQMD = South Coast Air Quality Management District; VOC = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; TAC = toxic air contaminant; NO₂ = nitrogen dioxide; ppm = parts per million by volume; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

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

- ^a The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the Project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
- ^b TACs include carcinogens and noncarcinogens.
- ^c Ambient air quality standards for criteria pollutants are based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.
- ^d Ambient air quality threshold are based on SCAQMD Rule 403.

Localized Carbon Monoxide

In addition to the daily thresholds listed above, the Project would also be subject to CAAQS and NAAQS. These are addressed through an analysis of localized CO impacts. The significance of localized

impacts depends on whether ambient CO levels near the Project site are above CAAQS and NAAQS (the more stringent CAAQS are 20 ppm for 1-hour and 9 ppm for 8-hour). The SCAB has been designated as attainment under the 1-hour and 8-hour CAAQS.

Localized Significance Thresholds

In addition to the CO hotspot analysis, the SCAQMD developed Local Significance Thresholds (LSTs) for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at new development sites (off-site mobile source emissions are not included in the LST analysis). LSTs represent the maximum emissions that can be generated at a project without expecting to cause or substantially contribute to an exceedance of the most stringent CAAQS or NAAQS. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb 5.0 acres or less on a single day. The City of Gardena is located within SCAQMD SRA 3. LST's interpolated at meters (between the 100- and 200-meter threshold) are provided in Table 3.1-7 for informational purposes and to demonstrate that the thresholds increase as acreages increase. However, because the sensitive receptors nearest the Project site are adjacent, this analysis uses the 25-meter thresholds.

Table 3.1-7. Localized Significance Thresholds for Construction/Operations

Project Size	Maximum Pounds Per Day			
	NO _x	CO	PM ₁₀	PM _{2.5}
1 Acre	91/91	664/664	5/1	3/1
2 Acres	132/131	967/967	8/2	5/1
5 Acres	197/197	1,796/1,796	15/4	8/2

Source: SCAQMD 2008, 2009.

Notes: NO₂ = nitrogen dioxide; CO = carbon monoxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter.

LST thresholds were determined based on the values for a distance of 25 meters in SRA 3.

3.1.4 Methodology

This air quality impact analysis considers the Project’s construction and operational impacts. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod) Version 2022.1 (CAPCOA 2022). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. CalEEMod input parameters, including the land use type used to represent the Project and its size, construction schedule, and anticipated use of construction equipment, were based on information provided by the Project Applicant or default model assumptions if Project specifics were unavailable. Air quality impacts were assessed according to methodologies recommended by CARB and the SCAQMD.

Construction Emissions

Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with Project construction would generate emissions of criteria air pollutants and precursors. Daily regional construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors in CalEEMod.

Operational Emissions

Project operations would result in emissions of area sources (consumer products), energy sources (natural gas usage and off-site electrify generation), and mobile sources (motor vehicles from Project generated vehicle trips). The list below describes each operational emissions source.

- **Area Source Emissions.** Area source emissions would be generated due to on-site equipment, architectural coating, and landscape maintenance equipment that were previously not present on the site.
- **Energy Source Emissions.** Energy source emissions would be generated due to electricity and natural gas usage associated with the Project. Primary uses of electricity and natural gas by the Project would be for miscellaneous warehouse equipment, space heating and cooling, water heating, ventilation, lighting, appliances, and electronics.
- **Off-Road Equipment.** Operational off-road emissions would be generated by off-road cargo handling equipment used during operational activities. For the Project, it was assumed that the warehouses would include three forklifts and one yard truck per SCAQMD data (SCAQMD 2014).
- **Emergency Backup Generators.** It is undetermined at this time whether the warehouse/distribution facility will require emergency backup generators. Backup generators would only be used in the event of a power failure and would not be part of the Project's normal daily operations. Nonetheless, emissions associated with this equipment were included to be conservative. Emissions from an emergency backup generator for the proposed warehouse building were calculated separately from CalEEMod; refer to Appendix B-1. However, CalEEMod default emissions rates were used. If backup generators are required, the end user would be required to obtain a permit from the SCAQMD prior to installation. Emergency backup generators must meet SCAQMD's Best Available Control Technology (BACT) requirements and comply with SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines), which would minimize emissions.
- **Mobile Source Emissions.** Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_x, PM₁₀, and PM_{2.5} are all pollutants of regional concern. NO_x and ROG react with sunlight to form O₃, known as photochemical smog. Additionally, wind currents readily transport PM₁₀ and PM_{2.5}. However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated increases in operational emissions would be predominantly associated with mobile sources (i.e., motor vehicle use). The proposed Project is forecast to generate 945 maximum daily vehicle trips (ADT), which includes 220 daily trips from the special events. The 945 maximum ADT is

also inclusive of 75 average daily truck trips (Kimley-Horn and Associates 2022a). It is also noted, because SCAQMD methodology requires analysis of maximum daily emissions, the special event daily trips (220 daily trips) were also included in the Project's maximum daily emissions modeling, although the various special events would occur only on special event days (up to three times per month) (Kimley-Horn and Associates 2022b). Thus, mobile source emissions were based on 945 maximum daily trips (725 ADT from the mixed-use development not accounting for displaced land uses and 220 daily trips from the special events) pursuant to SCAQMD methodology requirements.

As discussed above, the SCAQMD provides significance thresholds for emissions associated with Project construction and operations. The Project's construction and operational emissions are compared to the daily criteria pollutant emissions significance thresholds to determine the significance of a project's impact on regional air quality.

Health Risk Assessment

The SCAQMD's Modeling Guidance for American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) (SCAQMD 2023b) provides guidance to perform dispersion modeling for use in HRAs within the South Coast Air Basin. The SCAQMD has adopted a cancer risk threshold of 10 in 1 million (SCAQMD 2023a), which indicates that a person has an additional risk of 10 chances in 1 million (0.001%) of developing cancer during their lifetime as a result of the air pollution scenario being evaluated. The SCAQMD has also adopted a hazard index less than 1.0, below which indicates that people are not likely to experience any non-cancer health effects (SCAQMD 2023a).

Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact. The 10 in 1 million standard is a health-protective significance threshold. A risk level of 10 in 1 million implies a likelihood that up to 10 persons, out of 1 million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. This risk would be an excess cancer that is in addition to any cancer risk borne by a person not exposed to these air toxics.

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Noncarcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index of less than 1.0 means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less than significant.

This HRA evaluates potential health risks associated with the emission of DPM resulting from Project implementation. Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known TAC. Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. Operational activities would also include the use of heavy-duty diesel trucks.

Construction Sources

Construction would generate DPM emissions from the use of off-road diesel equipment required for demolition, grading and excavation, paving, and other construction activities. For construction activity, DPM is the primary toxic air contaminant of concern. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment were included in the analysis, although they are typically less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at the Project site potentially poses a health risk to nearby sensitive receptors. The nearest sensitive that will be impacted by the Project are the live work and townhome residences to the west of the Project as the one existing single-family residence to the south will be demolished as part of the Project.

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 episodic and would occur throughout the Project site. Construction activities would limit idling to no more than 5 minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Furthermore, even during the most intense period of construction, DPM emissions would be generated from different locations on the Project site rather than in a single location because different types of construction activities (e.g., site preparation and building construction) would not occur at the same place at the same time. Construction emission rates for PM₁₀ (DPM) were calculated from the CalEEMod construction emissions modeling conducted for the Project Greenhouse Gas Emissions Assessment. The Project's construction activities are anticipated to occur over approximately 18 months, starting as early as Spring 2024 and ending Fall 2025.¹ However, this analysis has conservatively assumed construction would occur over 2 years, exposing receptors to more construction emissions.

Operational Sources

Mobile Sources. The Project is located near existing residential uses. Due to the increased truck traffic from the Project, the resulting emissions could result in pollutant concentrations at existing nearby sensitive receptors. The Project's average daily truck trips were obtained from the *Traffic Impact Assessment* (Kimley-Horn and Associates 2024). The Transportation Assessment calculated that the Project would generate 75 one-way truck trips daily (or 38 trucks traveling in and out of the site). Using data from the Air Quality Study, it is assumed the mix of trucks accessing the Project site

¹ As the Project development is speculative, a conservative worst-case construction timeline has been modeled for analysis purposes. This involves modeling emissions at the earliest feasible date. Emissions in future years (i.e., due to a later construction start date or operational opening year) would be lower due to phased-in emissions standards, inspection and maintenance requirements, and fleet turnover). Project construction that occurs at a later date than what was modeled impacts would result in lower emissions than those analyzed due to the use of more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to state regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment. As a result, Project-related construction emissions would be lower than the impacts disclosed herein. For emissions modeling purposes, conservatively analyzing the emissions using an earlier construction start date provides for a worst-case analysis and full disclosure of potential air quality impacts, as required by CEQA.

would be 30% heavy trucks, 15% medium trucks, and 55% light trucks. In addition, to estimate emissions during special events, 3 additional trucks were added. Therefore, this HRA conservatively assumes operational emissions are equal to 41 trucks traveling to and from the Project site daily. An emission rate for PM₁₀ (DPM) was calculated using trip data and a CARB 2021 Emission FACTor model (EMFAC) model run for Los Angeles County; refer to Appendix B-1. EMFAC generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of vehicle speed and type (CARB 2021). The model was run for heavy-duty diesel vehicles traveling along off-site roads, circulating on the Project site, and idling at the proposed loading docks.

Dispersion Modeling

The HRA's construction and operational air dispersion modeling was performed using the U.S. EPA AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources. AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data is provided by the SCAQMD. Surface and upper air meteorological data from the Long Beach Airport Monitoring Station was selected as being the most representative for meteorology based on proximity to the Project site.

The model's emission sources are line volume sources (consisting of smaller adjacent volume sources) for construction and truck operations. Off-road construction equipment operating on site and on-road construction equipment (hauling materials to and from the Project site) were assigned a release height of 9 feet (2.85 meters) and a plume height of 18.7 feet (5.7 meters) based on a vehicle height of 11 feet (3.35 meters). The operational sources (i.e., heavy-duty diesel vehicles traveling along off-site roads, circulating on the Project site, and idling at the proposed loading docks) were assigned a release height of 11.5 feet (3.53 meters) and a plume height of 23 feet (7.06 meters) based on a vehicle height of 13.6 feet (4.15 meters). Release height and plume height are based on U.S. EPA guidance for vehicle volume sources (EPA 2012).

AERMOD was run to obtain the peak 1-hour and annual average (period) concentration in micrograms per cubic meter (µg/m³) of PM₁₀ at the nearby sensitive receptors. According to the SCAQMD's Supplemental Guidelines for Preparing Risk Assessments for AB 2588, air dispersion modeling is required to estimate annual average concentrations to calculate the Maximally Exposed Individual Resident (MEIR), the maximum chronic HI, the zones of impact, and excess cancer burden. To achieve these goals, a receptor grid was placed over the nearest sensitive receptors to cover the zone of impact. According to the SCAQMD, "to identify the maximum impacted receptors (i.e., peak cancer risk and peak hazard indices), a grid spacing of 100 meters or less must be used" (SCAQMD Supplemental Guidelines page 16). Due to the size of the Project site, receptors were modeled with a maximum of 20-meter grid spacing. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the Project site. The modeling and analysis were prepared in accordance with the SCAQMD Modeling Guidance for AERMOD (SCAQMD 2023b).

Note that the concentration estimate developed using this methodology is conservative and is not a specific prediction of the actual concentrations that would occur at the Project site any given point in time. Actual 1-hour and annual average concentrations are dependent on many variables, particularly

the number and types of vehicles and equipment operating at specific distances during time periods of adverse meteorology. A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on these worst-case exposure duration scenarios. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual. Only the risk associated with the Project’s worst-case location was assessed.

Risk and Hazard Assessment

Cancer Risk. Based on the OEHHA methodology, the residential inhalation excess cancer risk from annual average DPM and benzene concentrations is calculated by multiplying the daily inhalation dose, cancer potency factor, age sensitivity factor (ASF), frequency of time spent at home, and exposure duration divided by averaging time. These factors are discussed in more detail below. It is important to note that exposure duration is based on continual heavy truck operation along nearby roadways. Exposure through inhalation (dose-air) is a function of breathing rate, exposure frequency, and concentration of substance in the air. To estimate cancer risk, the dose was estimated by applying the following formula to each ground-level concentration:

$$\text{Dose-air} = C_{\text{air}} * (\text{BR}/\text{BW}) * A * \text{EF} * 10^{-6}$$

Dose-air =	dose through inhalation (mg/kg/day)
C _{air} =	air concentration (µg/m ³) from air dispersion model
(DBR/BW) =	daily breathing rate normalized to body weight (L/kg bodyweight-day)
A =	inhalation absorption factor (unitless)
EF =	exposure frequency (approximately 350 days per year for residential)
10 ⁻⁶ =	conversion factor (micrograms to milligrams, liters to cubic meters)

OEHHA developed ASFs to consider the increased sensitivity to carcinogens during early-life exposure. In the absence of chemical-specific data, OEHHA recommends default ASFs presented in Table 3.1-8. Fraction of time at home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific facility’s emissions, based on the assumption that exposure to the facility’s emissions is not occurring away from home. OEHHA recommends the FAH values presented in Table 3.1-8.

Table 3.1-8. Age Sensitivity Factors, Fraction of Time at Home, and Daily Breathing Rates

Age	Exposure Frequency (days/year)	Exposure Duration (years)	Age Sensitivity Factor ¹ (ASF)	Fraction of Time at Home (FAH)	Daily Breathing Rate (L/kg BW-day ²)
Residential					
Third trimester	350	0.25	10	100%	361
0 to 2 years	350	2	10	100%	1,090
Ages 2 through 8 years	350	7	3	100%	631
Ages 9 through 15 years	350	7	3	100%	572
Ages 16 and greater	350	14	1	73%	261

Table 3.1-8. Age Sensitivity Factors, Fraction of Time at Home, and Daily Breathing Rates

Age	Exposure Frequency (days/year)	Exposure Duration (years)	Age Sensitivity Factor ¹ (ASF)	Fraction of Time at Home (FAH)	Daily Breathing Rate (L/kg BW-day ²)
Worker ³	250	25	1	N/A	230
Student ³	180	9	3	N/A	640

Source: OEHHA 2015; SCAQMD 2017.

- ¹ Accounts for potential increased sensitivity to carcinogens during childhood.
- ² Daily breathing rate normalized to body weight (L/kg body weight - day) (95th percentile for 3rd trimester to 2 years and 80th percentile for other age groups).
- ³ Worker and Student breathing rates are 95th percentile 8-hour breathing rates based on moderate intensity activity.

To estimate the cancer risk, the dose is multiplied by the cancer potency factor, the ASF, the exposure duration divided by averaging time, and the frequency of time spent at home (for residents only):

$$\text{Risk}_{\text{inh-res}} = (\text{Dose}_{\text{air}} * \text{CPF} * \text{ASF} * (\text{ED}/\text{AT}) * \text{FAH})$$

$\text{Risk}_{\text{inh-res}}$ = residential inhalation cancer risk (potential chances per million)
 Dose_{air} = daily dose through inhalation (mg/kg-day)
 CPF = inhalation cancer potency factor (mg/kg-day⁻¹)
 ASF = age sensitivity factor for a specified age group (unitless)
 ED = exposure duration (years)
 AT = averaging time of lifetime cancer risk (years)
 FAH = fraction of time spent at home (unitless)

Chronic Non-Cancer Hazard. The non-cancer chronic hazard is calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer chronic hazard:

$$\text{Hazard Quotient} = C_i / \text{REL}_i$$

C_i = concentration in the air of substance *i* (annual average concentration in µg/m³)
 REL_i = chronic noncancer Reference Exposure Level for substance *i* (µg/m³)

Health Risk Computation. A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 30-year exposure scenario using the approach described in the OEHHA *Air Toxics Program Guidance Manual for the Preparation of Health Risk Assessments* (February 2015) and the daily breathing rates, age sensitivity factors, exposure duration, and fraction of time at home specified in the SCAQMD, Permit Application Package “N” Risk Assessment Procedures for Rules 1401, 1401.1, and 212 Version 8.1 (refer to Table 3.1-8). Health risks were analyzed at the point of maximum impact and are a conservative estimate. The pollutant concentrations are then used to estimate the long-term cancer health risk to an individual as well as the non-cancer chronic health index.

The off-site impacts would occur from the diesel trucks accessing the Project site. The cancer and chronic health risks are based on the annual average concentration of PM₁₀ (used as a proxy for DPM). As noted above, the chronic and carcinogenic health risk calculations are based on the standardized equations contained in the U.S. EPA *Human Health Evaluation Manual* (1991) and the OEHHA Guidance Manual (2015).

The localized effects from the Project's on-site emissions were evaluated in accordance with the SCAQMD's Localized Significance Threshold (LST) Methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

Laws, Ordinances, and Regulations (LORs)

Standard Conditions are existing requirements and conditions of approval that are based on local, state, or federal regulations or laws that are frequently required independent of CEQA review. Typical standard conditions and requirements include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because Standard Conditions are neither project specific nor a result of project development, they are not Mitigation Measures.

LOR AQ-1. Prior to the issuance of grading permits, the City Engineer shall confirm that the Grading Plan, Building Plans, and Specifications require all construction contractors to comply with South Coast Air Quality Management District (South Coast AQMD) Rules 402 and 403 to minimize construction dust and particulate emissions. The measures include, but are not limited to, the following:

- Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
- All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- All material transported off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
- Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.

LOR AQ-2. The applicant shall require by contract specifications that the interior and exterior architectural coating (paint and primer including parking lot paint) products used comply with South Coast AQMD Rule 1113 which requires building envelope coatings to have a volatile organic compound rating of 50 grams per liter or less.

LOR AQ-3. Require diesel powered construction equipment to turn off when not in use per California Code of Regulations, Title 13, Section 2449.

LOR AQ-4. Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the City’s Water Efficient Landscape requirements (Gardena Municipal Code Chapter 15.60 - Adoption of the California Model Water Efficient Landscape Ordinance).

LOR AQ-5. The Project shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. Title 24 Energy Efficiency Standards Section 110.10 requires buildings to be designed to have 15 percent of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to the issuance of occupancy permits.

LOR AQ-6. The Project shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:

- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with California Green Building Standards Code Part 11, Section 5.303 (nonresidential).
- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with California Green Building Standards Code Part 11, Section 5.408.1 (nonresidential).
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with California Green Building Standards Code Part 11, Section 5.410 (nonresidential).
- Provide designated parking for any combination of low-emitting, fuel efficient and carpool/van pool vehicles. At least eight percent of the total parking spaces are required to be designated in accordance with California Green Building Standards Code Part 11, Section 5.106.5.2 (nonresidential) - Designated Parking for Clean Air Vehicles.
- To facilitate future installation of electric vehicle supply equipment (EVSE), nonresidential construction shall comply with California Green Building Standards Code Part 11, Section 5.106.5.3 (nonresidential electric vehicle charging).

3.1.5 Impact Analysis

Threshold AQ-1: Would the Project 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 State Implementation Plan that demonstrates the means to attain the NAAQS. The State Implementation Plan 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

regarding the CAAQS and NAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project is located within the SCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the FCAA, to reduce criteria pollutant emissions for which the SCAB is in nonattainment. To reduce such emissions, the SCAQMD adopted the 2016 and 2022 AQMPs (AQMPs). The AQMPs establish a program of rules and regulations directed at reducing air pollutant emissions and achieving CAAQS and NAAQS. The AQMPs are a regional and multi-agency effort including the SCAQMD, the CARB, the SCAG, and the EPA. The AQMPs pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project is subject to the AQMPs.

Criteria for determining consistency with the AQMPs are defined by the following indicators:

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

According to the SCAQMD's *CEQA Air Quality Handbook*, the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with CAAQS and NAAQS.

The violations to which Consistency Criterion No. 1 refers are CAAQS and NAAQS. As shown in Table 3.1-9 and Table 3.1-10, Project construction and operational emissions would not exceed the regional thresholds that are established to help the SCAB achieve air quality standards. In addition, as shown in Table 3.1-12 and Table 3.1-13, the project would not exceed the LST thresholds established by SCAQMD to determine if a project would cause an air quality violation of the CAAQS or NAAQS. Therefore, the Project would not contribute to an existing air quality violation. Thus, the Project is consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMPs contain air pollutant reduction strategies based on SCAG's latest growth forecasts, which were defined in consultation with local governments and with reference to local general plans. As discussed in the *General Plan and Zoning* Section above, the Project is designated as Specific Plan and zoned as 1450 Artesia Specific Plan, which will allow commercial and industrial uses. At the time the AQMP was adopted, the property was zoned as Artesia Corridor Specific Plan, which designates the Project site as Commercial and Mixed Use. It was anticipated there would be development of a minimum of 80,000 SF of commercial uses in Area 5 and a minimum of 70,000 square feet of commercial development in Area 4. To date there has been no commercial development in Area 5 and approximately 10,000 square feet of commercial development in Area 4. The 1450 Artesia Specific Plan would allow up to 186,000 GSF of self-storage use, 72,000 GSF of industrial use, and 10,000 GSF of office/retail use on the Project site. Although the Project proposes more intense development on the Project site than the Artesia Corridor Specific Plan anticipated, the majority of the Project would be locally-serving (self-storage portion) and the

overall development would generate only approximately 40 jobs.² This growth equates to approximately 1.4% of the total employment growth that is projected to occur between 2020 and 2045 and approximately 21% of the growth that is expected to occur between the time of this writing (2022) and the Project’s anticipated buildout year (2024). Therefore, the Project would be consistent with the land use designation and development density presented in the City’s General Plan at the time the AQMP was developed and therefore would not exceed the population or job growth projections used by the SCAQMD to develop the AQMPs. Thus, the Project is consistent with the second criterion.

Based on these criteria, the Project would not conflict with or obstruct implementation of the AQMPs, and as such impacts would be **less than significant**.

Threshold AQ-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Construction Emissions

Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area are O₃-precursor pollutants (i.e., ROG and NO_x) and PM₁₀ and PM_{2.5}. Construction-related emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD’s thresholds of significance.

Construction results in the temporary generation of emissions resulting from site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water. Fugitive dust emissions may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the Project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby.

Project construction activities are estimated to be completed within 18 months, beginning in mid-2024 and finishing December 2025. The construction schedule used in the analysis represents a “worst-case” analysis scenario since emission factors for construction equipment decrease as the analysis year increases due to improvements in technology and more stringent regulatory requirements. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required pursuant to CEQA guidelines. The Project’s construction-related emissions were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Appendix B-1 of this EIR for more information regarding the construction assumptions used in this analysis. Table 3.1-9 provides the Project’s predicted maximum daily construction-related emissions and indicates all criteria pollutant emissions would remain below their respective thresholds. Notwithstanding, SCAQMD Rules 402 and

² Sorenson, Brian. 2022. Personal Correspondence.

403 (prohibition of nuisances, watering of inactive and perimeter areas, track out requirements, etc.), are applicable to the Project and were applied in CalEEMod to minimize fugitive dust emissions. Laws, Ordinances, and Regulations (LORs) were incorporated in the Project assumptions for analysis and are listed below as LOR measures. LOR AQ-1 requires the implementation of Rule 402 and 403 dust control techniques to minimize PM₁₀ and PM_{2.5} concentrations.³ As required by law, all architectural coatings for the Project structures would be subject to compliance with SCAQMD Rule 1113, which provides specifications on painting practices and regulates the ROG content of paint. LOR AQ-2 requires implementation of Rule 1113, which limits the VOC content of paint to 50 grams per liter or less.^{4,5} Compliance with LOR AQ-1 and LOR AQ-2 would be required to ensure compliance with SCAQMD Rules and Regulations, which would be verified and enforced through the City's development review process.

Table 3.1-9. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions - Unmitigated

Construction Year	Maximum Pounds Per Day					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Year 1 (2024)	3.72	36.03	34.27	0.05	3.17	1.53
Year 2 (2025)	21.60	13.13	18.57	0.03	1.64	0.72
SCAQMD Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: CalEEMod version 2022.1. Refer to Appendix B-1 for model outputs.

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

SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No adjustments were applied to equipment exhaust. Refer to Appendix B-1 for Model Data Outputs. The highest values between summer and winter results were used as a worst-case scenario.

While impacts would be considered **less than significant**, the Project would still be subject to SCAQMD Rules 401, 402, 403, 431.2, and 1113, described in the Regulatory Framework subsection above and required by Standard Conditions AQ-1 and AQ-2.

³ Standard Conditions are existing requirements and conditions of approval that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Applicable Standard Conditions are included at the end of this impact analysis.

⁴ Applicable Laws, Ordinances, and Regulations are included at the end of this impact analysis.

⁵ For analysis purposes, VOCs and ROG both represent organic compounds and these terms are used interchangeably.

Operational Emissions

The Project's operational emissions would be primarily associated with motor vehicle use and area sources, such as the use of landscape maintenance equipment, hearths, consumer products, and architectural coatings. Table 3.1-10 provides the Project's long-term operational emissions, which consider the land uses that would be removed, the proposed mixed-use development, and the special events. As shown in Table 3.1-10, the Project's operational emissions would remain below the SCAQMD's thresholds. Therefore, the Project's operational air pollutant emissions would be less than significant, and no mitigation is required. Note that emissions rates differ from summer to winter because different weather patterns affect pollutant mixing, dispersion, O₃ formation, and other factors.

Table 3.1-10. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Source	Maximum Pounds Per Day ¹					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Existing Conditions²						
Area	0.36	0.36	3.41	0.01	0.59	0.15
Energy	0.58	0.00	0.52	0.00	0.00	0.00
Mobile ²	0.01	0.11	0.09	0.00	0.01	0.01
Total Emissions	0.95	0.47	4.02	0.01	0.60	0.16
Proposed Project³						
Maximum Emissions						
Area	6.12	0.07	8.52	0.00	0.02	0.01
Energy	0.07	1.33	1.12	0.01	0.10	0.10
Mobile - Automobiles	2.16	1.83	19.37	0.05	4.30	1.11
Mobile - Trucks	0.29	6.18	3.22	0.03	2.74	0.81
Mobile - Special Events ³	0.73	0.62	6.55	0.02	1.46	0.38
Stationary - Backup Generators ⁴	0.90	2.51	2.29	0.00	0.13	0.13
Total Emissions	10.27	12.54	41.07	0.13	8.74	2.54
Net Emissions						
Existing Conditions	0.95	0.47	4.02	0.01	0.60	0.16
Proposed Project Net Change	9.32	12.06	37.04	0.12	8.14	2.37
SCAQMD Significance Thresholds	55	55	550	150	150	55
Thresholds Exceeded?	No	No	No	No	No	No

Source: CalEEMod version 2022.1. Refer to Appendix B-1 for model outputs.

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

¹ Total values are from CalEEMod and may not add up 100% due to rounding. The highest values between summer and winter results were used as a worst-case scenario.

² Two commercial uses (i.e., a U-Haul dealer and sandblasting service) totaling approximately 12,064 GSF (circa 1950) with associated surface parking currently occupy the Project site.

- ³ Includes special events, which would be held approximately two to three times per month, including weekday evening events (after 6 p.m.) and weekend daytime events.
- ⁴ Per Mitigation Measures GHG-1 from the Project's Greenhouse Gas Emissions Assessment, all off-road vehicles will be electric and will not produce air quality emissions. Stationary source emissions for one generator were calculated using default emissions rates from CalEEMod.

Cumulative Short-Term Emissions

The SCAB is designated nonattainment for O₃, PM₁₀, and PM_{2.5} for CAAQS and nonattainment for O₃ and PM_{2.5} for NAAQS. Appendix D of the SCAQMD White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (SCAQMD 2003) notes that projects that result in emissions that do not exceed the project-specific SCAQMD regional thresholds of significance should result in a less-than-significant impact on a cumulative basis unless there is other pertinent information to the contrary. Therefore, if a project is estimated to result in emissions that do not exceed the thresholds, the project's contribution to the cumulative air quality impact in the SCAB would not be cumulatively considerable. As shown in Table 3.1-10 above, Project construction-related emissions by themselves would not exceed the SCAQMD significance thresholds for criteria pollutants. Therefore, the Project would not generate a cumulatively considerable contribution to air pollutant emissions during construction.

The SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMPs pursuant to the FCAA mandates. The analysis assumed fugitive dust controls would be utilized during construction, including frequent water applications. SCAQMD rules, mandates, and compliance with adopted emissions control measures with the AQMPs would also be imposed on construction projects throughout the SCAB, which would include related projects. Compliance with SCAQMD rules and regulations would further reduce Project construction-related emissions. Therefore, Project-related construction emissions, combined with those from other projects in the area, would not substantially deteriorate local air quality. The Project's construction-related emissions would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. Impacts would be **less than significant**.

Cumulative Long-Term Impacts

The SCAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the operational thresholds of significance based on the level above which individual project emissions would result in a cumulatively considerable contribution to the SCAB's existing air quality conditions. Therefore, a project that exceeds the SCAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact. As shown in Table 3.1-10, Project operational emissions would not exceed the SCAQMD thresholds. Therefore, the Project's operational emissions would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. Impacts would be **less than significant**.

Threshold AQ-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?

Localized Construction Significance Analysis

The nearest sensitive receptors are the Live/Work multi-family residences adjacent/west of the Project site. To identify impacts to sensitive receptors, the SCAQMD recommends addressing construction LSTs. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific emissions.

Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, Table 3.1-11, is used to determine the maximum daily disturbed acreage for comparison to LSTs. The Project is located within SRA 3 (Southwest Costal LA County). LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. The SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5.0 acres in size. Project construction is anticipated to disturb a maximum of 2.5 acres in a single day. As the LST guidance provides thresholds for projects disturbing 1.0, 2.0, and 5.0 acres in size and the thresholds increase with size of the site, the LSTs for a 2.5-acre threshold were interpolated and utilized for this analysis.

Table 3.1-11. Equipment-Specific Grading Rates

Construction Phase	Equipment Type	Equipment Quantity	Acres Graded per 8-Hour Day	Operating Hours per Day	Acres Graded per Day
Grading	Tractors	3	0.5	8	1.5
	Graders	1	0.5	8	0.5
	Dozers	1	0.5	8	0.5
Total Acres Graded per Day					2.5

Source: CalEEMod version 2022.1. Refer to Appendix B-1 for model outputs.

The SCAQMD's methodology states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, only "on-site" emissions included in the CalEEMod outputs were considered. The nearest sensitive receptors are the Live/Work multi-family residences adjacent/west of the Project site. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. SCAQMD's LST guidance recommends using the 25-meter threshold for receptors located 25 meters or less from a project site. Therefore, the LSTs for 2.5 acres at 25 meters were used for the Project's construction analysis, which is consistent with the SCAQMD LST methodology. Table 3.1-12 presents the results of the Project's localized unmitigated emissions during each construction phase. Table 3.1-12 shows the Project's pollutant emissions on the peak day of construction without any mitigations or dust control measures.

Table 3.1-12. Localized Significance of Construction Emissions - Unmitigated

Construction Activity	Maximum Pounds Per Day			
	NO _x	CO	PM ₁₀	PM _{2.5}
Demolition	24.89	21.74	1.06	0.98
Site Preparation	35.95	32.93	1.60	1.47
Grading	18.23	18.82	0.84	0.77
Building Construction	10.44	13.04	0.43	0.39
Paving	6.52	8.84	0.29	0.26
Architectural Coating	0.88	1.14	0.03	0.03
SCAQMD Localized Screening Threshold (adjusted for 2.5 acres at 25 meters)	142	1,105	9	6
Exceed SCAQMD Threshold?	No	No	No	No

Source: CalEEMod version 2022.1. Refer to Appendix B-1 for model outputs.

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

As shown in Table 3.1-12, the Project would not exceed the applied SCAQMD localized screening thresholds at the nearest receptor. Therefore, the Project would result in a less-than-significant impact concerning LSTs during construction.

Localized Operational Significance Analysis

According to the SCAQMD LST methodology, LSTs would apply to the operational phase of a project only if it includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at a site (e.g., warehouse or transfer facilities). Since the Project contains self-storage and warehouse uses, the operational phase LST protocol is conservatively applied to both the area source and 20% the mobile source emissions. LST thresholds for receptors were used for 25 meters because the sensitive receptors are adjacent/south and west of the Project site, using SCAQMD methodology. Although the Project site is approximately 6.59 acres, the 5.0-acre LST threshold was also conservatively used for the Project, as the LSTs increase with the site's size. The LST analysis only includes on-site sources. However, the CalEEMod model outputs do not separate on- and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table 3.1-13, conservatively includes all on-site Project-related stationary sources and 20% of the Project-related new mobile sources, since a portion of mobile sources could include trucks idling on site and that trucks account for roughly 10% of trip generation.

Table 3.1-13 shows that the maximum daily pollutant emissions during operations would not exceed SCAQMD thresholds at the nearest sensitive receptors. Therefore, the Project would result in a **less-than-significant** impact concerning LSTs during operations.

Table 3.1-13. Localized Significance of Operational Emissions

Activity	Maximum Pounds Per Day			
	NO _x	CO	PM ₁₀	PM _{2.5}
On-Site and 20% Mobile Emissions	5.64	17.76	1.95	0.70
SCAQMD Localized Screening Threshold (5.0 acres at 25 meters)	142	1,105	2	1
Exceed SCAQMD Threshold?	No	No	No	No

Source: CalEEMod version 2022.1. Refer to Appendix B-1 for model outputs.

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

Criteria Pollutant Health Impacts

On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project's air emissions to health impacts or explain why such information could not be ascertained (*Sierra Club v. County of Fresno* [Friant Ranch, L.P.] [2018] Cal.5th, Case No. S219783).

The Friant Ranch project was a 942-acre Specific Plan that involved a commercial master planned community of approximately 2,500 dwelling units and extensive commercial supporting development. The anticipated air quality impacts resulting from this development included significant and unavoidable emissions of multiple criteria pollutants (including significant emissions of both primary O₃ precursors [NO_x and ROGs]) at levels that exceeded the daily thresholds of significance. As noted above and shown in Table 3.1-11, the Project's operational emissions are below SCAQMD's significance thresholds, resulting in a less-than-significant impact.

The SCAQMD has set its CEQA significance thresholds based on the Federal CAA, which defines a major stationary source (in extreme ozone nonattainment areas such as the SCAB) as emitting 10 tons per year. The thresholds correlate with the trigger levels for the federal New Source Review (NSR) Program and SCAQMD Rule 1303 for new or modified sources. The NSR Program⁶ was created by the Federal CAA to ensure that stationary sources of air pollution are constructed or modified in a manner that is consistent with attainment of health-based NAAQS. The NAAQS establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, projects that do not exceed the SCAQMD's LSTs and mass emissions thresholds would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts would occur.

NO_x and ROG are precursor emissions that form ozone in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources. Breathing ground-level ozone can result in health effects that include

⁶ Code of Federal Regulation (CFR) [i.e., PSD (40 CFR 52.21, 40 CFR 51.166, 40 CFR 51.165 (b)), Non-attainment NSR (40 CFR 52.24, 40 CFR 51.165, 40 CFR part 51, Appendix S).

reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily ozone concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that ozone can make asthma symptoms worse and can increase sensitivity to asthma triggers.

According to the SCAQMD AQMPs, ozone, NO_x, and ROG have been decreasing in the SCAB since 1975 and are projected to continue to decrease in the future. Although vehicle miles traveled in the SCAB continue to increase, NO_x and ROG levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_x emissions from electric utilities have also decreased due to the use of cleaner fuels and renewable energy. The 2022 AQMP demonstrates how the SCAQMD's control strategy to meet the 2015 federal ozone standard by 2037 and would lead to sufficient NO_x emission reductions (SCAQMD 2022). In addition, since NO_x emissions also lead to formation of PM_{2.5}, the NO_x reductions needed to meet the ozone standards will likewise lead to improved PM_{2.5} levels and attainment of PM_{2.5} standards.

The SCAQMD's air quality modeling demonstrates that NO_x reductions prove to be much more effective in reducing ozone levels and will also lead to significant improvement in PM_{2.5} concentrations. NO_x-emitting stationary sources regulated by the SCAQMD include Regional Clean Air Incentives Market (RECLAIM) facilities (e.g., refineries, power plants, etc.), natural gas combustion equipment (e.g., boilers, heaters, engines, burners, flares) and other combustion sources that burn wood or propane. The AQMPs identify robust NO_x reductions from new regulations on RECLAIM facilities, non-refinery flares, commercial cooking, and residential and commercial appliances. Such combustion sources are already heavily regulated with the lowest NO_x emissions levels achievable but there are opportunities to require and accelerate replacement with cleaner zero-emission alternatives, such as residential and commercial furnaces, pool heaters, and backup power equipment. The SCAQMD plans to achieve such replacements through a combination of regulations and incentives. Technology-forcing regulations can drive development and commercialization of clean technologies, with future year requirements for new or existing equipment. Incentives can then accelerate deployment and enhance public acceptability of new technologies.

As previously discussed, localized effects of on-site Project emissions on nearby sensitive receptors were found to be less than significant (refer to Table 3.1-12 and Table 3.1-13). The LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable CAAQS or NAAQS. The LSTs were developed by the SCAQMD based on the ambient concentrations of that pollutant for each SRA and distance to the nearest sensitive receptor. The ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations. Information on health impacts related to exposure to ozone and particulate matter emissions published by the U.S. EPA and CARB have been summarized above and discussed in the Regulatory Framework section. As shown above, Project-related emissions would not exceed the regional thresholds or the LSTs, and therefore would not exceed the ambient air quality standards or cause an increase in the frequency or severity of existing violations of air quality standards. Therefore,

the Project would not expose sensitive receptors to criteria pollutant levels in excess of the health-based ambient air quality standards. Impacts would be **less than significant**.

Carbon Monoxide Hotspots

An analysis of CO “hot spots” is needed to determine whether the change in the level of service of an intersection resulting from a project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, California’s CO standard is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard.

The SCAB was re-designated as attainment in 2007 and is no longer addressed in the SCAQMD’s AQMP. The 2003 AQMP is the most recent version that addresses CO concentrations. As part of the SCAQMD *CO Hotspot Analysis*, the Wilshire Boulevard/Veteran Avenue intersection, one of the most congested intersections in Southern California with an ADT volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm NAAQS. The Project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD’s *CO Hotspot Analysis*. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any Project area intersections from the 679 ADT (from a conservatively assumed 0 daily existing trips) attributable to the Project. Therefore, impacts would be **less than significant**.

Health Risk Analysis

Project construction would generate DPM emissions from the required use of off-road diesel equipment. 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.

A Health Risk Assessment (Project HRA) was conducted and is included in Appendix B-2 of this EIR. Project construction-related activities would result in DPM emissions from the exhaust of off-road, heavy-duty diesel equipment for demolition; site preparation (e.g., clearing, grading); building construction; paving; application of architectural coatings; on-road truck travel; and other miscellaneous construction activities. For construction activity, DPM is the primary toxic air contaminant of concern. On-road diesel-powered haul trucks traveling to and from a construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at a construction site poses a health risk to nearby sensitive receptors. Refer to Appendix B-2 for analysis methodology, results, and model data.

The Project's PM₁₀ exhaust construction emissions rates were calculated in grams per second based on the total annual on-site and off-site (haul and vendor trucks) construction exhaust emissions reported in CalEEMod. Construction exhaust emissions over the entire construction period were used in AERMOD, a U.S. EPA-approved dispersion model, to approximate construction DPM emissions. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources. AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Uniform Cartesian receptors were used to evaluate the locations of the maximally exposed sensitive receptors. Surface and upper air meteorological data from the Long Beach Airport Monitoring Station provided by the SCAQMD was selected as being the most representative meteorology. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the Project site. The modeling and analysis were prepared in accordance with the SCAQMD Modeling Guidance for AERMOD.

Risk levels were calculated based on the California OEHHA guidance *Risk Assessment Guidelines* document (OEHHA 2015). SCAQMD's threshold for cancer risk is 10 in 1 million and the chronic noncancer hazard index is one. Projects that do not exceed these thresholds would not result in a significant impact. Table 3.1-14 shows the unmitigated and mitigated health risk for the Project's combined construction and operations for the closest maximally exposed individual resident (MEIR) to the Project site.

Table 3.1-14. Carcinogenic Risk Assessment

Exposure Scenario	Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold?
Construction			
Resident			
Sensitive Receptors – Unmitigated: Live/Work and Multi-Family units west of Project site ¹	30.07	10	Yes
Sensitive Receptors – Mitigated: Live/Work Residences west of Project Site ^{1,2}	4.62	10	No
Student			
Sensitive Receptors – Unmitigated: Students at Gardena Early Education Center and Gardena High School southeast of the Project Site	3.26	10	No
Sensitive Receptors – Mitigated: Students at Gardena Early Education Center and Gardena High School southeast of the Project Site	0.54	10	No
Operations			
Resident			
Sensitive Receptors - Unmitigated: Live/Work and Multi-Family units west of Project site ^{1,2}	288.38	10	Yes

Table 3.1-14. Carcinogenic Risk Assessment

Exposure Scenario	Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold?
Sensitive Receptors - Mitigated: Live/Work Residences west of Project site ^{1,3}	2.09	10	No
Student			
Sensitive Receptors – Unmitigated: Students at Gardena Early Education Center and Gardena High School southeast of the Project Site	18.82	10	Yes
Sensitive Receptors – Mitigated: Students at Gardena Early Education Center and Gardena High School southeast of the Project Site	0.12	10	No
Combined (Construction + Operations)			
Resident			
Sensitive Receptors – Unmitigated: Live/Work and Multi-Family units west of Project site ¹	318.45	10	Yes
Sensitive Receptors – Mitigated: Live/Work and Multi-Family units west of Project site ^{1,2,3}	6.71	10	No
Student			
Sensitive Receptors – Unmitigated: Students at Gardena Early Education Center and Gardena High School southeast of the Project Site	22.09	10	Yes
Sensitive Receptors – Mitigated: Students at Gardena Early Education Center and Gardena High School southeast of the Project Site	0.66	10	No

Source: Refer to Appendix B-2 for modeling data.

Notes:

- ¹ The reported annual pollutant concentration is at the closest maximally exposed individual resident (MEIR) to the Project site.
- ² The “Mitigated” HRA construction scenario incorporates MM AQ-1 (Tier 4 Construction Equipment).
- ³ The “Mitigated” HRA operations scenario incorporates MM AQ-2 (Electric Cargo Handling Equipment).

The HRA determined that the combined construction and operational health risk from the Project without mitigation would be a maximum cancer risk of 318.45 in 1 million, which would exceed the SCAQMD threshold of 10 in 1 million. Therefore, implementation of mitigation measures MM-AQ-1, which requires the use of Tier 4 Final construction equipment, and MM-AQ-2, which requires the use of electric cargo handling equipment are required. With implementation of MM-AQ-1 and MM-AQ-2, the combined construction and operational health risk from the Project would be reduced to 6.71 in 1 million, which would be below the SCAQMD threshold of 10 in 1 million. Therefore, Project impacts associated with carcinogenic risk would be **less than significant with mitigation**. Chronic impacts were also evaluated in the HRA and as shown in Table 3.1-15 the highest unmitigated maximum chronic

hazard index from Project emissions would be 0.0177, which would be below the threshold of 1. The Project's non-carcinogenic unmitigated hazards would be less than significant. However, the Project would implement MM AQ-1 to mitigate carcinogenic risk during construction, as discussed above and would further reduce the chronic hazard index.

Table 3.1-15. Non-carcinogenic Chronic Hazards

Emissions Sources	Chronic Hazard
Resident	
Sensitive Receptors – Unmitigated: Live/Work and Multi-Family units west of Project ¹	0.1610
Sensitive Receptors – Mitigated: Live/Work and Multi-Family units west of Project ^{1,2}	0.0029
Student	
Sensitive Receptors – Unmitigated: Students at Gardena Early Education Center and Gardena High School southeast of the Project Site	0.0236
Sensitive Receptors – Mitigated: Students at Gardena Early Education Center and Gardena High School southeast of the Project Site	0.0005
SCAQMD Threshold	1.0
Threshold Exceeded?	No

Notes: SCAQMD = South Coast Air Quality Management District.

¹ Refer to Appendix B2 for modeling data.

² The exposure scenario shows the risk with MM-AQ-1 (Tier 4 Construction Equipment).

Threshold AQ-4: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The SCAQMD CEQA *Air Quality Handbook* 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 would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, Project operations would not result in odors that would adversely affect people.

During Project construction, some odors (not substantial pollutant concentrations) that may be detected are those typical of construction vehicles (e.g., diesel exhaust from grading and construction equipment). These odors are a temporary short-term impact that is typical of construction projects and would disperse rapidly. The Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, neither Project construction activities or operations would result in objectionable odors that would adversely affect a substantial number of people and impacts would be **less than significant**.

3.1.6 Mitigation Measures

- MM AQ-1 **Clean Construction Equipment.** Prior to issuance of grading permits, the Applicant shall prepare and submit documentation to the City of Gardena that demonstrate the following:
- All off-road diesel-powered construction equipment greater than 50 horsepower meets California Air Resources Board (CARB) Tier 4 Final off-road emissions standards or, if not commercially available, meet Tier 4 Interim off-road emission standards (as shown in CARB’s 2017 Off-Road Diesel Emission Factor Update for NO_x and PM). A copy of each unit’s Best Available Control Technology (BACT) documentation (certified tier specification or model year specification), and CARB or South Coast Air Quality Management District. operating permit (if applicable) shall be provided to the City at the time of mobilization of each applicable unit of equipment.
 - Construction equipment shall be properly maintained according to manufacturer specifications.
 - All construction equipment and delivery vehicles shall be turned off when not in use, or limit on-site idling for no more than 5 minutes in any 1 hour.
 - On-site electrical hook ups to a power grid shall be provided for electric construction tools including saws, drills, and compressors, where feasible, to reduce the need for diesel powered electric generators.
- MM AQ-2 **Electric Cargo Handling Equipment.** All outdoor cargo handling equipment (such as yard trucks, hostlers, yard goats, pallet jacks, and forklifts) shall be zero emission (i.e., powered by electricity or other alternative fuels). The warehouse building shall include the necessary charging stations for cargo handling equipment. The building manager or their designee shall be responsible for enforcing these requirements.
- MM GHG-1 **Establish On-Site Solar Power.** Prior to the issuance of a Building permit, the Project Applicant shall provide written proof to the City of Gardena Community Development Director that the total annual electricity demand from on-site operations does not exceed 2,226,107 kWh/year. On-site electrical demand exceeding 2,226,107 kWh/year shall be supplied by on-site renewable sources (e.g., solar photovoltaic panels). Further, the Project will be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every 3 years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10) require buildings to be designed to have 15% of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

3.1.7 Level of Significance After Mitigation

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

The Project would result in a **less-than-significant impact** regarding the potential to conflict with or obstruct implementation of an applicable air quality management plan in the SCAQMD.

Threshold AQ-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

The Project would result in a **less-than-significant impact** regarding cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment.

Threshold AQ-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?

Localized construction and operational emissions would be below the SCAQMD site-specific LSTs and impacts would **less than significant**.

The Project would not result in traffic volumes that would result in a CO hotspot during construction or operations. This impact would be **less than significant**.

Finally, implementation of MM-AQ-1 and MM-AQ-2 would ensure that potential cancer and chronic health risk impacts associated with Project construction and operations would be reduced to levels below the SCAQMD thresholds of significance. Therefore, the Project construction and operational health risk impacts would be **less than significant with mitigation**.

Threshold AQ-4: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The Project would result in **less-than-significant** impacts associated other emissions (such as those leading to odors) that could adversely affect a substantial number of people. No mitigation is required.

3.1.8 Cumulative Effects

As described in Section 3.1.5, implementation of the Project would result in less-than-significant impacts to air quality after mitigation.

Air pollution by nature is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and SCAQMD develops and implements plans for future attainment of ambient air quality standards. In addition to SCAQMD's efforts, CARB has comprehensive regulatory programs in place for new and existing sources of air pollution. Local policies, such as land use decisions that involve siting, zoning, and permitting actions, in conjunction with air agency efforts have the potential to greatly enhance the effectiveness of these programs by addressing cumulative impacts in local areas. Project-specific emissions associated with implementation of the Project could result in regional and localized impacts. Regional pollutants such

as O₃ and PM_{2.5} are derived from complex interactions of emissions from many sources. In contrast, localized, or near-source, pollutants such as SO₂ are mainly derived from a single source or group of sources. Cumulative air quality impacts are the effect of long-term emissions of the project plus any existing emissions at the same location, as well as the effect of long-term emissions of reasonably foreseeable similar projects, on the projected regional air quality or localized air pollution in the SCAB and surrounding areas. Accordingly, impacts can be localized or far-reaching and the geographic scope of air quality impacts varies based on the type of emission source.

Based on the cumulative nature of air pollution and the various mechanisms in place to reduce cumulative air pollutant emissions, Project-level thresholds of significance for criteria pollutants, as analyzed in Section 3.1.5, are relevant in the determination of whether the Project's individual emissions would have a cumulatively significant impact on air quality. The potential for the Project to result in a cumulatively considerable air quality impact is evaluated in Section 3.1.5. After mitigation, the Project is not expected to exceed SCAQMD's mass daily emission-based thresholds during operation, and the Project would not conflict with SCAQMD's 2022 AQMP. As such, the Project's potential to result in a cumulatively considerable net increase of criteria air pollutants for which the region is in nonattainment under an applicable federal or state ambient air quality standard would be less than significant with the implementation of mitigation measures. In addition, during construction and operation and with the implementation of MM-AQ-1 and MM-AQ-2, there would be a less-than-significant cumulative impact related to exposure of sensitive receptors to substantial pollutant concentrations from TACs. Therefore, the Project would result in a less-than-significant cumulatively considerable impact regarding exposure of sensitive receptors to substantial pollutant concentrations. The Project does not include any odorous land uses as identified by the SCAQMD, therefore it would not contribute to a cumulatively considerable impact in emissions such as odors; the cumulative impact would be **less than significant**.

3.1.9 References

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3.2 Cultural Resources

This section describes the existing cultural resources conditions of the 1450 Artesia Specific Plan Project (Project or proposed Project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Project.

The following analysis is based, in part, on the following sources:

- Cultural Resources Assessment Report for the 1450 Artesia Specific Plan Project, prepared by BCR Consulting LLC in September 2023 (Appendix C)
- Geotechnical Exploration Report for 1440-1462 Artesia Boulevard, prepared by Carl Kim Geotechnical Inc. in February 2022 (Appendix E)

3.2.1 Existing Conditions

This section describes the existing conditions on the Project site, including its environmental setting and the results of the California Historical Resources Information System (CHRIS) and Native American Heritage Commission (NAHC) Sacred Lands File (SLF) records searches, other background research, and pedestrian survey.

3.2.1.1 Environmental Setting

The Project is situated within the northernmost Peninsular Ranges Geomorphic Province (Norris and Webb 1990; CGS 2002). This geomorphic province is characterized by northwest trending mountain ranges and valleys that extend over 900 miles from the tip of the Baja Peninsula to the Transverse Ranges (i.e., the San Bernardino and San Gabriel Mountains in Southern California). Regionally, the Peninsular Ranges are bounded to the east by the Colorado Desert and the west by the continental shelf and offshore islands (Santa Catalina, Santa Barbara, San Nicholas, and San Clemente) (Norris and Webb 1990; CGS 2002). Regional mountain ranges in the Peninsular Ranges Geomorphic Province include the Santa Ana, San Jacinto, and Santa Rosa Mountains. Geologically, these mountains are dominated by Mesozoic, plutonic igneous and metamorphic rocks that are part of the Peninsular Ranges Batholith (Southern California Batholith) (Jahns 1954).

More specifically, the Project site is situated within the physiographic area known as the Los Angeles Basin. It is characterized as a transverse-oriented lowland basin and coastal plain. The basin originated as a deep marine trough during the Pliocene (7–2 million years ago) that eventually filled with shallow water fossil bearing sediments. By the beginning of the Pleistocene (after 2 million years ago) uplifting created the series of plains and mesas along the coast that now characterize the area (Lambert 1994; Mendenhall 1905; Woodford et al. 1954). A review of the United States Geological Society (USGS) mineral resources (USGS 2023) online spatial data for geology indicates that the Project site consists of one geological unit. The entirety (100%) of the Project site is underlain by Older Quaternary alluvium and marine deposits from the Pleistocene epoch. Late Pleistocene-era alluvial formations do have the potential to support the presence of buried archaeological resources. These soils are associated with the period of prehistoric human use, as well as represent ongoing processes of development that have potential to preserve cultural material in context, depending on area-specific topographical setting.

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2023a), soils within the northwestern portion of the Project site, which accounts for approximately 25% of the site, is dominated by Urban Land (565%) with minor components, including Aquic Xerothents (20%), Cropley (20%), and Grommet (5%). The remaining 75% of the Project site to the southeast, is dominated by Urban Land (50%) with minor components, including Thums (20%), Windfetch (15%), Sepulveda (10%), and Typic Argiaquolis (5%). The dominant soil series within the proposed Project site, Urban Land, refers to soils in areas of high population density in a largely built environment and can include human-transported or human-altered materials, minimally altered materials, or intact native soils (USDA 2019). The available official USDA soil descriptions for soil types identified within the Project site are provided below.

Cropley (USDA 2023b): The Cropley series consists of 0% to 15% slopes, characterized as very deep, moderately well and well drained soils that formed in alluvium from mixed rock sources. Cropley soils are on alluvial fans, floodplains and in small basins.

Grommet (USDA 2023c): The Grommet series consists of 0% to 12% slopes, characterized as well drained soils that formed in alluvium from mixed sedimentary sources. Grommet soils are on alluvial fans and inset fans.

Thums (USDA 2023d): The Thums series consists of 0% to 12% slopes, characterized as well drained soils that formed in uplifted alluvium from mixed rock sources and have a thin mantle of human transported material at the surface.

Windfetch (USDA 2023e): The Windfetch series consists of 0% to 12% slopes, characterized as well drained soils that formed in a thin, discontinuous layer of human transport materials (or Urban Land soils) overlying uplifted alluvium from marine and other mixed rock sources.

A review of previous and current subsurface geotechnical investigations performed within the Project site revealed that the site is generally underlain by varying amounts of undocumented fill and older alluvium. A review of the logs for the two subsurface geotechnical investigations completed in December 2021 indicates that asphalt and base overlies fill soils and these materials extend from surface to between 2 to 5 feet below current grade within the Project site and is underlain by alluvial soils that extend to the maximum depths explored between 50 and 65 feet below the current grade (Appendix E). The undocumented fill soils are described as silty sand and sandy silts with potentially isolated areas of buried debris consisting of bricks, asphalt, and concrete rubble that are associated with prior development and land uses (Appendix E).

Based on the recommendations of the geotechnical report prepared for the Project site, the depths of ground disturbance for the proposed Project site is between 5 to 11 feet below the existing ground surface for Project site preparation, including the removal of all undocumented fill, underground obstructions, existing vegetation and debris on site and includes construction activities associated with utilities and foundation. Shoring activities are assumed not to exceed 20 feet below existing grade. The proposed new structure would only overlap with the remediated Haack Rework area. The remediation will be completed prior to the start of current proposed Project construction activities. The portion of the Project that overlaps the Haack and Cooper sumps areas would be paved and utilized exclusively as a parking lot, which would be located atop ARC's engineered cap as part of the DTSC-approved Final RAP.

3.2.1.2 Background Research

For a discussion of the historical land uses of the Project site, please see Section 2.3, Environmental Setting, in Chapter 2, Project Description, of this EIR.

CHRIS Records Search

On May 19, 2022, a CHRIS records search was conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. This archival research reviewed the status of all recorded historic-period and prehistoric cultural resources, and survey and excavation reports completed within a 0.5-mile radius of the Project site. Additional resources reviewed included the National Register, the California Register, and documents and inventories published by the California Office of Historic Preservation. These include the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

The SCCIC results revealed that 12 previous cultural resources studies have been conducted within the records search area. None of the previous studies has address the Project site. SCCIC records also revealed that four cultural resources have been previously recorded within 0.5 miles of the Project site. These resources include one prehistoric site and three historic built environment resources; none these resources were identified within the Project site. A complete records search bibliography is provided in Appendix A of Appendix C of this EIR.

Native American Coordination

Sacred Lands File Search

A search of the NAHC's SLF database was completed on May 18, 2022 with negative results (see Appendix C of Appendix C). It should be noted that Sacred Land Files maintained by the NAHC represent a curation of "sacred lands" or Tribal Cultural Resources (TCRs) provided by tribal entities and Native American representatives. For various reasons, tribal entities and Native American representatives do not always report sacred lands or TCRs to the NAHC. As such, the NAHC's SLF is not a comprehensive list, and searches of the SLF must be considered in concert with other research and not used as a sole source of information regarding the presence of TCRs or cultural resources.

3.2.1.3 Survey Methods and Results

An intensive-level cultural resources field survey of the Project site was conducted on June 21, September 9, and September 19, 2022. Only 3.5 acres (53.8% of the Project site) was accessible during the survey. The inaccessible eastern portion of the Project site once served as a petroleum dump site. The survey was conducted by walking parallel transects spaced approximately 15 meters (approximately 50 feet) apart across the accessible portions of the Project site. No prehistoric or historic-period archaeological resources were identified within accessible portions of the Project as a result of the surveys performed. However, four buildings that are historic in age were identified. These included the following:

- **1440 Artesia Boulevard.** The subject property was constructed in 1940 and historic aerials confirm that it was in place before 1952. The original owners and occupants are unknown.

From 1962-1994, the subject property was occupied by Sabina J. Knight. At age 16, Sabina married 20-year-old Kenneth K. Knight in 1950, and in 1966 she worked as a waitress at the Smith Bros. Indian Village (U.S. Public Records Index 1950–1993; U.S. Marriage Index 1949–1959; Los Angeles Times 20 January 1966). Research did not reveal additional details. This house was demolished in May 2023 as it constituted a public nuisance.

- **1450 Artesia Boulevard.** The subject property was formerly the site of a brick manufacturing plant during the 1920s and 1930s, and the area immediately to the east was used as a refinery dump from the 1930s to the 1950s. All traces of brick manufacturing had been removed and the buildings at 1450 Artesia Boulevard were constructed in 1950. Historic aerials confirm Buildings A, B, and C were present by 1952. By the late 1950s dump operator William Russell Ward owned the subject property. Ward operated several dumps throughout the Los Angeles area, and newspaper research showed that Mr. Ward was implicated in overcharging for dumping fees along with Raymond Charles Christl, a known affiliate of Mickey Cohen. By the 1990s, Clarence Charles Haack and family owned the subject property. The refinery dump remains in place at the eastern end of the property and is commonly referred to as the Gardena Sumps. The northwestern portion of the Project site currently contains three warehouses (8,080 square feet, 825 square feet, and 3,159 square feet) and a variety of trailer-type storage structures that house several small businesses, including a U-Haul rental agency, a metal fabricating shop, a sandblasting and painting company and an auto body repair shop.
- **1462 Artesia Boulevard.** The subject property is the site of a demolished residence that occupied 550 square feet and was constructed in 1923, according to assessor records. It was also demolished in May 2023 because it was a public nuisance. Since only a small portion of the house remains in place, it does not retain integrity and does warrant in-depth research.
- **1472 Artesia Boulevard.** Los Angeles County Assessor records indicate a build-date of 1923, although historic aerial photos show that the property was vacant in 1952, and that the subject residence was constructed by 1963. Alterations include a stuccoed rear addition and vinyl windows, added at an unknown date. Research has indicated that the property was occupied by a business known as Ron’s Trucking in the 1960s. It is currently occupied, although it has been acquired by the Applicant and will be demolished as part of the Project.

3.2.2 Relevant Plans, Policies, and Ordinances

State

The California Register of Historical Resources

In California, the term “historical resource” includes, but is not limited to, “any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California” (PRC Section 5020.1[j]). In 1992, the California legislature established the CRHR “to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below.

A resource is considered historically significant if it (i) retains “substantial integrity,” and (ii) meets at least one of the following criteria (PRC Section 5024.1[c][1–4]):

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.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. Prehistoric resources are those that pre-date written records, while historic resources reflect written records or recorded events of the past. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

The following CEQA statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and TCRs:

- PRC Section 21083.2(g) defines “unique archaeological resource.”
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) define “historical resources.” In addition, CEQA Guidelines Section 15064.5(b) defines the phrase “substantial adverse change in the significance of an historical resource”; it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines “tribal cultural resources.”
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with an archaeological site.

Under CEQA, a project may have a significant impact on the environment if it may cause “a substantial adverse change in the significance of an historical resource” (PRC Section 21084.1; 14 CCR 15064.5[b]). If a site is listed or eligible for listing in the CRHR, or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1[q]), it is a “historical resource” and is presumed to be historically or culturally significant for the purposes of CEQA (PRC Section 21084.1; 14 CCR 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; 14 CCR 15064.5[a]).

A “substantial adverse change in the significance of an historical resource” reflecting a significant impact under CEQA 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” (14 CCR 15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does any of the following:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register [CRHR] as determined by a lead agency for purposes of CEQA (14 CCR 15064.5[b][2]).

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any “historical resources,” then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource’s historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a]–[c]).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC Section 21083.2[g]):

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts on non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2[a]; 14 CCR 15064.5[c][4]). However, if a non-unique archaeological resource qualifies as a TCR (PRC Sections 21074[c] and 21083.2[h]), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98.

Regarding paleontological resources, CEQA Guidelines require that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to paleontological resources. Paleontological resources, which are limited, nonrenewable resources of scientific, cultural, and educational value, are recognized as part of the environment under these state guidelines. This study satisfies project requirements in accordance with CEQA (13 PRC, 21000 et seq.).

Paleontological resources are explicitly afforded protection by CEQA, specifically in Section VII(f) of CEQA Guidelines Appendix G, the “Environmental Checklist Form,” which addresses the potential for adverse impacts to “unique paleontological resource[s] or site[s] or ... unique geological feature[s].” This provision covers fossils of signal importance – remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group – as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth.

CEQA Guidelines Section 15064.5(b)(2)

Pursuant to these sections, CEQA first evaluates whether a project site contains any “historical resources,” and if so, then assesses whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource’s historical significance is materially impaired.

When a project significantly affects a unique archaeological resource, CEQA imposes special mitigation requirements. Specifically, “[i]f it can be demonstrated that a project will cause damage to a unique archeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:”

1. “Planning construction to avoid archeological sites.”
2. “Deeding archeological sites into permanent conservation easements.”
3. “Capping or covering archeological sites with a layer of soil before building on the sites.”

California Public Resources Code Section 21083.2(b)(1)-(4)

If these “preservation in place” options are not feasible, mitigation may be accomplished through data recovery (PRC Section 21083.2[d]; 14 CCR 15126.4[b][3][C]). PRC Section 21083.2(d) states that “[e]xcavation as mitigation shall be restricted to those parts of the unique archeological resource that would be damaged or destroyed by the project. Excavation as mitigation shall not be required for a unique archeological resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report.”

These same requirements are set forth in slightly greater detail in CEQA Guidelines Section 15126.4(b)(3), as follows:

1. Preservation in place is the preferred manner of mitigating impacts to archeological sites. Preservation in place maintains the relationship between artifacts and the archeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
2. Preservation in place may be accomplished by, but is not limited to, the following:
 - a. Planning construction to avoid archeological sites;
 - b. Incorporation of sites within parks, greenspace, or other open space;
 - c. Covering the archeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site [; and]
 - d. Deeding the site into a permanent conservation easement.
3. 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.
4. Note that, when conducting data recovery, “[i]f an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation.” However, “[d]ata 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 archeological or historic resource, provided that determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center” (14 CCR 15126.4[b][3][D]). “Planning parks, greenspace, or other open space to incorporate archeological sites.”

California Health and Safety Code Section 7050.5

California law protects human remains, Native American burials, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County Coroner has examined the remains and determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning

investigation of 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 Section 5097.98 of the PRC (PRC Section 7050.5[b]). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (PRC Section 7050.5[c]). The NAHC will notify the “most likely descendant” (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the MLD by NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Local

City of Gardena General Plan 2006

The City of Gardena General Plan contains the following goals and policies that address cultural resources and are applicable to the Project (City of Gardena 2006).

Conservation Plan: Cultural Resources

CN Goal 5. Protect the City’s cultural resources.

Policy CN 5.1. Maintain an inventory of the City’s historical resources, including a survey of buildings of architectural, cultural or historical significance.

Policy CN 5.2. Provide provisions in the Municipal Code to protect historical and cultural resources.

Policy CN 5.3. Protect and preserve cultural resources of the Gabrielino Native American Tribe found or uncovered during construction.

3.2.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to cultural resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to cultural resources would occur if the Project would:

1. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
3. Disturb any human remains, including those interred outside of formal cemeteries?

Based on the results of the Initial Study prepared for the Project (Appendix A), all three thresholds are evaluated in this section of the Draft EIR:

CUL-1 Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

CUL-2 Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

CUL-3 Would the Project disturb any human remains, including those interred outside of formal cemeteries?

3.2.4 Impact Analysis

Threshold CUL-1. Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

A Cultural Resources Assessment was prepared for the proposed Project and is included as Appendix C of this EIR. As discussed therein, four properties with historic period buildings were identified. CEQA calls for the evaluation and recordation of historic and archaeological resources. The criteria for determining the significance of impacts to cultural resources are based on Section 15064.5 of the CEQA Guidelines and Guidelines for the Nomination of Properties to the California Register. Properties eligible for listing in the California Register and subject to review under CEQA are those meeting the criteria for listing in the California Register, or designation under a local ordinance.

Based on the results of the Cultural Resources Assessment, none of the four properties with historic period buildings are recommended eligible for the California Register of Historic Places or as a City Landmark. No other cultural resources of any kind have been identified within the Project site. As such, impacts to historical resources would be **less than significant**.

Threshold CUL-2. Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

A CHRIS database records search, NAHC SLF database search, background research, including a review of a geotechnical report, and archaeological pedestrian surveys were conducted in support of the proposed Project. Historical land use of the Project site included the Gardena Sumps in the northeastern portion of the Project site, which was used as a sludge disposal site through the 1950s. A review of historical topographic maps and aerial photographs through the Nationwide Environmental Title Research, LLC (NETR) depicts the Dominguez Channel as intersecting and overlapping the Project site as early as 1896. In the early 1950s, the Dominguez Channel is depicted as undergoing channelization. By 1963, the segment of the Dominguez Channel adjacent to the Project site is depicted as fully constructed and relocated from its historical location to the southern end of the Project site (NETR 2023). The CHRIS records search identified four previously recorded cultural resources within the 0.5-mile records search area. No record of previously recorded historic-period or prehistoric archaeological resources are on file with the SCCIC as being present within the Project site. A review of the CHRIS records search results also indicates that 12 cultural resource studies have been conducted within the records search area. None of the

previous studies has addressed the Project site. A search of the NAHC's SLF database yielded negative results for any reported Native American cultural resources within proximity to or within the Project site. Additionally, no archaeological resources were observed within the Project site as a result of the pedestrian survey.

A review of the available geotechnical report prepared for the Project site determined that asphalt and base overlying fill soils were encountered from surface to between 2 to 5 feet below current grade within the two exploratory boring locations to the northeast and south of the proposed self-storage building and is underlain by alluvial soils that extend to the maximum depths explored between 50 and 65 feet below the current grade. Based on the recommendations of the geotechnical report prepared for the Project site, the depth of ground disturbance for the proposed Project site is between 5 to 11 feet below the existing ground surface for site preparation, including the removal of all undocumented fill, underground obstructions, existing vegetation and debris on site and includes construction activities associated with utilities and foundation. Shoring activities are assumed not to exceed 15 feet below existing grade. The proposed new structure would only overlap with the remediated Haack Rework area. The remediation will be completed prior to the start of current proposed Project construction activities. The portion of the Project that overlaps the Haack and Cooper sumps areas would be paved and utilized exclusively as a parking lot, which would be located atop ARC's engineered cap as part of the DTSC-approved Final RAP.

In consideration of all these factors, the potential to encounter intact deposits containing archaeological resources within soils from the current grade and between 2 and 5 feet below existing ground surface is unlikely. However, the potential for intact cultural deposits to exist within native soils (below between 2 and 5 feet below existing ground surface) to the depths of proposed ground disturbance (between 5 to 11 feet, with maximum depth of an assumed 15 feet below grade for shoring activities), is unknown. Given that the Dominguez Creek historically flowed through the Project site prior to channelization, there is a potential for the proposed Project site to be buried in alluvial and flood deposits. For these reasons, the Project site should be treated as potentially sensitive for archaeological resources. In the event that unanticipated archaeological resources are encountered during Project implementation, impacts to these resources would be potentially significant.

Thus, mitigation is required to address impacts related to the inadvertent discovery of archaeological resources during construction, as outlined in MM-CUL-1, MM-CUL-2, and MM-CUL-3. Mitigation measure MM-CUL-1 requires that all Project construction personnel participate in a Workers Environmental Awareness Program training for the proper identification and treatment of inadvertent discoveries. Mitigation measure MM-CUL-2 requires the retention of an on-call qualified archaeologist to respond to and address inadvertent discoveries, as well as survey the Project site after the removal of fill soils to ensure no cultural deposits underly the fill layer. Mitigation measure MM-CUL-3 requires construction work occurring within 100 feet of a cultural resource discovery be immediately halted until the qualified archaeologist, meeting the Secretary of Interior's Professional Qualification Standards for Archaeology, can assess and evaluate the discovery pursuant to CEQA. Additionally, MM-CUL-3 requires the inadvertent discovery clause be included on all construction plans. With implementation of MM-CUL-1, MM-CUL-2, and MM-CUL-3, potentially significant impacts to unknown archaeological resources would be reduced to **less than significant with mitigation** incorporated.

Threshold CUL-3 Would the Project disturb any human remains, including those interred outside of formal cemeteries?

No prehistoric or historic period burials, within or outside of formal cemeteries, were identified within the Project site as a result of the CHRIS records search or pedestrian survey. In the event that human remains are inadvertently encountered during ground disturbing activities, they would be treated consistent with state and local regulations including California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. No further excavation or disturbance of the Project site or off-site improvement areas or any nearby (no less than 100 feet) area reasonably suspected to overlie adjacent remains can occur until the County Coroner has determined if the remains are potentially human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she is required to notify the NAHC that shall notify those persons believed to be the most likely descendant. The most likely descendant shall determine, in consultation with the property owner, the disposition of the human remains. Compliance with these regulations would ensure that impacts to human remains resulting from the Project would be **less than significant**.

3.2.5 Mitigation Measures

- MM-CUL-1 **Workers Environmental Awareness Program.** Prior to the start of construction activities, all construction personnel and monitors shall be trained regarding identification and treatment protocol for inadvertent discoveries of cultural resources (archaeological and tribal) and human remains. A basic presentation and handout or pamphlet shall be prepared in order to ensure proper identification and treatment of inadvertent discoveries of cultural resources and human remains. The purpose of the Workers Environmental Awareness Program (WEAP) training is to provide specific details on the kinds of materials that may be identified during ground disturbing activities and explain the importance of and legal basis for the protection of human remains and significant cultural resources. Each worker shall also be trained in the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground disturbing activities. These procedures include but are not limited to work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitoring staff.
- MM-CUL-2 **Retention of an On-Call Qualified Archaeologist.** A qualified archaeologist shall be retained and on-call to respond and address any inadvertent discoveries identified Project implementation. Additionally, in consideration of the potential to encounter intact cultural deposits beneath fill soils, the qualified archaeologist shall survey the proposed Project site once fill soils have been removed to ensure no cultural deposits underly the fill layer. If is determined, based on the aforementioned survey, that cultural resources are present or may be present and may be impacted during Project construction, monitoring may be warranted. Additionally, any identified cultural resources shall be assessed and evaluated pursuant to CEQA. If it is determined that monitoring is warranted, a qualified archaeological principal investigator, meeting the

Secretary of the Interior's Professional Qualification Standards, shall oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor will be responsible for maintaining daily monitoring logs.

MM-CUL-3 Inadvertent Discovery Clause. In the event that potential archaeological resources (sites, features, or artifacts) are exposed during ground disturbing, all construction work occurring not less than 100 feet of the find shall immediately stop and the qualified archaeologist that has been retained on call must be notified immediately to assess the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the CEQA, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work (e.g., preparation of an archaeological treatment plan, testing, data recovery, or monitoring) may be warranted if the resource cannot be feasibly avoided. If the discovery is Native American in nature, consultation with and/or monitoring by a tribal representative may be necessary.

3.2.6 Level of Significance After Mitigation

Threshold CUL-1: Would the Project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

Impacts would be **less than significant**; as such, no mitigation is required.

Threshold CUL-2: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

The Project would result in potentially significant impacts with regard to a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. With incorporation of **MM-CUL-1** through **MM-CUL-3**, impacts associated with archaeological resources would be **less than significant with mitigation incorporated**.

Threshold CUL-3: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

The Project would result in potentially significant impacts associated with the disturbance of human remains, including those interred outside of formal cemeteries. With compliance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code, impacts associated with human remains would be **less than significant**.

3.2.7 Cumulative Effects

Potential cumulative impacts to cultural and historical resources would result from projects that combine to create an environment where cultural and historical resources are vulnerable to destruction by demolition or alteration, earthmoving equipment, looting by the public, and natural causes such as weathering and erosion. The majority of impacts to cultural and historical resources are site-specific and

are therefore generally mitigated on a project-by-project basis. Cumulative projects would be required to assess impacts to cultural resources. Additionally, as needed, projects would incorporate individual mitigation for site-specific cultural resources and conditions present for each individual project site. Furthermore, the Project does not propose construction (including grading/excavation) or design features that could directly or indirectly contribute to an increase in a cumulative impact to known cultural and historical resources, as the mitigation measures provided in analysis conducted for this Project ensures any significant cultural resources uncovered during Project implementation would be properly identified, evaluated, and treated by qualified archaeologist. Therefore, the Project, in combination with the past, present, and reasonably foreseeable future projects in the Project vicinity, would result in less-than-significant cumulative impacts to cultural and historical resources, and no further mitigation measures are required. Moreover, impacts to cultural resources would be avoided and/or mitigated with implementation of **MM-CUL-1** through **MM-CUL-3**. Therefore, the Project's contribution to cumulative impacts would not be cumulatively considerable. As such, cumulative impacts on cultural resources would be **less than significant**.

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3.3 Energy

This section describes the existing energy conditions of the 1450 Artesia Specific Plan Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures (if any) related to implementation of the proposed Project. Information contained in this section is based on California Emissions Estimator Model (CalEEMod), Version 2022.1, to estimate the Project's energy consumption from both construction and operations. For the relevant data, refer to the following appendix:

- **Appendix D**, Energy Assessment, dated June 2024

3.3.1 Existing Conditions

3.3.1.1 Electricity and Natural Gas Services

Southern California Edison (SCE) provides electrical services to the City through state-regulated public utility contracts. Over the past 15 years, electricity generation in California has undergone a transition. Historically, California has relied heavily on oil- and gas-fired plants to generate electricity. Spurred by regulatory measures and tax incentives, California's electrical system has become more reliant on renewable energy sources; including cogeneration, wind energy, solar energy, geothermal energy, biomass conversion, transformation plants, and small hydroelectric plants. Unlike petroleum production, electricity generation is not usually tied to the location of the fuel source and can be delivered great distances via the electrical grid. The generating capacity of a unit of electricity is expressed in megawatts (MW). Net generation refers to the gross amount of energy produced by a unit, minus the amount of energy the unit consumes. Generation is typically measured in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh).

Southern California Gas Company provides natural gas services within the City. Natural gas is a hydrocarbon fuel found in reservoirs beneath the earth's surface and is composed primarily of methane (CH₄). It is used for space and water heating, process heating and electricity generation, and as transportation fuel. Use of natural gas to generate electricity is expected to increase in coming years because it is a relatively clean alternative to other fossil fuels (e.g., oil and coal). In California and throughout the western United States, many new electrical generation plants fired by natural gas are being brought online. Thus, there is great interest in importing liquefied natural gas from other parts of the world. California's natural gas-fired electric generation increased by 2% in 2021, accounting for 50% of in-state generation (CEC 2021).

The City's ongoing development review process includes a review and comment opportunity for privately owned utility companies and to provide input on all development proposals. The input facilitates a detailed review of projects by service purveyors to assess the potential demands for utility services on a project-by-project basis. The ability of utility providers to provide services concurrently with each project is evaluated during the development review process. Utility companies are bound by contract to update energy systems to meet any additional demand.

3.3.1.2 Energy Usage

Energy usage is typically quantified using the British Thermal Unit (BTU). Total energy usage in California was 7,202.6 trillion BTUs in 2021 (the most recent year for which this specific data is available) (EIA 2021). Of California's total energy usage, the breakdown by sector is 37.8% transportation, 23.2% industrial, 19.0% commercial, and 20.0% residential (EIA 2022). Electricity and natural gas in California are generally consumed by stationary users such as residences, commercial, and industrial facilities, whereas petroleum consumption is generally accounted for by transportation-related energy use. In 2021, taxable gasoline sales (including aviation gasoline) in California accounted for 13,919,678,835 gallons of gasoline (CDTFA 2022).

The electricity consumption attributable to Los Angeles County from 2011 to 2021 is shown in Table 3.3-1. As indicated in Table 3.3-1, electricity consumption in Los Angeles County increased steadily between 2011 and 2014 and relatively decreased between 2015 and 2021.

Table 3.3-1. Electricity Consumption Los Angeles County 2011-2021

Year	Electricity Consumption (in millions of kilowatt hours)
2011	68,180
2012	69,248
2013	68,342
2014	69,924
2015	69,503
2016	69,390
2017	68,632
2018	67,887
2019	66,805
2020	65,650
2021	65,375

Source: CEC 2022a.

The natural gas consumption attributable to Los Angeles County from 2010 to 2021 is shown in Table 3.3-2. Similar to electricity consumption, natural gas consumption in Los Angeles County relatively decreased between 2011 and 2015 and increased between 2016 and 2019 with a reduction between 2020 and 2021.

Table 3.3-2. Natural Gas Consumption in Los Angeles County 2011-2021

Year	Natural Gas Consumption (in millions of therms)
2011	3,055
2012	2,985
2013	3,065
2014	2,794

Table 3.3-2. Natural Gas Consumption in Los Angeles County 2011-2021

Year	Natural Gas Consumption (in millions of therms)
2015	2,761
2016	2,878
2017	2,956
2018	2,922
2019	3,048
2020	2,937
2021	2,881

Source: CEC 2022b.

Automotive fuel consumption in Los Angeles County from 2011 to 2021 is shown in Table 3.3-3. As shown in Table 3.3-3, on-road automotive fuel consumption in Los Angeles County relatively increased from 2011 to 2017 and decreased between 2018 and 2020 with a slight increase in 2021. Heavy-duty vehicle fuel consumption increased between 2012 and 2017 and decreased between 2018 and 2020 with an increase in 2021 and 2022.

Table 3.3-3. Automotive Fuel Consumption in Los Angeles County 2011-2022

Year	On-Road Automotive Fuel Consumption (gallons)	Heavy-Duty Vehicle/Diesel Fuel Consumption (Construction Equipment) (gallons)
2011	3,745,485,930	434,920,563
2012	3,714,743,617	430,477,995
2013	3,720,160,331	453,247,552
2014	3,754,124,477	457,345,104
2015	3,864,098,889	462,749,587
2016	3,990,292,164	489,895,770
2017	3,961,448,725	506,904,226
2018	3,914,668,171	494,484,395
2019	3,844,847,561	492,605,543
2020	3,381,588,164	491,579,947
2021	3,816,162,983	507,214,212
2022	3,774,778,086	526,229,424

Source: CARB 2021.

3.3.2 Relevant Plans, Policies, and Ordinances

The following is a description of federal, state, and local environmental laws and policies related to energy consumption that are relevant to the proposed Project.

Federal

Federal Energy Policy and Conservation Act and CAFE Standards

In 1975, Congress enacted the federal Energy Policy and Conservation Act, which established the first fuel economy standards, known as the Corporate Average Fuel Economy (CAFE) standards, for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration (NHTSA) is responsible for establishing additional vehicle standards. In 2012, new CAFE standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. The act includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The act requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in the act. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. The Energy Policy Act also requires states to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased CAFE standards for motor vehicles, the EISA facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.
- Requiring approximately 25% greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200% greater efficiency for light bulbs, or similar energy savings, by 2020.
- While superseded by the U.S. Environmental Protection Agency (EPA) and NHTSA actions described previously, establishing miles per gallon targets for cars and light trucks and directing the NHTSA to establish a fuel economy program for medium-and heavy-duty trucks and create a separate fuel economy standard for trucks.

This federal legislation requires ever-increasing levels of renewable fuels (the RFS) to replace petroleum (EPA 2024). EPA is responsible for developing and implementing regulations to facilitate that transportation fuel sold in the United States contains at least a minimum volume of renewable fuel.

The RFS program was created under the Energy Policy Act and established the first renewable fuel volume mandate in the United States. As required under the Energy Policy Act, the original RFS program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several ways that laid the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as “RFS2” and includes the following:

- The EISA expanded the RFS program to include diesel, in addition to gasoline.
- The EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- The EISA established new categories of renewable fuel and set separate volume requirements for each one.
- The EISA required EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green (environmentally beneficial) jobs.

Intermodal Surface Transportation Efficiency Act of 1991

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 promoted the development of intermodal transportation systems to maximize mobility and address national and local interests in air quality and energy. ISTEA contained factors for metropolitan planning organizations to address in developing transportation plans and programs, including some energy - related factors. To meet the new ISTEA requirements, metropolitan planning organizations adopted policies defining the social, economic, energy, and environmental values guiding transportation decisions.

Transportation Equity Act for the 21st Century

The Transportation Equity Act for the 21st Century was signed into law in 1998 and builds on the initiatives established in the ISTEA legislation (previously discussed). The Transportation Equity Act authorizes highway, highway safety, transit, and other efficient surface transportation programs. The act continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of transportation decisions. The Transportation Equity Act also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of intelligent transportation systems to help improve operations and management of transportation systems and vehicle safety.

State

Warren-Alquist Act

The California legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act created the California Energy Commission (CEC). The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- The act directed the CEC to formulate and adopt the nation's first energy conservation standards for buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

Energy Conservation

In 1975, largely in response to the oil crisis of the 1970s, the California State legislature adopted Assembly Bill 1575 (AB 1575), which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct state responses to energy emergencies, and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require Environmental Impact Reports (EIRs) to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project.

Thereafter, the State Resources Agency created Appendix F, Energy Conservation, in the California Environmental Quality Act Guidelines (CEQA Guidelines). CEQA Guidelines Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. In addition, the California Natural Resources Agency finalized updates to the CEQA Guidelines in December 2018. New CEQA Guidelines Section 15126.2(b) treats “wasteful, inefficient, or unnecessary” energy consumption as a significant environmental impact. As a result, energy thresholds have been incorporated into Appendix G of the CEQA Guidelines. This section has been prepared to assess energy impacts in accordance with Appendix G of the CEQA Guidelines.

State of California Energy Action Plan

CEC and CPUC approved the first State of California Energy Action Plan in 2003. The Energy Action Plan established shared goals and specific actions to support that adequate, reliable, and reasonably priced electrical power and natural gas supplies are provided, and identified policies, strategies, and actions that are cost effective and environmentally sound for California's consumers and taxpayers. In 2005, CEC and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the preceding 2 years.

At the beginning of 2008, CEC and CPUC determined that it was not necessary or productive to prepare a new Energy Action Plan. This determination was based, in part, on a finding that the state's

energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed in “Assembly Bill 32 and Senate Bill 32”). Rather than produce a new Energy Action Plan, CEC and CPUC prepared an update that examines the state’s ongoing actions in the context of global climate change.

Assembly Bill 1007 (2005)

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California’s goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

California’s Energy Efficiency Standards for Residential and Non-Residential Buildings (Title 24)

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission [CEC]) in June 1977 and are updated every 3 years (Title 24, Part 6, of the California Code of Regulations). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The current Title 24, Part 6 standards referred to as the 2022 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2023.

The 2022 Standards improve upon the 2019 Standards. Under the 2022 Title 24 standards, newly constructed residential and commercial buildings encourage electric heat pump technology for space and water heating, electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options, expand solar PV system and battery storage standards, and strengthen ventilation standards to improve indoor air quality.

Title 24 also includes Part 11, California Green Building Standards Code (CALGreen). CALGreen establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The 2022 CALGreen standards are the current applicable standards.

California Public Utilities Commission Energy Efficiency Strategic Plan

The California Public Utilities Commission (CPUC) prepared an Energy Efficiency Strategic Plan in 2011 with the goal of promoting energy efficiency and a reduction in greenhouse gases (CPUC 2011). Assembly Bill 1109, adopted in 2007, also serves as a framework for lighting efficiency. This bill requires the State Energy Resources Conservation and Development Commission to adopt minimum energy efficiency standards as a means to reduce average statewide electrical energy consumption by not less than 50% from the 2007 levels for indoor residential lighting and not less than 25% from the 2007 levels for indoor commercial and outdoor lighting by 2018. According to the Energy Efficiency Strategic Plan, lighting

comprises approximately one-fourth of California's electricity use while non-residential sector exterior lighting (parking lot, area, walkway, and security lighting) usage comprises 1.4% of California's total electricity use, much of which occurs during limited occupancy periods.

Renewable Portfolio Standard

In 2002, California established its Renewable Portfolio Standard program with the goal of increasing the annual percentage of renewable energy in the state's electricity mix by the equivalent of at least 1% of sales, with an aggregate total of 20% by 2017. The California Public Utilities Commission subsequently accelerated that goal to 2010 for retail sellers of electricity (Public Utilities Code Section 399.15[b][1]). Then-Governor Schwarzenegger signed Executive Order S-14-08 in 2008, increasing the target to 33% renewable energy by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs the California Air Resources Board (CARB) under its AB 32 authority to enact regulations to help the state meet its Renewable Portfolio Standard goal of 33% renewable energy by 2020. In September 2010, CARB adopted its Renewable Electricity Standard regulations, which require all of the state's load-serving entities to meet this target. In October 2015, then-Governor Brown signed into legislation Senate Bill 350, which requires retail sellers and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030. Signed in 2018, SB 100 revised the goal of the program to achieve the 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100% carbon-free electricity target.

Local

City of Gardena Climate Action Plan

The 2017 City of Gardena Climate Action Plan (Gardena CAP) establishes a series of energy efficiency related measures intended to reduce greenhouse gas (GHG) emissions based on the AB 32 Scoping Plan (City of Gardena 2017). Those applicable to the Project are Renewables Portfolio Standard for Building Energy Use, Assembly Bill 1109 Energy Efficiency Standards for Lighting, Electricity Energy Efficiency, Residential Energy Efficiency Standards, Commercial Energy Efficiency Requirements and Residential Renewable Energy Requirements.

City of Gardena General Plan

The City of Gardena adopted their General Plan in 2006. The Conservation Element contains the following goal and policies that pertain to energy:

CN Goal 4: Conserve energy resources through the use of technology and conservation methods.

Policy 4.1: Encourage innovative building designs that conserve and minimize energy consumption.

Policy 4.2: Require compliance with Title 24 regulations to conserve energy.

Policy 4.3: Encourage the residential and business community to install energy saving features and appliances in existing structures.

3.3.3 Thresholds of Significance

In accordance with State CEQA Guidelines, the effects of a project are evaluated to determine whether they would result in a significant adverse impact on the environment. This analysis will focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary depending on the nature of the project. According to Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact related to energy, if it would:

1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation; and/or
2. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Based on the results of the Initial Study prepared for the Project (Appendix A), the following thresholds of significance are used to evaluate potential energy impacts associated with the Project:

ENG-1. Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

ENG-2. Would the Project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

3.3.4 Methodology

The impact analysis focuses on the three sources of energy that are relevant to the proposed Project: electricity, natural gas, and transportation fuel for vehicle trips associated with the Project as well as the fuel necessary for Project construction. Electricity, natural gas, and transportation fuel use for the Project was determined from the California Emissions Estimator Model used for the Air Quality and Greenhouse Gas Technical analyses. While Section 3.5, Greenhouse Gas Emissions, includes PDF-GHG-1 requiring electrification of the Project to be consistent with the CARB Scoping Plan, the analysis in this section conservatively assumed natural gas usage for informational purposes. As correctly noted in PDF-GHG-1, the Project would be designed to be all-electric. See details in Appendix D of this EIR.

3.3.5 Impact Analysis

Threshold ENG-1: Would the Project result in wasteful, inefficient, or unnecessary consumption of energy resources?

Energy consumption associated with the Project is summarized in Table 3.3-4. As shown in Table 3.3-4, the Project's increase in electricity usage would constitute approximately 0.0026% of the typical

annual electricity usage and approximately 0.0024% of the typical annual natural gas consumption in the County. Construction-related off-road automotive fuel consumption (i.e., fuel consumed during construction) would constitute approximately 0.0119% of the diesel and 0.0003% of the gasoline consumption within the County. During operations, on-road automotive fuel consumption (i.e., fuel consumed from operational vehicle trips to and from the Project site) would constitute approximately 0.0150% of the diesel and approximately 0.0024% of the gasoline consumption within the County.

Table 3.3-4. Project and Countywide Energy Consumption

Energy Type	Project Annual Energy Consumption	Los Angeles County Annual Energy Consumption ^{1,2}	Percentage of Countywide Consumption
Operational Electricity and Natural Gas			
Electricity Consumption	4,520,192 kWh	65,374,721,369 kWh	0.0071%
Natural Gas Consumption ³	63,561 therms	2,880,994,891 therms	0.0022%
Automotive Fuel Consumption⁴			
Project Construction^{5,6}			
Diesel	65,171 gallons	526,229,424 gallons	0.0124%
Gasoline	8,960 gallons	3,774,778,086 gallons	0.0002%
Project Operations⁷			
Diesel	103,762 gallons	526,229,424 gallons	0.0197%
Gasoline	131,992 gallons	3,774,778,086 gallons	0.0035%

Source: Refer to Appendix D for assumptions used in this analysis.

Notes:

- ¹ The Project increases in electricity and natural gas consumption are compared with the total consumption in Los Angeles County in 2021.
- ² The Project increases in automotive fuel consumption are compared with the countywide fuel consumption (projected) in 2025.
- ³ It is noted that although the proposed Project would preclude natural gas infrastructure per Project Design Feature (PDF) GHG-1 from the 1450 Artesia Boulevard Specific Plan Project Greenhouse Gas Emissions Assessment (Kimley-Horn, June 2024), this analysis conservatively estimates Project energy consumption from natural gas.
- ⁴ Countywide fuel consumption is from the California Air Resources Board EMFAC2021 model.
- ⁵ Construction fuel consumption is based on equipment and load factors from California Emissions Estimator Model (CalEEMod version 2022.1).
- ⁶ The estimated construction fuel consumption is based on the Project's construction equipment list timing/phasing, and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips.
- ⁷ Due to CARB's Zero-Emission Off-Road Forklift Regulation Phase 1 requiring on-site forklifts to be non-diesel, diesel use is solely from truck operations.

Construction-Related Energy

During construction, the Project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during grading, paving, and building construction. Fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. Some incidental energy conservation would occur during construction through compliance with state requirements that equipment not in use for more than 5 minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and California Air Resources Board engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than non-recycled materials. In addition, the recycled materials can be less expensive than virgin materials, particularly if they are sourced locally and have lower transportation costs (Construction Engineering 2023). The incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest in minimizing the cost of doing business.

As shown in Table 3.3-4, the overall diesel fuel consumption during construction of the Project would be 65,171 gallons and gasoline consumption would be 8,960 gallons, which would result in a nominal increase in fuel use in the County. Further, the energy use associated with water use during construction would result in 6,316 kW. As such, Project construction would have a minimal effect on the local and regional energy supplies. It is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or state. Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. Impacts would be less than significant, and no mitigation is required.

Operational Energy

Energy Demand

Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration (NTSA) is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. Table 3.3-4 provides an estimate of the daily fuel consumed by vehicles traveling to and from the Project site. As indicated in Table 3.3-4, Project operations are estimated to consume approximately 103,762 gallons of diesel fuel and 131,992 gallons of gasoline fuel per year, which constitutes approximately 0.019% and 0.0035% of Countywide consumption, respectively. The Project would not result in any unusual characteristics that would result in excessive long-term operational fuel consumption. Fuel consumption associated with vehicle trips generated by the Project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Building Energy Demand

Operation of the Project would require approximately 4,819,410 kWh of electricity per year and approximately 63,561 therms of natural gas per year. The Project would comply with Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage. Furthermore, the electricity provider, SCGE, is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 36% of total procurement by 2020 and to 60% of total procurement by 2030. Renewable energy is generally defined as energy that comes from resources that are naturally replenished within a human timescale, such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures projects will not result in the waste of the finite energy resources.

As shown in Table 3.3-4, operational energy consumption would represent an approximate 0.0071% of electricity consumption of the current Countywide usage. The Project would adhere to all federal, state, and local requirements for energy efficiency, including the Title 24 standards. As such, the Project would not result in the inefficient, wasteful, or unnecessary consumption of building energy.

Special Events

The various special events to be hosted two to three times per month are anticipated to attract an average of 220 attendees in addition to the 725 estimated daily vehicle trips. According to the 1450 Artesia Blvd Special Events Trip Generation Technical Memorandum (Special Events Trip Generation Memorandum) (Kimley-Horn, June 2023), these 250 attendees are estimated to generate an additional 220 vehicle trips to the Project site on special event days. Since special events are only expected to occur a few times a month, the additional vehicle trips would not significantly increase

the annual energy consumption that result from mobile sources as compared to the standard operations of the Project. To account for the special events similar to the GHG analysis, VMT was increased 3% for fuel usage.

Summary

As shown in Table 3.3-4, the increase in electricity and automotive fuel consumption over existing conditions is minimal. For the reasons described above, the Project would not place a substantial demand on regional energy supply or require significant additional capacity, or significantly increase peak and base period electricity demand. Thus, the Project would not cause a wasteful, inefficient, and unnecessary consumption of energy during Project construction, operation, and/or maintenance, or preempt future energy development or future energy conservation. Impacts would be **less than significant**, and no mitigation is required.

Threshold ENG-2 Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Title 24 of the California Code of Regulations contains energy efficiency standards for residential and non-residential buildings based on a state mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating, and air conditioning, including the energy impact of the building envelope such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs.

Part 6 of Title 24 specifically establishes energy efficiency standards for residential and nonresidential buildings constructed in the State of California in order to reduce energy demand and consumption. The Project would comply with Title 24, Part 6 per state regulations. In accordance with Title 24 Part 6, the Project would have: (a) sensor-based lighting controls—for fixtures located near windows, the lighting would be adjusted by taking advantage of available natural light; and, (b) efficient process equipment—improved technology offers significant savings through more efficient processing equipment.

Title 24, Part 11, contains voluntary and mandatory energy measures that are applicable to the Project under the California Green Building Standards Code. As discussed above, the Project would result in an increased demand for electricity, natural gas, and petroleum. In accordance with Title 24 Part 11 mandatory compliance, the Applicant would have (a) 50% of its construction and demolition waste diverted from landfills; (b) mandatory inspections of energy systems to ensure optimal working efficiency; (c) low pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring and particle boards; and (d) a 20% reduction in indoor water use. Compliance with all of these mandatory measures would decrease the consumption of electricity, natural gas, and petroleum.

The Gardena CAP establishes a series of energy efficiency related measures intended to reduce GHG emissions based on the AB 32 Scoping Plan. Those applicable to the Project are Renewables Portfolio Standard for Building Energy Use, Assembly Bill 1109 Energy Efficiency Standards for Lighting, Electricity Energy Efficiency, Residential Energy Efficiency Standards, Commercial Energy Efficiency Requirements and Residential Renewable Energy Requirements.

The Project would not conflict with any of the federal, state, or local plans for renewable energy and energy efficiency. Because the Project would comply with Parts 6 and 11 of Title 24 and with Gardena CAP measures, no conflict with existing energy standards and regulations would occur. Therefore, impacts associated with renewable energy or energy efficiency plans would be considered **less than significant**.

3.3.6 Mitigation Measures

Impacts would be less than significant. As such, no mitigation measures are required.

3.3.7 Level of Significance After Mitigation

Threshold ENG-1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

The Project would have a **less-than-significant impact** with regard to the wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation. No mitigation is required.

Threshold ENG-2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and impacts would be **less than significant**. No mitigation is required.

3.3.8 Cumulative Effects

Cumulative projects that could exacerbate the Project's impacts include any projects that could result in wasteful, inefficient, or unnecessary use of energy. However, cumulative projects would be required by the City of Gardena, to conform to current federal, state, and local energy conservation standards, including the California Energy Code Building Energy Efficiency Standards (24 CCR Part 6), the CALGreen Code (24 CCR Part 11), and SB 743.

By complying with the above regulatory measures, the Project, in combination with other reasonably foreseeable projects, would not cause a wasteful use of energy or other non-renewable natural resources. Therefore, the energy demand and use associated with the Project and cumulative projects would not substantially contribute to a cumulative impact on existing or proposed energy supplies or resources and would not cause a significant cumulative impact on energy resources. As such, the Project's contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of electricity would not be cumulatively considerable and, thus, would be less than significant.

Furthermore, the Project would not conflict with applicable plans for renewable energy as it would implement energy-saving measures pursuant to Title 24 and would comply with the Gardena CAP. Other projects, including development throughout the state, would also be subject to the Title 24 standards in place at the time of construction. It is speculative whether other projects would conflict with a state or local plan for renewable energy. However, future projects would be subject to CEQA and evaluate whether

they would conflict with applicable plans. As such, the Project in combination with other reasonably foreseeable projects, would not conflict with a state or local plan for renewable energy or energy efficiency. The Project's contribution to cumulative impacts related to renewable energy or energy efficiency would not be cumulatively considerable and, thus, would be **less than significant**.

3.3.9 References

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3.4 Geology and Soils

This section describes the existing geological conditions of the Project site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, cumulative impacts, and identifies mitigation measures related to implementation of the proposed 1450 Artesia Specific Plan Project (Project or proposed Project). The analysis of the potential Project impacts related to geology and soils is partly based on information provided in a site-specific geotechnical report conducted by Carl Kim Geotechnical Inc., dated February 4, 2022, which is included as Appendix E to this EIR. Paleontological resources were considered and evaluated as part of the Cultural Resources Assessment, included as Appendix C to this EIR.

Information contained in this section is based on the above referenced reports of the Project area and other publicly available information from the United States Geological Survey, the California Geological Survey (CGS), and Southern California Earthquake Data Center. Other sources consulted are listed in Section 3.4.8, References.

3.4.1 Existing Conditions

This section describes the existing conditions in the Project area and identifies the resources that could be affected by the Project.

Regional Geologic Setting

The City of Gardena (City) is located within the Peninsular Ranges geomorphic province, which extends from the Los Angeles Basin south of the Santa Monica Mountains to the tip of Baja California and includes the San Jacinto and Santa Ana Mountain Ranges, as well as Santa Catalina Island (CGS 2002). The Peninsula Ranges province is characterized by elongated northwest-trending mountain ranges separated by straight-sided sediment floored valleys. The northwest trend is further reflected in the direction of the dominant geologic structural features of the province, which are northwest-trending faults and folds created by the boundary of the Pacific and North American tectonic plates. The lateral movement of these plates has created shear zones that have produced the San Andreas fault zone as well as other regional faults. Regional faults in the vicinity of the Project area include the Newport-Inglewood Fault Zone, Palos Verde, Whittier-Elsinore, Raymond, Hollywood, Whittier, and Santa Monica faults (CGS 2023).

Topography

The Project site and surrounding area is part of the Los Angeles Coastal Plain and generally relatively level in an urban, developed commercial and residential area, with little of the natural topography remaining. The developed portion of the Project site on the western side is at an elevation of approximately 29 feet above mean sea level (amsl) with a slight gradient towards the south southeast. The current grade ranges from about elevation 38 feet amsl in the southern portion of the site to about 19 feet amsl along the east edge of the site. The western portion of the site where the former sump disposal areas (also known as the Gardena Sumps or Cooper and Haack Sumps) were located, appears to currently be at an elevation that is a few feet below the surrounding grade.

Subsurface Soils

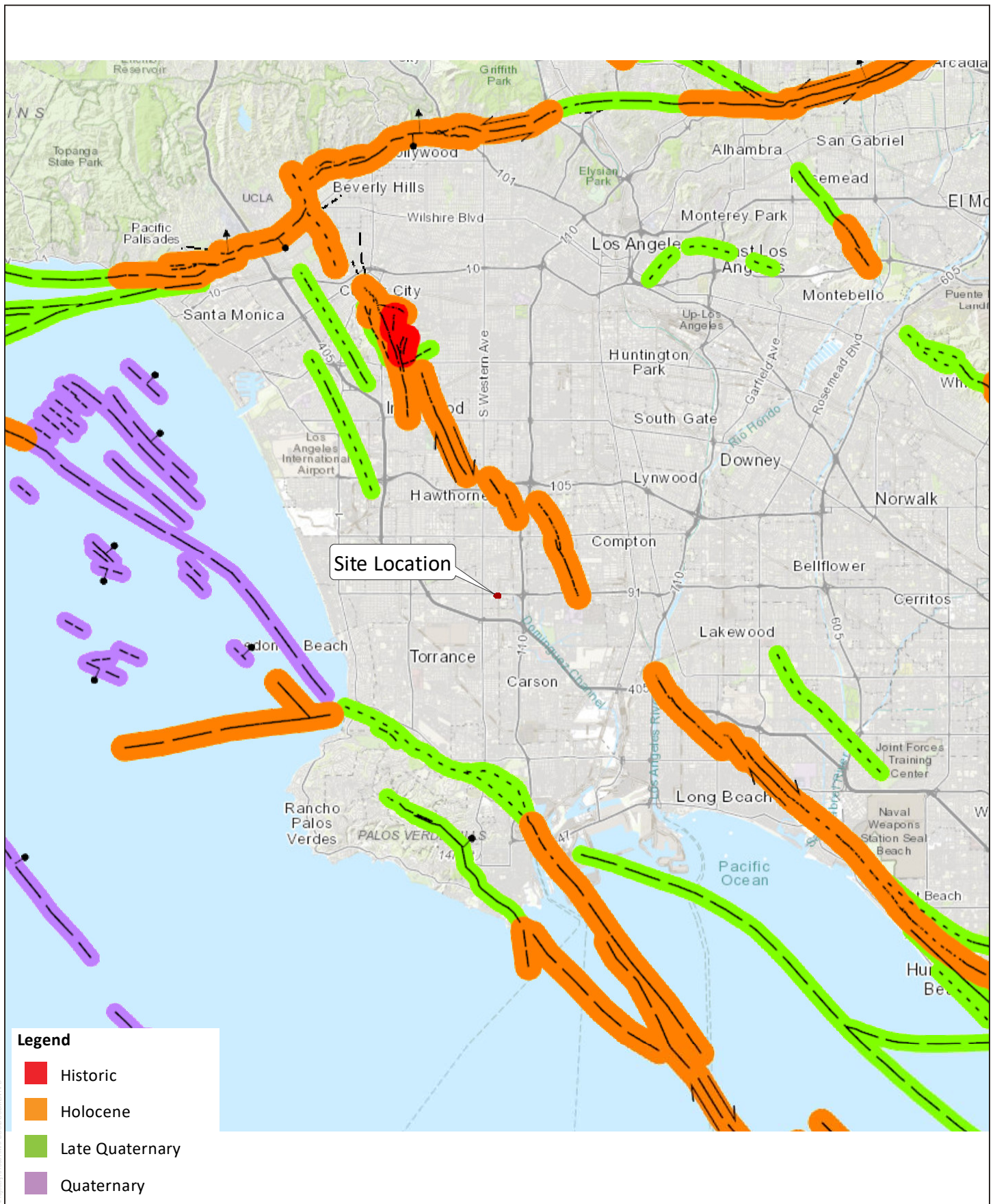
Based on geotechnical borings completed at the Project site as part of a site-specific geotechnical investigation, on-site geologic materials encountered included varying amounts of artificial fill and sludge-bearing undocumented fill overlying native alluvial soils (Appendix E). The artificial fill soils were encountered to a depth of approximately 5 feet below ground surface and may contain buried debris (e.g., bricks, asphalt, and concrete rubble). The artificial fill materials are generally characterized as silty sand and sandy silts. The undocumented sludge-bearing fill materials are associated with the former sump locations on the eastern portion of the site and include mixtures of sand, silt clay, brick or other debris along with zones of materials described as “sludge” (Appendix E). The sludge was generally described in the geotechnical report as “acidic, black, soft to dense, dry to wet, vitreous to fibrous, semi-solidified to solidified tar” (Appendix E). The sludge material was also found to be layered with fine sand, and occasionally silt and clay soil. In the areas of the sumps, the undocumented fills and sludge fills are deeper and can range up to 16 feet deep. The native alluvial soils were found to generally consist of silty sand, sandy silt, silt, and some clay layers (Appendix E). At depths of approximately 25 to 30 feet below ground surface, finer grained layers of clay or silt become more prevalent (Appendix E).

Seismicity and Faulting

The Los Angeles Basin is located in a very seismically active region with numerous large and well-known faults that have greatly influenced landforms and seismicity of the area (Figure 3.4-1, Regional Faults). The fault closest to the Project site is the Newport-Inglewood Fault, located approximately 2.6 miles to the east of the Project site. Other significant faults in the region include the Palos Verde Fault Zone, the Whittier-Elsinore Fault System, the Santa Monica Fault Zone, the Hollywood Fault, the Raymond Fault, and the Puente Hills and Elysian Park blind thrusts (Appendix E).

According to criteria established by the California Geological Survey, faults are categorized as follows:

- **Holocene-active faults:** faults that have shown evidence of displacement within the past approximately 11,700 years (i.e., Holocene time). These faults exhibit signs of geologically recent movement, are considered most likely to experience movement in the near future, and are capable of surface fault rupture. Faults that meet these criteria are known as “active faults.”
- **Pre-Holocene faults:** faults that have not shown evidence of displacement in the past 11,700 years but are known to have displaced materials between 11,700 and 2 million years ago (i.e., Quaternary time). These faults were once known as “potentially active faults” and may be capable of seismicity (i.e., earthquakes), but are considered unlikely to cause surface rupture.
- **Age-undetermined faults:** faults where the recency of fault movement has not been determined. These faults are considered “inactive faults.”



SOURCE: USGS; CA Department of Conservation; CKGEO 2022

FIGURE 3.4-1

Regional Faults

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Holocene-active faults have been responsible for large historical earthquakes in Southern California, including the 1971 San Fernando earthquake (moment magnitude¹ [Mw] 6.7), the 1992 Landers earthquake (Mw 7.3), the 2019 Searles Valley earthquake (Mw 7.1), the 1952 Kern County earthquake (Mw 7.5), and the 1933 Long Beach earthquake (Mw 6.4). The moment magnitude is the most commonly used method of describing the size of earthquakes. It measures the size of seismic events in terms of how much energy is released, and it relates to the amount of rock movement. The Southern California region also includes blind thrust faults, which are faults that do not rupture at the surface but are capable of generating substantial earthquakes and associated ground shaking. Examples include the 1987 Whittier Narrows earthquake (Mw 5.9) and the 1994 Northridge earthquake (Mw 6.7). Both of these earthquakes occurred on previously unidentified blind thrust faults.

Most of the Holocene-active faults in California are recognized as fault zones in accordance with the Alquist-Priolo Earthquake Fault Zoning Act. Fault zones are defined as a region, varying in width but typically approximately 0.25 miles in width, that bounds major fault traces. The Project site is not located within or immediately adjacent to any Alquist-Priolo Earthquake Fault Zone (CGS 2023).

Regional Holocene-active faults within the vicinity of the Project site are listed in Table 3.4-1, Regional Faulting, and are described in the following subsections. Distances from the Project site to individual faults represent the distance to the nearest fault segment within the respective fault zones.

San Andreas Fault

The Holocene-active San Andreas Fault is California's most prominent structural feature, trending in a generally northwest direction for almost the entire length of the state. The southern segment of the fault is approximately 280 miles long, extending from the Mexican border into the Transverse Ranges west of Tejon Pass. Along this segment, there is no single traceable fault line; rather, the fault is composed of several branches. The fault is located approximately 47 miles to the northeast of the Project site and is capable of producing up to a Mw 8.25 earthquake (CGS 2023; CIT 2023).

Newport-Inglewood Fault

The Holocene-active Newport-Inglewood Fault is located approximately 2.6 miles to the east of the Project site and extends from the southern edge of the Santa Monica Mountains southeastward to an area offshore of Newport Beach and possibly offshore beyond San Diego. This zone can be traced at the surface by following a line of relatively young anticlinal (folded) hills and mesas. These hills and mesas include the Cheviot Hills, Baldwin Hills, Rosecrans Hills, Dominguez Hills, Signal Hill-Reservoir, Alamitos Heights, Landing Hill, Bolsa Chica Mesa, Huntington Beach Mesa, and Newport Mesa. Earthquake focal mechanisms for 39 small earthquakes (1977 to 1985) show faulting along the north segment (north of Dominguez Hills) and along the south segment (south of Dominguez Hills to Newport Beach). The 1933 Long Beach earthquake (magnitude 6.3) has been attributed to movement on the Newport-Inglewood Fault Zone. Based on historic earthquakes, the fault zone is considered Holocene-active. Movement along the fault is northeast side up, resulting in vertical

¹ Moment magnitude (Mw) is considered to be a more reliable estimate of an earthquake's size as compared to the more well-known Richter magnitude (M) scale; however, both scales are used in this section, depending on what is used in the reference material.

displacement of water-bearing sediments extending for several miles. The Newport-Inglewood Fault is capable producing of a maximum probable magnitude Mw 6.0 to 7.5 earthquake (CIT 2023).

Palos Verde Fault

The Holocene-active to pre-Holocene Palos Verdes Fault is located approximately 6 miles west of the Project site and is traceable in the subsurface along the northern front of the Palos Verdes Hills. Offshore data, consisting of acoustic and reflection profiles, suggests very recent movement along the Palos Verdes Fault. No historic large magnitude earthquakes are associated with this fault; however, it is estimated that this fault is capable of producing a maximum probable magnitude Mw 6.0–7.7 earthquake (CIT 2023).

Whittier-Elsinore Fault

The Whittier-Elsinore Fault is located approximately 17 miles to the east of the Project site. The Whittier Fault together with the Chino Fault comprises the northernmost extension of the northwest trending Elsinore fault system. The mapped surface of the Whittier Fault extends in a west-northwest direction for a distance of 20 miles from the Santa Ana River to the terminus of the Puente Hills. It is estimated that this fault is capable of producing a magnitude Mw 7.8 earthquake (CIT 2023).

Raymond Fault

The Raymond Fault is located approximately 18 miles to the northeast of the Project site. This fault serves as a groundwater barrier, which divides the San Gabriel Valley into groundwater subbasins. Much of the geomorphic evidence of this fault has been destroyed by urbanization. The recurrence interval for this fault is estimated to be approximately 3,000 years, with a documented event occurring 1,600 years ago. Historical accounts also suggest an event occurring in 1855 associated with the Raymond Fault. The Raymond Fault is estimated to be capable of producing a magnitude Mw 6.8 earthquake (CIT 2023).

Hollywood Fault

The northeast–southwest trending Hollywood Fault (Holocene-active) is a left-reverse lateral strike-slip fault that is deeply buried, is concealed by dense urbanization, and is located approximately 16 miles north of the Project site. This fault trends east-west along the base of the Santa Monica Mountains from the West Beverly Hills Lineament in the West Hollywood-Beverly Hills area to the Los Feliz area of Los Angeles. The Hollywood Fault has not produced any damaging earthquakes during the historical period (i.e., from 1769 to the present) and has had relatively minor micro-seismic activity. It is estimated that the Hollywood Fault is capable of producing a maximum magnitude Mw 6.7 earthquake (CIT 2023).

Blind Thrusts Faults

Buried or blind thrusts faults are faults without a surface expression but are significant sources of seismic activity. Due to their buried nature, their existence is sometimes not known until they produce an earthquake. There are two blind thrust faults in the Los Angeles metropolitan region, identified as the Elysian Park blind thrust and the Puente Hills blind thrust. The Puente Hills blind thrust extends

eastward from downtown Los Angeles to the City of Brea in northern Orange County BSSA 2002). This fault includes three north-dipping segments, named from east to west as the Coyote Hills segment, the Santa Fe Springs segment, and the Los Angeles segment. The Elysian Park blind thrust fault, located approximately 19 miles northeast of the site, has been estimated to cause an earthquake every 500 to 1,300 years in the magnitude range of Mw 6.2 to 6.7. This fault is located approximately 15 miles to the northeast of the Project site.

Table 3.4-1. Regional Faulting

Regional Faulting	Approximate Closest Distance to Project Site (miles)	Fault Age	Magnitude Potential (Mw)
Newport-Inglewood Fault	2.6	Holocene-active	7.5
Palos Verdes Fault	5.8	Holocene-active to pre-Holocene	7.7
Whittier-Elsinore Fault System	17	Holocene-active	7.8
Santa Monica Fault	14.6	Holocene-active	7.4
Hollywood Fault	15.9	Holocene-active	6.7
Raymond Fault	18.2	Holocene-active	6.8
Puente Hills Blind Thrust System	8.5	Holocene-active	7.0
Elysian Park Fault	15	Holocene-active	6.7
San Andreas Fault	46.8	Holocene-active	8.25

Source: CGS 2023; CIT 2023; BSSA 2002.

Ground Shaking

Ground shaking is the movement of the earth's surface as a result of an earthquake. Ground motion produced by seismic waves emanates from slow or sudden slip on a fault. The degree of ground shaking felt at a given site depends on a number of different factors including the distance from the earthquake source, the magnitude of the earthquake, the type of subsurface material on which the site is situated, duration of shaking and topography. Generally, ground shaking is less severe on rock than on alluvium or fill where the materials under some conditions can amplify ground shaking, but other local characteristics may override this generalization. Ground shaking can produce significant ground horizontal and vertical movement that can result in severe damage to structures that are generally not equipped to withstand it. The Project site is located in the seismically active Southern California region and could be subject to moderate to strong ground shaking in the event of an earthquake on one of the many Holocene-active Southern California faults.

Detectable ground shaking at the Project site could be observed by a seismic event occurring on any of the active or potentially active faults in the region. The amount of ground shaking would depend on a number of factors including distance and depth to the epicenter. The Newport-Inglewood, Whittier, Santa Monica, and Palos Verdes Faults are the active faults most likely to cause high ground accelerations within the City, as a whole; however, the San Andreas Fault has the highest probability of generating a maximum credible earthquake in California within the next 30 years (USGS 2015).

Surface Rupture

Surface rupture involves the displacement and cracking of the ground surface along a fault trace. Surface ruptures are visible instances of horizontal or vertical displacement, or a combination of the two, typically confined to a narrow zone along the fault. Surface rupture is more likely to occur in conjunction with active fault segments where earthquakes are large, or where the location of the movement (earthquake hypocenter) is shallow.

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 regulates development near Holocene-active faults to mitigate the hazard of surface fault rupture. This act requires the state geologist to establish regulatory zones (known as Alquist-Priolo Special Study Fault Zones) around the surface traces of Holocene-active faults and to issue appropriate maps. Local agencies must regulate development projects within these zones by requiring a fault hazard geologic investigation that can demonstrate that proposed buildings will not be constructed across active faults. If a Holocene-active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault.

The Project site is not located within or adjacent to any Alquist-Priolo Earthquake Fault Zone (Appendix E; CGS 2023). There are no known Holocene-active or Pre-Holocene faults that underlie the Project site and the closest Alquist-Priolo Fault to the Project site is the Newport-Inglewood Fault, located approximately 2.6 miles to the northeast (Appendix E).

Liquefaction

Liquefaction is a process by which water-saturated cohesionless granular soils below the groundwater table are subject to a temporary loss of strength due to the buildup of excess pore pressure during cyclic loading conditions such as those induced by an earthquake. Materials will then behave more like a liquid than a solid. Liquefaction-related effects include loss of bearing strength, amplified ground oscillations, lateral spreading, and flow failures. Liquefaction typically occurs in areas where groundwater is less than 50 feet from the surface, and where soils are composed of poorly consolidated, fine to medium-grained sand. In addition to the necessary soil conditions, the ground acceleration and duration of the earthquake must also be of sufficient level to initiate liquefaction.

Liquefaction can result in the shifting of foundations, settling of roadways, and rupture of underground pipelines and cables. Buildings and other objects on the ground surface can settle, tilt, and collapse as the foundations beneath them lose support, and lightweight buried structures may float to the surface. The northwest corner of the Project site is located in an area that has been mapped as being potentially susceptible to liquefaction area (Figure 6 of Appendix E). However, according to site specific analysis conducted during the preliminary geotechnical investigation of the Project site, the liquefaction hazard at the site was deemed to be low (Appendix E).

Lateral Spreading

Lateral spreading, a geotechnical hazard related to liquefaction, occurs when liquefiable materials move as a block towards an exposed slope or free face of a slope. Compact surface materials may slide on a liquefied or low shear strength layer at a shallow depth, moving laterally several feet down slopes of less than 2 degrees. Such a condition may be present where conditions conducive to

shallow liquefaction exist. However, it was determined that the potential for lateral spreading to occur within the Project site is low (Appendix E).

Slope Instability/Landslides

A landslide is the downhill movement of masses of earth material under the force of gravity. The factors contributing to landslide potential are steep slopes, unstable terrain, and proximity to earthquake faults. This process typically involves the surface soil and an upper portion of the underlying bedrock. Movement may be very rapid, or so slow that a change of position can be noted only over a period of weeks or years (creep). The size of a landslide can range from several square feet to several square miles.

The Project site is located in a developed area that is relatively level and is not located near any exposed hillsides. In addition, the Project site is not located within an earthquake-induced landslide zone (Appendix E). Because of the little to no change in topography of the site, the geotechnical report determined that landslides do not pose a hazard at the Project site (Appendix E).

Subsidence

Subsidence is the permanent collapse of the pore space within a soil or rock and downward settling of the earth's surface relative to its surrounding area. Subsidence can result from the extraction of water or oil, liquefaction, or the addition of water to the land surface—a condition called “hydrocompaction.” The compaction of subsurface sediment caused by the withdrawal or addition of fluids can cause subsidence. Land subsidence can disrupt surface drainage, reduce aquifer storage, cause earth fissures, damage buildings and structures, and damage wells, roads, and utility infrastructure.

In general, the greater Los Angeles metropolitan area experiences subsidence due to a variety of natural and human-induced causes including tectonic deformation, oil-field operations, and groundwater extraction and injection. Since these activities occur in overlapping proximity, it can be difficult to determine the cause of observed deformations using standard surveying techniques (USGS 2023). Human-induced land deformation also produces horizontal surface motion that obscures, or in some cases mimics, the tectonic signals expected from the blind thrust faults beneath Los Angeles. However, according to mapping compiled by the U.S. Geological Survey, the Project site is located to the north of an area of subsidence attributed to groundwater withdrawal (USGS 2023).

Expansive Soils

Expansive soils exhibit volumetric changes with changing moisture content where they tend to swell with seasonal increases in soil moisture in the winter months and shrink as soils become drier in the summer months. Repeated shrinking and swelling of expansive soils over time can lead to stress and damage of structures, foundations, and fill slopes and can cause overlying concrete to crack and settle. Soils with a high clay content typically have high shrink/swell characteristics. According to the soil sampling performed during the geotechnical investigation of the Project site, the surficial soils at the Project site were found to have a low to very low expansion potential (Appendix E).

Paleontological Resources

Paleontological resources, or fossils, are the remains of once living plants and/or animals and their traces (e.g., burrows and tracks) preserved in Earth's crust, and are generally considered to be greater than 5,000 years old or prior to recorded human history per the Society of Vertebrate Paleontology (SVP 2010) guidelines. With the exception of fossils found in low-grade metasedimentary rocks, significant paleontological resources are found in sedimentary rock units that are old enough to preserve the remains or traces of plants and animals.

As discussed in the Cultural Resources Assessment, included as Appendix C to this EIR, the geologic units underlying the Project site are mapped as Holocene alluvial fan deposits of clay and sand. Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits.

3.4.2 Relevant Plans, Policies, and Ordinances

Federal

The following federal regulations pertaining to seismicity and geologic hazards would apply to the Project.

Earthquake Hazards Reduction Act

In October 1977, the U.S. Congress passed the Earthquake Hazards Reduction Act to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives.

The mission of National Earthquake Hazards Reduction Program includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improved building codes and land-use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improved mitigation capacity; and accelerated application of research results. The National Earthquake Hazards Reduction Program Act designates the Federal Emergency Management Agency as the lead agency of the program and assigns several planning, coordinating, and reporting responsibilities. Other National Earthquake Hazards Reduction Program Act agencies include the National Institute of Standards and Technology, National Science Foundation, and the U.S. Geological Survey.

State

The following state regulations pertaining to seismicity and geologic hazards would apply to the Project.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) addresses earthquake hazards from non-surface fault rupture, including liquefaction and seismically induced landslides.

The act established a mapping program for areas that have the potential for liquefaction, landslide, strong ground shaking, or other earthquake and geologic hazards. Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate “seismic hazard zones.” Cities and counties must regulate certain development projects within these zones until the geologic and soil conditions of their project sites have been investigated and appropriate mitigation measures, if any, have been incorporated into development plans. Under California Public Resources Code Section 2697, cities and counties must require, prior to the approval of a project located in a seismic hazard zone, submission of a Preliminary Geotechnical Report defining and delineating any seismic hazard. State publications supporting the requirements of the Seismic Hazards Mapping Act include the CGS SP 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS 2008), discussed previously, and SP 118, Recommended Criteria for Delineating Seismic Hazard Zones in California. SP 117A provides guidelines to assist in the evaluation and mitigation of earthquake-related hazards for projects within designated zones requiring investigations and to promote uniform and effective Statewide implementation of the evaluation and mitigation elements of the Seismic Hazards Mapping Act.² SP 118 provides recommendations to assist the CGS in carrying out the requirements of the Seismic Hazards Mapping Act to produce the Probabilistic Seismic Hazard Maps for the State. The Project site is partially located within a seismic hazard zone for liquefaction and must conform to the requirements of the Seismic Hazards Mapping Act.

National Pollutant Discharge Elimination System Permit

In California, the State Water Resources Control Board administers regulations promulgated by the U.S. Environmental Protection Agency (55 CFR 47990), requiring the permitting of stormwater-generated pollution under the National Pollutant Discharge Elimination System (NPDES). In turn, the State Water Resources Control Board’s jurisdiction is administered through nine Regional Water Quality Control Boards. Under these federal regulations, an operator must obtain a general permit through the NPDES Stormwater Program for all construction activities with ground disturbance of 1 acre or more. The general permit requires the implementation of best management practices (BMPs) to reduce sedimentation into surface waters and to control erosion. One element of compliance with the NPDES permit is preparation of a Stormwater Pollution Prevention Plan (SWPPP) that addresses control of water pollution, including sediment, in runoff during construction.

California Building Code

The state regulations protecting structures from geo-seismic hazards are contained in the California Code of Regulations (CCR), Title 24, Part 2 (the California Building Code [CBC]), which is updated every 3 years. These regulations apply to public and private buildings in the state and establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability. The CBC is based on the International Building Code of the International Code Council, with California amendments. The 2022 CBC, which became effective January 1, 2023, is based on the 2021 International Building Code and enhances

² Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, prepared by California Geologic Survey, 2008, <http://www.conservation.ca.gov/cgs/shzp/webdocs/Documents/sp117.pdf>.

the sections dealing with existing structures. Seismic-resistant construction design is required to meet more stringent technical standards than those set by previous versions of the CBC.

Construction activities are subject to occupational safety standards for excavation and trenching, as specified in the California Safety and Health Administration regulations (Title 8 of the CCR) and in Chapter 33 of the CBC. These regulations specify the measures to be used for excavation and trench work where workers could be exposed to unstable soil conditions. The construction contractors would be required to employ these safety measures during any excavation and trenching required for construction.

Paleontological Resources

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value and are afforded protection under state laws and regulations (California Environmental Quality Act [CEQA]). Paleontological resources are explicitly afforded protection by CEQA, specifically in Section VII(f) of CEQA Guidelines Appendix G, the Environmental Checklist Form, which addresses the potential for adverse impacts to “unique paleontological resource[s] or site[s] or ... unique geological feature[s]” (CEQA Guidelines Section 15000 et seq.). This provision covers fossils of single importance—remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group—as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth. Further, CEQA provides that, generally, a resource shall be considered “historically significant” if it has yielded or may be likely to yield information important in prehistory (CEQA Guidelines Section 15064.5[a][3][D]). Paleontological resources would fall within this category. The California Public Resources Code, Chapter 1.7, Sections 5097.5 and 30244, also regulates removal of paleontological resources from state lands, defines unauthorized removal of fossil resources as a misdemeanor, and requires mitigation of disturbed sites.

Local

The following local/regional regulations pertaining to seismicity and geologic hazards would apply to the Project.

City of Gardena General Plan

The City of Gardena General Plan was adopted in 2006 and includes goals and policies within the required elements including the Public Safety Plan and the Conservation Plan. The Public Safety Plan within the General Plan for the City was updated and adopted February 2022. The following is a list of goals and policies applicable to the proposed Project relating to Geology and Soils:

Public Safety Plan

PS Goal 3. Protect the community from dangers associated with geologic instability, seismic hazards and other natural hazards.

PS 3.1: California Building Code. Require compliance with seismic safety standards in the California Building Code, as adopted and amended.

PS 3.2: Geotechnical Studies. Require geotechnical studies for all new development projects in the City, including those located in an Alquist-Priolo Earthquake Fault Zone or areas subject to liquefaction.

3.4.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to geology and soils are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to geology and soils would occur if the Project would:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?
 - b. Strong seismic ground shaking?
 - c. Seismic-induced ground failure, including liquefaction?
 - d. Landslides?
2. Result in substantial soil erosion or the loss of topsoil?
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Based on the results of the Initial Study prepared for the Project (Appendix A), the Project would result in less-than-significant geology and soils impacts related to resulting in substantial soil erosion or the loss of top soil and no impacts with regard to landslides or having soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. As such the following thresholds are evaluated in this section of the Draft EIR:

- GEO-1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?
 - ii. Strong seismic ground shaking?

iii. Seismic-induced ground failure, including liquefaction?

GEO-2. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

GEO-3. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

GEO-4. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

3.4.4 Impact Analysis

Threshold GEO-1. Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?***

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone. The closest such zone is located along the Newport-Inglewood Fault Zone, approximately 2.6 miles to the east of the Project site. In addition, no known faults traverse on or immediately adjacent to the Project site. Furthermore, development of the proposed Project would not directly or indirectly cause or exacerbate existing fault rupture risks. As a result, **no impacts** related to surface rupture of a known earthquake fault would occur.

- ii Strong seismic ground shaking?***

The Project site is located in the seismically active region of Southern California with numerous regional faults capable of causing substantive ground shaking at the Project site. The Holocene-active Newport-Inglewood Fault Zone is located relatively close (2.6 miles to the east) to the Project site. Other regional faults include the San Andreas, Palos Verde, Hollywood, Raymond, and Elysian Park faults), any of which could be the source of producing moderate to large seismic events (i.e., earthquakes) that could adversely affect the Project site, if the proposed improvements are not constructed appropriately and in accordance with current regulatory requirements. However, Project construction would be completed in accordance with current CBC requirements, which include seismic design criteria. The CBC provides procedures for earthquake-resistant structural design that includes considerations for on-site soil conditions, occupancy, and the configuration of the structure, including the structural system and height. Although substantial damage to structures may be unavoidable during large earthquakes, the proposed structures would be designed to resist structural collapse and thereby provide reasonable protection from serious injury, catastrophic property damage, and loss of life.

Chapters 18 and 18A of the CBC include (but are not limited to) the requirements for foundation and soil investigations (Sections 1803 and 1803A); excavation, grading, and fill (Sections 1804 and 1804A); damp-proofing and water-proofing (Sections 1805 and 1805A); allowable load-bearing

values of soils (Sections 1806 and 1806A); the design of foundation walls, retaining walls, embedded posts and poles (Sections 1807 and 1807A), and foundations (Sections 1808 and 1808A); and design of shallow foundations (Sections 1809 and 1809A) and deep foundations (Sections 1810 and 1810A). In conjunction with City policies aimed at mitigating and minimizing geologic hazards, the proposed Project would not directly or indirectly cause substantial adverse effects involving strong seismic ground shaking. Impacts would be **less than significant**, and no mitigation is required.

iii Seismic-induced ground failure, including liquefaction?

As discussed previously, according to mapping compiled by the CGS, the northwestern corner of the Project site is located in a seismic hazard zone for liquefaction. The preliminary geotechnical investigation included an evaluation for liquefaction at the Project site and determined that the potential for liquefaction at the site is low (Appendix E). Regardless, all proposed development within the Project site would be required to adhere to requirements of the CBC and Special Publication 117A, for anything located within the Liquefaction Seismic Hazard Zone, for the mitigation of liquefaction hazards. As part of adherence to these building code requirements, final Project designs would require geotechnical engineering measures such as site preparation (e.g., treatment of liquefiable layers or use of engineered fills) and foundation design that would minimize damage from the effects of liquefaction at the Project site as necessary to meet building code standards. In addition, development of the Project site would not increase or exacerbate the potential for liquefaction to occur and therefore would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismically related ground failure, including liquefaction. Impacts would be **less than significant**, and no mitigation is required.

Threshold GEO-2. Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

According to the geotechnical report that was prepared for the Project, the site is underlain by artificial fills, sludge-bearing fills, and alluvial deposits. The artificial fills are characterized in the geotechnical report as undocumented, which indicates that they may not have been placed in accordance with current compaction standards to adequately support proposed improvements.

The Project site is relatively level and there are no existing slopes or proposed grading that would create slope conditions that would be susceptible to slope failure or landslides. As a result, the potential to result in on- or off-site landslides would be considered less than significant. Lateral spreading, a geotechnical hazard related to liquefaction, was evaluated as part of the preliminary geotechnical investigation. The geotechnical report concluded that the site conditions are such (i.e., no continuous liquefiable layers that could move toward an unconfined area or open slope face) that the potential for lateral spreading is considered low (Appendix E). The potential for liquefaction was also determined to be low at the Project site. The Project site is located outside of a known area of subsidence and there would be no extraction of groundwater or petroleum at the site such that the potential for subsidence due to fluid withdrawal is not likely. Otherwise, even though there are undocumented artificial fills at the site that likely would not be sufficient to adequately support proposed improvements, building code requirements would include measures to ensure that site preparations (e.g., removal of artificial fills and replacement with engineered fills compacted to current building code standards) are included as part of design plans. Completion of these site

preparation measures, consistent with building code specifications, would ensure that underlying soil units are sufficient to adequately support proposed improvements on a long-term basis. As a result, with adherence to the current CBC and City building code requirements, the potential impacts related to unstable geologic units or soils would be **less than significant**, and no mitigation is required.

Threshold GEO-3. Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils are clay-rich soils that can experience volumetric changes (i.e., shrinking and swelling) with changes in moisture content. Over time, these cyclical changes in volume can exert substantial pressure on foundations, resulting in structural distress and/or damage to above ground improvements. According to the preliminary geotechnical report, the underlying soils at the Project site were found to have low to very low expansion potential (Appendix E). Any imported engineered fill materials that might be brought onto the site would be required to meet building code specification, which would include ensuring that the fills have negligible expansive properties. As a result, the Project construction would not increase or exacerbate the potential for expansive soils to create substantial direct or indirect risk of the property and the potential impacts associated with expansive soils would be **less than significant**, and no mitigation is required.

Threshold GEO-4. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As discussed in the Cultural Resources Assessment, included as Appendix C to this EIR, the geologic units underlying the Project area is mapped as Holocene alluvial fan deposits of clay and sand. Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching Pleistocene alluvial sediments would increase.

While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant such that potentially significant impacts could occur. Excavation activity associated with the development of the Project area is unlikely to be paleontologically sensitive; however, inclusion of mitigation measure MM-GEO-1 is required in order to reduce potentially significant impacts to paleontological resources, in the event that they are encountered. Impacts to paleontological resources would be **less than significant with mitigation**.

3.4.5 Mitigation Measures

In order to reduce potentially significant impacts to paleontological resources, the following mitigation measure is required.

MM-GEO-1 Inadvertent Discovery. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading

to recommence in the area of the find. Salvaged fossils deemed to be significant shall be donated to an accredited repository with retrievable storage such as a museum. Costs for preparing the fossils for accessioning into the accredited repository and any associated curation fees shall be paid by the Project Applicant.

3.4.6 Level of Significance After Mitigation

Threshold GEO-4: Potential impacts related to paleontological resources with adherence to existing building code requirements would be **less than significant with implementation of MM GEO-1**.

3.4.7 Cumulative Effects

The geographic context for the cumulative analysis is the greater Los Angeles Basin, which even though it has wide-ranging geologic conditions, there is a general risk of seismic hazards due to the regional seismic activity and presence of numerous Holocene-active faults. Potential cumulative impacts related to geology and soils would result if cumulative projects would combine to create or exacerbate geologic hazards, including seismicity, erosion/loss of topsoil, or unstable geologic conditions. However, the majority of geologic hazards, including liquefaction, ground shaking, landslides, and unstable soils, tend to be site-specific with conditions changing, sometimes substantially, over relatively short distances and are therefore generally reduced to the extent practicable on a project-by-project basis through adherence to building code requirements. Each cumulative project identified in Table 3-1 would be required to adhere to the same required building engineering design standards as the proposed Project, per the most recent version of the CBC, to ensure the safety of building occupants and thus avoiding a cumulative geologic hazard. Additionally, as needed, cumulative projects would incorporate individual mitigation or geotechnical measures that are appropriate for site-specific conditions present on each individual cumulative project site. Therefore, since geologic hazards tend to be site-specific and do not combine to become cumulatively considerable, but all cumulative projects would adhere to current building code requirements, the proposed Project would not combine with other cumulative projects. As such, the proposed Project would not contribute to a significant cumulative impact associated with geology and soils and the impact would be **less than significant**.

3.4.8 References

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3.5 Greenhouse Gas Emissions

This section describes the existing greenhouse gas (GHG) conditions of the 1450 Artesia Specific Plan Project (Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed Project. Information contained in this section is based on California Emissions Estimator Model (CalEEMod), Version 2022.1, to estimate the Project's GHG emissions from both construction and operations and existing land use operation. For the relevant data, refer to the following appendix:

- Appendix F, Greenhouse Emissions Assessment, dated June 2024

3.5.1 Existing Conditions

Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO₂ emissions, approximately 55% is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45% of human-caused CO₂ emissions remains stored in the atmosphere (IPCC 2013). Table 3.5-1 describes the primary GHGs attributed to global climate change, including their physical properties.

Table 3.5-1. Description of Greenhouse Gases

Greenhouse Gas	Description
Carbon Dioxide (CO ₂)	CO ₂ is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO ₂ is variable because it is readily exchanged in the atmosphere. CO ₂ is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
Nitrous Oxide (N ₂ O)	N ₂ O is largely attributable to agricultural practices and soil management. Primary human-related sources of N ₂ O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N ₂ O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. The Global Warming Potential of N ₂ O is 298.
Methane (CH ₄)	CH ₄ , a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87% by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH ₄ include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH ₄ is about 12 years and the Global Warming Potential is 25.
Hydrofluorocarbons (HFCs)	HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of CFCs and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above the earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum

Table 3.5-1. Description of Greenhouse Gases

Greenhouse Gas	Description
	production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.
Sulfur Hexafluoride (SF ₆)	SF ₆ is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF ₆ is 23,900.
Hydrochlorofluorocarbons (HCFCs)	HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100% reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.
Nitrogen Trifluoride (NF ₃)	NF ₃ was added to Health and Safety Code Section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.
Black Carbon	Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential. Diesel particulate matter emissions are a major source of black carbon and are TACs that have been regulated and controlled in California for several decades to protect public health.

Table 3.5-1. Description of Greenhouse Gases

Greenhouse Gas	Description
Water Vapor	The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.
Ozone	Tropospheric O ₃ , which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O ₃ , which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O ₂), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O ₃ , due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.
Aerosols	Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Sources: IPCC 2007; EPA 2010, 2018.

Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the earth (e.g., affect cloud formation or albedo) (EPA 2017). The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons of CO₂ equivalent (MT CO₂e).

The current version of the California Emissions Estimator Model (CalEEMod) (Version 2022.1) assumes that the GWP for CH₄ is 25 (so emissions of 1 MT of CH₄ are equivalent to emissions of 25 MT of CO₂), and the GWP for N₂O is 298, based on the IPCC's Fourth Assessment Report (IPCC 2007).

Greenhouse Gas Inventories

Global Inventory

Anthropogenic GHG emissions worldwide in 2020 (the most recent year for which data is available) totaled approximately 49,800 million metric tons (MMT) of CO₂e, excluding land use change and forestry (PBL 2022). The top six GHG emitters include China, the United States, the Russian Federation, India, Japan, and the European Union, which accounted for approximately 60% of the total global emissions, or approximately 30,270 MMT CO₂e (PBL 2022). Table 3.5-2 presents the top GHG-emissions-producing countries.

Table 3.5-2. Six Top GHG Producer Countries

Emitting Countries	2020 GHG Emissions (MMT CO ₂ e) ^a
China	14,300
United States	5,640
European Union	3,440
India	3,520
Russian Federation	2,210
Japan	1,160
Total	30,270

Source: PBL 2022.

Notes: GHG = greenhouse gas; MMT CO₂e = million metric tons of carbon dioxide equivalent.

^a Column may not add due to rounding.

National Inventory

Per the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2021, total United States GHG emissions were approximately 6,340.2 million MT CO₂e (MMT CO₂e) in 2021 (EPA 2023). Total U.S. emissions have decreased by 2.3% from 1990 to 2021, down from a high of 15.8% above 1990 levels in 2007. Emissions increased from 2020 to 2021 by 5.2% (314.3 MMT CO₂e). Net emissions (i.e., including sinks) were 5,586.0 MMT CO₂e in 2021. Overall, net emissions increased 6.4% from 2020 to 2021 and decreased 16.6% from 2005 levels. Between 2020 and 2021, the increase in total GHG emissions was driven largely by an increase in CO₂ emissions from fossil fuel combustion due to economic activity rebounding after the height of the COVID-19 pandemic. The CO₂ emissions from fossil fuel combustion increased by 6.8% from 2020 to 2021, including a 11.4% increase in transportation sector emissions and a 7.0% increase in electric power sector emissions. The increase in electric power sector emissions was due in part to an increase in electricity demand of 2.4% since 2020. Overall, there has been a decrease in electric power sector emissions from 1990 through 2021, which reflects the combined impacts of long-term trends in many factors, including population, economic growth, energy markets, technological changes including energy efficiency, and the carbon intensity of energy fuel choices (EPA 2023).

State Inventory

According to California's 2000–2020 GHG emissions inventory, California emitted approximately 369.2 MMT CO₂e in 2020, including emissions resulting from out-of-state electrical generation (CARB 2022a). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high-GWP substances, and recycling and waste. Table 3.5-3 presents California GHG emission source categories and their relative contributions to the emissions inventory in 2020.

Table 3.5-3. GHG Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO ₂ e)	Percent of Total*
Transportation	136.60	37
Industrial uses	73.84	20
Electricity generation ^a	59.07	16
Residential and commercial uses	36.92	10
Agriculture and Forestry	33.22	9
High GWP substances	22.15	6
Recycling and waste	7.38	2
Totals	369.2	100

Source: CARB 2022a.

Notes: GHG = greenhouse gas; GWP = global warming potential; MMT CO₂e = million metric tons of carbon dioxide equivalent.

Emissions reflect 2020 California GHG inventory.

Totals may not sum due to rounding.

^a Includes emissions associated with imported electricity, which account for 18.46 MMT CO₂e.

Per capita GHG emissions in California have dropped from a 2001 peak of 13.8 MT per person to 9.3 MT per person in 2020, a 33% decrease. In 2016, statewide GHG emissions dropped below the 2020 GHG limit of 431 MMT CO₂e and have remained below that level since that time (CARB 2022a).

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 IPCC Synthesis Report (IPCC 2014) indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, rising sea levels, and ocean acidification (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand and supply. The primary effect of global climate change has been a rise in average global tropospheric temperature. Reflecting the long-term warming trend since pre-industrial times,

observed global mean surface temperature for the decade 2006–2015 was 0.87 °C (likely between 0.75 °C and 0.99 °C) higher than the average over the 1850–1900 period (IPCC 2018). Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Human activities are estimated to have caused approximately 1.0 °C (1.8 °F) of global warming above pre-industrial levels, with a likely range of 0.8 °C to 1.2 °C (1.4 °F to 2.2 °F) (IPCC 2018). Global warming is likely to reach 1.5 °C (2.7 °F) between 2030 and 2052 if it continues to increase at the current rate (IPCC 2018).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernible evidence that climate change is occurring in California and is having significant, measurable impacts in the state. Changes in the state's climate have been observed including an increase in annual average air temperature with record warmth from 2012 to 2016, more frequent extreme heat events, more extreme drought, a decline in winter chill, an increase in cooling degree days and a decrease in heating degree days, and an increase in variability of statewide precipitation (OEHHA 2018).

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers and snowpack—upon which the state depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the state's annual water supply. Impacts of climate on physical systems have been observed such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in spring snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters (OEHHA 2018).

Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed including climate change impacts on terrestrial, marine, and freshwater ecosystems. As with global observations, species responses include those consistent with warming: elevational or latitudinal shifts in range, changes in the timing of key plant and animal life cycle events, and changes in the abundance of species and in community composition. Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses a threat to public health as warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California as well as the variability of heat-related deaths and illnesses. In addition, since 1950, the area burned by wildfires each year has been increasing.

The California Natural Resources Agency (CNRA) has released four California Climate Change Assessments (2006, 2009, 2012, and 2018), which have addressed the following: acceleration of warming across the state, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming. To address local and regional governments' need for information to support action in their communities, the Fourth Assessment (CNRA 2018) includes reports for nine

regions of the state, including the Los Angeles Region, which includes western Riverside County, where the Project is located. Key projected climate changes for the Los Angeles Region include the following (CNRA 2018):

- Continued future warming over the Los Angeles region. Across the region, average maximum temperatures are projected to increase around 4°F to 5°F by the mid-century, and 5°F to 8°F by the late-century.
- Extreme temperatures are also expected to increase. The hottest day of the year may be up to 10°F warmer for many locations across the Los Angeles region by the late century under certain model scenarios. The number of extremely hot days is also expected to increase across the region.
- Despite small changes in average precipitation, dry and wet extremes are both expected to increase. By the late twenty-first century, the wettest day of the year is expected to increase across most of the Los Angeles region, with some locations experiencing 25% to 30% increases under certain model scenarios. Increased frequency and severity of atmospheric river events are also projected to occur for this region.
- Sea levels are projected to continue to rise in the future, but there is a large range based on emissions scenario and uncertainty in feedbacks in the climate system. Roughly 1 to 2 feet of sea level rise is projected by the mid-century, and the most extreme projections lead to 8 to 10 feet of sea level rise by the end of the century.
- Projections indicate that wildfire may increase over southern California, but there remains uncertainty in quantifying future changes of burned area over the Los Angeles region.

3.5.2 Relevant Plans, Policies, and Ordinances

Federal

To date, national standards have not been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency

labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks. It should be noted that the U.S. Environmental Protection Agency (EPA) in 2019 proposed to freeze the vehicle fuel efficiency standards at their planned 2020 level (37 mpg), canceling any future strengthening (currently 54.5 mpg by 2026). However, this proposal was scrapped in December 2021, and the current finalized rule calls for vehicles in model years 2023–2026 to reduce their greenhouse gas emissions between 5% and 10% each year. This means that by 2026, cars will be required to achieve 40 miles per gallon.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6% to 23% over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

On September 27, 2019, EPA and NHTSA published the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program.” (84 Fed. Reg. 51,310 (Sept. 27, 2019) (EPA and NHTSA 2019). The SAFE Rule (Part One) revoked California’s authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, EPA and NHTSA finalized rulemaking for SAFE Part Two sets CO₂ emissions standards and corporate average fuel economy (CAFE) standards for passenger vehicles and light duty trucks, covering model years 2021–2026. The current EPA administration repealed SAFE Rule Part One, effective January 28, 2022 and is reconsidering Part Two.

In December 2021, EPA finalized federal GHG emissions standards for passenger cars and light trucks for Model Years 2023 through 2026. These standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector and are based on sound science and grounded in a rigorous assessment of current and future technologies. The updated standards will result in avoiding more than three billion tons of GHG emissions through 2050 (EPA 2021).

Clean Power Plan and New Source Performance Standards for Electric Generating Units

On October 23, 2015, the EPA published a final rule (effective December 22, 2015) establishing the carbon pollution emission guidelines for existing stationary sources: electric utility generating units (80 Federal Register [FR] 64510–64660), also known as the Clean Power Plan (CPP). These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO₂ emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: one fossil-fuel-fired electric utility steam-generating unit and two stationary combustion turbines. Concurrently, the EPA published a final rule (effective October 23, 2015) establishing standards of performance for GHG emissions from new, modified, and reconstructed stationary sources: electric utility generating units (80 FR 64661–65120). The rule prescribes CO₂ emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the CPP pending resolution of several lawsuits. Additionally, in March 2017, the federal government directed the EPA Administrator to review the CPP to determine whether it is consistent with current executive policies concerning GHG emissions, climate change, and energy. On January 13, 2021 EPA finalized its revised NSPS for new power plants that abandoned the earlier proposal of increasing the limits on CO₂ emissions. However, the final rule contains a new restriction that Section 111 can only be used to regulate greenhouse gases from stationary sources if the source category is responsible for at least 3% of U.S. greenhouse gas emissions. Other sectors that are currently regulated under the Clean Air Act (such as oil and gas facilities) could be affected, and the rule could bind the EPA from issuing future GHG emissions on new stationary sources.

On May 11, 2023, EPA proposed new GHG emission limits and guidelines for new and existing fossil fuel-fired power plants. This proposal covers new and existing coal and natural gas-fired power plants. The EPA focuses the proposed new limits and guidelines on baseload plants that plan to operate far into the future to ensure they control GHG emissions and is proposing performance standards based on carbon capture and sequestration (CCS) technologies, and for natural gas plants. The EPA also includes a performance standard for using low-GHG hydrogen. EPA proposes emission standards based on technologies that companies are already pursuing, which now have lower costs due to Congressional investments through the Inflation Reduction Act.

The Inflation Reduction Act of 2022

The Inflation Reduction Act was signed into law by President Biden in August 2022. The bill includes specific investment in energy and climate reform and is projected to reduce GHG emissions within the United States by 40% as compared to 2005 levels by 2030. The bill allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of electric vehicles, and includes measures that will make homes more energy efficient.

State

California Air Resources Board

The California Air Resources Board (CARB) is responsible for coordination and oversight of state and local air pollution control programs. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO₂ equivalents (CO₂e) in the world and produced 459 gross million metric tons of carbon dioxide equivalent (MMTCO₂e) in 2013. The transportation sector is the state's largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The state legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB) 32, California Global Warming Solutions Act of 2006, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the legislation's major provisions.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for reporting and verifying statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

CARB Scoping Plan

CARB adopted the Scoping Plan to achieve AB 32 goals. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB

determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29% below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as “business-as-usual”).¹ The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the state’s Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program.² Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key Scoping Plan elements include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33% by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85% of California’s GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing state laws and policies, including California’s clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of the State of California’s long-term commitment to AB 32 implementation.
- The California Sustainable Freight Action Plan was developed in 2016 and provides a vision for California’s transition to a more efficient, more economically competitive, and less polluting freight transport system. This transition of California’s freight transport system is essential to supporting the state’s economic development in coming decades while reducing pollution.
- CARB’s Mobile Source Strategy demonstrates how the state can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from

¹ CARB defines business-as-usual (BAU) in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB’s definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

² The Climate Action Team, led by the secretary of the California Environmental Protection Agency, is a group of state agency secretaries and heads of agencies, boards, and departments. Team members work to coordinate statewide efforts to implement global warming emissions reduction programs and the state’s Climate Adaptation Strategy.

transportation emissions, and reduce petroleum consumption over the next 15 years. The mobile Source Strategy includes increasing ZEV buses and trucks.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated in light of current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 MMTCO₂e to 545 MMTCO₂e. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7%, down from 29%. CARB also provided a lower 2020 inventory forecast that incorporated state-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16%.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. This updated Scoping Plan summarized the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

In 2016, the Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40% below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017, CARB adopted a second update to the Scoping Plan (CARB 2022b). The 2017 Scoping Plan details how the state will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping plan are to provide direct GHG emissions reductions, support climate investment in disadvantaged communities, and support the Clean Power Plan and other federal actions.

Adopted December 15, 2022, CARB's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85% below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines Section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and

are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place.

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the state's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects. CARB specifically states that Appendix D does not address other land uses (e.g., industrial). However, CARB plans to explore new approaches for other land use types in the future.

As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

Senate Bill 32 and Assembly Bill 197

Enacted in 2016, SB 32 and AB 197 are companion bills. SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40% below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the Board as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions-reduction measures when updating the Scoping Plan.

SB 375 (The Sustainable Communities and Climate Protection Act of 2008)

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet AB 32's GHG reduction goals. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

An SCS does not: (1) regulate the use of land; (2) supersede the land use authority of cities and counties; or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it (California Government Code Section 65080[b][2][K]). Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

AB 1493 and Executive Order B-16-12 (Pavley Regulations and Fuel Efficiency Standards)

AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011. The regulations establish one set of emission standards for passenger vehicle and light duty truck model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new passenger vehicles are anticipated to emit 34% fewer CO₂e emissions and 75% fewer smog-forming emissions. EO B-16-12 (March 2012) required that state entities under the governor's direction and control support and facilitate the rapid commercialization of ZEVs. On a statewide basis, EO B-16-12 identified a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

Executive Order S-1-07

EO S-1-07 (January 2007, implementing regulation adopted in April 2009) sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO₂e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard was to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (17 CCR 95480 et seq.). The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel—including extraction/feedstock production, processing, transportation, and final consumption—per unit of energy delivered.

SB 1368 (Emission Performance Standards)

SB 1368, which is AB 32's companion bill, directs the California Public Utilities Commission (CPUC) to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the state. The CPUC adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, for 1,100 pounds of CO₂ per megawatt-hour.

SB 1078, SB 107, and SBX1-2 (Renewable Electricity Standards)

SB 1078 requires California to generate 20% of its electricity from renewable energy by 2017. SB 107 (2006) changed the due date to 2010 instead of 2017. On November 17, 2008, then Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33% of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33% renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. SBX1-2 codified the 33% by 2020 target.

SB 350 (Clean Energy and Pollution Reduction Act of 2015)

Signed into law on October 7, 2015, SB 350 implements Executive Order B-30-15's goals. The SB 350 objectives are to increase the procurement of electricity from renewable sources from 33% to 50% (with interim targets of 40% by 2024, and 25% by 2027) and to double the energy efficiency savings in electricity and natural gas end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

AB 398 (Market-Based Compliance Mechanisms)

Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the state. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts' responsibility and authority to curb toxic air contaminants and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40% by 2030 and prioritized Cap-and-Trade spending to various programs including reducing diesel emissions in impacted communities.

SB 150 (Regional Transportation Plans)

Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with state targets (i.e., 40% below 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

SB 100 (California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases)

Signed into law in September 2018, SB 100 increased California's renewable electricity portfolio from 50% to 60% by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

AB 1346 (Air Pollution: Small Off-Road Engines)

Signed into Law in October 2021, AB 1346 requires CARB, to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines, consistent with federal law, by July 1, 2022. The bill requires CARB to identify and, to the extent feasible, make available funding for commercial rebates or similar incentive funding as part of any updates to existing applicable funding program guidelines to local air pollution control districts and air quality management districts to implement to support the transition to zero-emission small off-road equipment operations.

AB 1279 (The California Climate Crisis Act)

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% 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 CO₂ removal solutions and carbon capture, utilization, and storage technologies.

Senate Bill 605 and Senate Bill 1383

SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of SLCPs in the state (California Health and Safety Code Section 39730) and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018 (California Public Resources Code Sections 42652–43654). SB 1383 also establishes specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for CH₄ and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon) and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its SLCP Reduction Strategy in March 2017 (CARB 2017). The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, methane, and fluorinated gases (CARB 2017).

Assembly Bill 1757

AB 1757 (September 2022) requires the CNRA to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions that reduce GHG emissions for future years 2030, 2038, and 2045. These targets are to be determined by no later than January 1, 2024, and are established to support the state's goals to achieve carbon neutrality and foster climate adaptation and resilience.

SB 1020 (100% Clean Electric Grid)

Signed on September 16, 2022, SB 1020 provides additional goals for the path to the 2045 goal of 100% clean electricity retail sales. It creates a target of 90% clean electricity retail sales by 2035 and 95% clean electricity retail sales by 2040.

SB 905 (Carbon Sequestration Program)

Signed on September 16, 2022, SB 905 establishes regulatory framework and policies that involve carbon removal, carbon capture, utilization, and sequestration. It also prohibits the injecting of concentrated carbon dioxide fluid into a Class II injection well for the purpose of enhanced oil recovery.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars (ACC) I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle (LEV) regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for ZEVs that contributes to both types of emission reductions (CARB 2023). The package includes elements

to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program, which was adopted in August 2022, established the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2023). The main objectives of ACC II are as follows:

- Maximize criteria air pollutant and GHG emission reductions through increased stringency and real-world reductions
- Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use

The ACC II rulemaking package also considers technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts.

CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission "last-mile" delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- **Zero-Emission Truck Sales:** Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales are required to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales.
- **Company and Fleet Reporting:** Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

Executive Order S-3-05

Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80% below 1990 levels

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07

Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the LCFS on April 23, 2009.

Executive Order S-13-08

Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08

Issued on November 17, 2008, Executive Order S-14-08 expands the state's Renewable Energy Standard to 33% renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33% of electricity sold in the state come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33% renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09

Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's RPS to 33% by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20% renewable energy by 2017, and SB 107 (2006), which advanced the 20% deadline to 2010, a goal which was expanded to 33% by 2020 in the 2005 Energy Action Plan II.

Executive Order B-18-12

EO B-18-12 (April 2012) directed state agencies, departments, and other entities under the Governor's executive authority to take action to reduce entity-wide GHG emissions by at least 10% by 2015 and 20% by 2020, as measured against a 2010 baseline. EO B-18-12 also identified goals for existing state buildings for reducing grid-based energy purchases and water use.

Executive Order B-30-15

Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40% below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMT CO₂e. The 2030 target acts as an interim goal on the way to achieving reductions of 80% below 1990 levels by 2050, a goal set by Executive Order S-3-05. Executive Order B-30-15 also requires the state's climate adaptation plan to be updated every 3 years and for the state to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the legislature codified the goal of reducing GHG emissions to 40% below 1990 levels by 2030.

Executive Order B-55-18

Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

Executive Order N-79-20

Issued on September 23, 2020, Executive Order N-79-20 established a goal to end the sales of new internal combustion engine vehicles in the state as soon as possible, and no later than 2035, and continue to phaseout fossil-fueled cars and trucks. By setting a course to end sales of internal combustion passenger vehicles by 2035, the Governor's Executive Order establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045. It is important to note that the Executive Order focuses on new vehicle sales for automakers and therefore does not require Californians to give up the existing cars and trucks they already own.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations

The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, Sections 1601–1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

Title 24 Building Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

Title 24 California Green Building Standards Code

The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect on January 1, 2023 (2022 CALGreen). The 2022 CALGreen standards continue to improve upon the existing standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

Water

SB X7-7, or the Water Conservation Act of 2009, required that all water suppliers increase their water use efficiency with an overall goal of reducing per capita urban water use by 20% by December 31, 2020. Each urban water supplier was required to develop water use targets to meet this goal.

Solid Waste

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. The minimum threshold of organic waste generation by businesses decreases

over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

SB 1383 (2016) requires a 50% reduction in organic waste disposal from 2014 levels by 2020 and a 75% reduction by 2025—essentially requiring the diversion of up to 27 million tons of organic waste—to reduce GHG emissions. SB 1383 also requires that not less than 20% of edible food that is currently disposed be recovered for human consumption by 2025.

Other State Actions

Senate Bill 97

SB 97 (2007) directed the Governor’s Office of Planning and Research and CNRA to develop guidelines under CEQA for the mitigation of GHG emissions. CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures (14 CCR 15126.4[c]). The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. CNRA also acknowledged that a lead agency could consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project’s GHG emissions (CNRA 2009).

With respect to GHG emissions, CEQA Guidelines Section 15064.4(a), as subsequently amended in 2018, states that lead agencies “shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate” GHG emissions. The CEQA Guidelines now note that an agency “shall have discretion to determine, in the context of a particular project, whether to: (1) Quantify greenhouse gas emissions resulting from a project; and/or (2) Rely on a qualitative analysis or performance based standards” (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

Regional

South Coast Air Quality Management District

Air districts typically act in an advisory capacity to local governments in establishing the framework for environmental review of air pollution impacts under CEQA. This may include recommendations regarding significance thresholds, analytical tools to estimate emissions and assess impacts, and mitigations for potentially significant impacts. Although air districts will also address some of these issues on a project-specific basis as responsible agencies, they may provide general guidance to local governments on these issues (SCAQMD 2008). As discussed in Section 3.5.3, Thresholds of Significance, the South Coast Air Quality Management District (SCAQMD) has recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential, commercial, industrial, and mixed-use development projects; however, these thresholds were not adopted.

Southern California Association of Governments

On September 3, 2020, the Southern California Association of Governments (SCAG) Regional Council adopted Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS]). The RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The strategy was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG's RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15. The RTP/SCS is a long-range vision plan that balances future mobility and housing needs with economic, environmental, and public health goals.

The RTP/SCS contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals and Federal Clean Air Act (FCAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently.

Local

The City of Gardena General Plan Land Use Plan, Circulation Plan, and Environmental Justice Element identify the following air quality goals and policies that apply to the Project (City of Gardena 2021):

CI Goal 1: Promote a safe and efficient circulation system that benefits residents and businesses, and integrates with the greater Los Angeles/South Bay transportation system.

Policy 1.1: Prioritize long - term sustainability for the City of Gardena, in alignment with regional and State goals, by promoting infill development, reduced reliance on single - occupancy vehicle trips, and improved multi - modal transportation networks, with the goal of reducing air pollution and greenhouse gas emissions, thereby improving the health and quality of life for residents.

Policy 1.2: Minimize truck traffic through Gardena and minimize adverse impacts by regulating off - street truck parking, intrusions into neighborhoods, and noise levels.

CI Goal 3: Develop Complete Streets to promote alternative modes of transportation that are safe and efficient for commuters, and available to persons of all income levels and disabilities.

Policy 3.4: Maintain a citywide bicycle route and maintenance plan that promotes efficient and safe bikeways integrated with the MTA's regional bicycle system.

Policy 3.5: As roadways are repaved or otherwise improved, evaluate opportunities to enhance the quality and safety of the roadway by implementing new or improved walking, bicycling, or public transit infrastructure. If no walking, bicycling, or public transit improvements are being provided, a report to the City Council should provide an explanation for why such improvements are not needed along this roadway segment.

LU Goal 3: Provide high quality, attractive and well-maintained commercial, industrial, and public environments that enhance the image and vitality of the City.

Policy 3.6: New commercial and industrial developments shall meet or exceed local and state requirements pertaining to noise, air, water, seismic safety and any other applicable environmental regulations.

EJ Goal 1: Reduce greenhouse gas emissions, enhance air quality, and reduce impacts associated with climate change.

Policy 1.2: Attract new clean industry to the City which do not emit smoke, noise, offensive odors, or harmful industrial wastes.

Policy 1.13: Reduce communitywide greenhouse gas emissions locally by actively supporting regional efforts to reduce greenhouse gases.

City of Gardena Climate Action Plan

In 2017, the City, in cooperation the South Bay Cities Council of Governments, prepared a Gardena Climate Action Plan (Gardena CAP), which includes the goal to reduce GHG emissions to 15% below 2005 levels by the year 2020 and the longer-term GHG reduction goal of 49% below 2005 levels by 2035. The Gardena CAP establishes a series of energy efficiency related measures intended to reduce GHG emissions based on the AB 32 Scoping Plan. Those applicable to the Project are Renewables Portfolio Standard for Building Energy Use, Assembly Bill 1109 Energy Efficiency

Standards for Lighting, Electricity Energy Efficiency, Residential Energy Efficiency Standards, Commercial Energy Efficiency Requirements and Residential Renewable Energy Requirements. The Gardena CAP is a planning tool with optional GHG reduction strategies and is not a qualified CAP for use in CEQA streamlining.

3.5.3 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. Based on these thresholds, implementation of the proposed Project would have a significant adverse impact related to GHG emissions if it would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Based on the results of the Initial Study prepared for the Project, the following thresholds of significance are used to evaluate potential GHG impacts associated with the Project:

GHG-1. Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG-2. Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project, such as the Project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated on a project-level under CEQA.

With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or performance-based standards" (14 CCR 15064.4[a]). A lead agency may use a "model or methodology" to estimate GHG emissions and has the 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" (14 CCR 15064.4[c]). The CEQA Guidelines provide that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment (14 CCR 15064.4[b]):

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

In addition, the CEQA Guidelines specify that “when adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence” (14 CCR 15064.7[c]).

The extent to which a project increases or decreases GHG emissions in the existing environmental setting should be estimated in accordance with Section 15064.4, Determining the Significance of Impacts from Greenhouse Gas Emissions, of the CEQA Guidelines. The CEQA Guidelines indicate that when calculating GHG emissions resulting from a project, lead agencies shall make a good-faith effort based on scientific and factual data (Section 15064.4[a]), and lead agencies have discretion to select the model or methodology deemed most appropriate for enabling decision makers to intelligently assess the project’s incremental contribution to climate change (Section 15064.4[c]).

The CEQA Guidelines do not indicate an amount of GHG emissions that constitutes a significant impact on the environment. Instead, they authorize the lead agency to consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence (14 CCR 15064.4[a] and 15064.7[c]).

The Governor’s Office of Planning and Research technical advisory titled CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review states that “public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact” (OPR 2018). Furthermore, the advisory document indicates that “in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a ‘significant impact,’ individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice” (OPR 2008).

SCAQMD Guidance

In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008). This guidance document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO₂e per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (SCAQMD Resolution No. 08-35).

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

- Tier 1** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2** Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3** Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO₂e per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO₂e per year), commercial projects (1,400 MT CO₂e per year), and mixed-use projects (3,000 MT CO₂e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO₂e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4** Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO₂e per service population per year (MT CO₂e/SP/year) for project level analyses and 6.6 MT CO₂e/SP/year for plan level analyses. The 2035 efficiency targets are 3.0 MT CO₂e/SP/year for project level analyses and 4.1 MT CO₂e/SP/year for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- Tier 5** Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Notably, the recommended thresholds for residential, commercial, and mixed-use projects have not been adopted by SCAQMD. These thresholds have been termed “interim” because at the time, SCAQMD anticipated that CARB would be adopting a statewide significance threshold that would inform and provide guidance to SCAQMD in its adoption of a final threshold. To date, no statewide threshold has been adopted and the interim thresholds remain in place.

The SCAQMD interim thresholds were based on implementation of EO S-3-05, achieving GHG emissions 80% below 1990 levels and were set at a level to “capture” 90% of GHG emissions from these land use sectors. The term “capture” meant that 90% of total emissions from new projects would be subject to some type of CEQA analysis (i.e., potentially significant) (SCAQMD 2008).

Approach to Determining Significance

Given that neither the City, nor CARB, nor SCAQMD have adopted a numerical threshold of significance for GHG emissions within the City or region, the approach for evaluating the Project's impacts related to GHG emissions relies on compliance with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs, which includes CARB's Scoping Plan, SCAG's RTP/SCS, and statewide 2030 and 2050 GHG reduction targets identified in SB 32 and EO S-3-05. The compliance evaluation is the sole basis for determining the significance of the Project's GHG-related impacts on the environment.

Nevertheless, and in accordance with Section 15064.4 of the State CEQA Guidelines, GHG emissions resulting from construction and operation of the Project were quantitatively estimated. In addition, to further support the compliance determination noted above, the Project's GHG emissions were compared to the SCAQMD interim threshold of 3,000 MT CO₂e per year under Tier 3, Option 1 (commercial projects) and Option 2 (all non-industrial projects). Per the SCAQMD guidance, construction emissions should be amortized over the operational life of the Project, which is assumed to be 30 years (SCAQMD 2008). The GHG emissions associated with implementation of the Project were estimated using industry standard and accepted software tools, techniques, and emissions factors, as described below, for construction and operation.

Methodology

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2022.1.1 (CalEEMod). Details of the modeling assumptions and emission factors are provided in Appendix F of the EIR. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The Project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. The Project's operational-related GHG emissions would be generated by vehicular traffic, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste. Below is a description of the primary sources of operational emissions:

- **Area Sources.** Area source emissions occur from architectural coatings, landscaping equipment, and consumer products. Landscaping is anticipated to occur throughout the Project site. Additionally, the primary emissions from architectural coatings are volatile organic compounds, which are relatively insignificant as direct GHG emissions. The Project would result in approximately 5.5 MTCO₂e/yr (refer to Table 3.5-6).
- **Energy Consumption.** Energy consumption consists of emissions from Project consumption of electricity and natural gas. Although the Project is a speculative warehouse, the analysis conservatively assumed a worst-case scenario that total building area of the warehouse would be refrigerated. The Project would result in approximately 973 MTCO₂e/yr from energy consumption (refer to Table 3.5-6).

- **Off-Road Equipment.** Operational off-road emissions would be generated by off-road cargo handling equipment used during operational activities. For this Project it was assumed that the mixed use would include three forklifts per Client information. Based on CARB OFFROAD emissions data, the forklifts would generate approximately 10.4 MTCO₂e/yr.
- **Mobile Sources.** Mobiles sources from the standard Project operations were calculated with CalEEMod based on the trip generation from the Transportation Analysis. As shown in Table 3.5-6, the mobile source emissions from the Project would be approximately 1,902 MTCO₂e/yr.
- **Solid Waste.** Solid waste releases GHG emissions in the form of methane when these materials decompose. The Project would result in approximately 96 MTCO₂e/yr from solid waste (refer to Table 3.5-6).
- **Water and Wastewater.** GHG emissions from water demand would occur from electricity consumption associated with water conveyance and treatment. The Project would result in approximately 186 MTCO₂e/yr from water and wastewater conveyance and treatment (refer to Table 3.5-6).

Laws, Ordinances, and Regulations

Laws, Ordinances, and Regulations (LORs) were incorporated in the Project assumptions for analysis and are listed below as LOR measures. LORs are existing requirements and conditions of approval that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical standard conditions and requirements include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because LORs are neither Project specific nor a result of development of the Project, they are not considered to be either PDFs or Mitigation Measures.

LOR GHG-1. Prior to the issuance of grading permits, the City Engineer shall confirm that the Grading Plan, Building Plans and Specifications require all construction contractors to comply with South Coast Air Quality Management District's (SCAQMD's) Rules 402 and 403 to minimize construction emissions of dust and particulates. The measures include, but are not limited to, the following:

- Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
- All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- All material transported off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
- Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

LOR GHG-2. The applicant shall require by contract specifications that the interior and exterior architectural coatings (paint and primer including parking lot paint) products used would comply with

SCAQMD Rule 1113 which requires building envelope coatings to have a volatile organic compound rating of 50 grams per liter or less.

LOR GHG-3. Require diesel powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations, Section 2449.

LOR GHG-4. Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the City's Water Efficient Landscape requirements (Chapter 15.60 of the City's Municipal Code).

LOR GHG-5. The Project shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10) require buildings to be designed to have 15 percent of the roof area "solar ready" that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

LOR GHG-6. The Project shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:

- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 (nonresidential) of the California Green Building Standards Code Part 11.
- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance Section 5.410 (nonresidential) of the California Green Building Standards Code Part 11.
- To facilitate future installation of electric vehicle supply equipment (EVSE), nonresidential construction shall comply with Section 5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.

3.5.3.1 Project Design Features

Project Design Feature (PDF) are elements of the Project that are designed to reduce its environmental impact. The following PDF has been incorporated into the Project:

PDF-GHG-1 The Project shall be designed to be all-electric and prohibit connection to natural gas infrastructure. Using electric instead of natural gas-powered appliances replaces a more emissions-intensive fossil fuel source of energy with a less emissions-intensive source of energy as electricity from the grid is increasingly transitioning to renewable sources.

3.5.4 Impact Analysis

Threshold GHG-1. Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

and

Threshold GHG-2. Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As discussed previously, the Project’s compliance with regulatory programs adopted by CARB, and other state and local agencies is used to evaluate the significance of the Project’s GHG emissions. The Project’s potential to conflict with applicable GHG reduction plans is evaluated below.

SCAG RTP/SCS Consistency

GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the RTP/SCS is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the state. The Project’s consistency with the RTP/SCS goals is analyzed in detail in Table 3.5-4.

The RTP/SCS goals were used to determine consistency with the planning efforts previously stated. As shown in Table 3.5-4, the Project would be consistent with the stated RTP/SCS goals. Further, compliance with applicable state standards would ensure consistency with state and regional GHG reduction planning efforts. Therefore, the Project would not interfere with SCAG’s ability to achieve the region’s post-2020 mobile source GHG reduction targets. A less-than-significant impact would occur in this regard, and no mitigation is required.

Table 3.5-4. Project Consistency with the Regional Transportation Plan/ Sustainable Communities Strategy

SCAG Goals	Consistency Analysis
GOAL1: Encourage regional economic prosperity and global competitiveness.	Consistent. This policy would be implemented at the jurisdiction level by cities and counties within the SCAG region as part of local land use and policy planning efforts. Nonetheless, the Project would involve construction of mixed-use commercial/industrial (warehouse ³) development on a currently blighted an underutilized property. Thus, the Project would establish a jobs-producing and tax-generating land use that would meet contemporary industry standards.

³ “Warehouse” includes distribution uses as set forth in the Project Description.

Table 3.5-4. Project Consistency with the Regional Transportation Plan/ Sustainable Communities Strategy

SCAG Goals	Consistency Analysis
GOAL 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent. Although this Project is not a transportation improvement project, the Project is located near existing transit routes on Artesia Boulevard, Western Avenue, and access to I-110 and SR-91, which would help to facilitate regional goods movement from the warehouse component throughout Southern California.
GOAL 3: Enhance the preservation, security, and resilience of the regional transportation system.	Consistent. A local transportation assessment (Appendix J2) has been prepared to determine the Project's potential effect on the regional and local circulation system. The Project would not adversely affect the local or circulation system.
GOAL 4: Increase person and goods movement and travel choices within the transportation system.	Consistent. The Project would include construction and operation of mixed-use development that includes a warehouse component. The Project site would be easily and efficiently accessible to regional highways (i.e., I-105, I-110 and SR-91), which would help to facilitate regional goods movement throughout Southern California.
GOAL 5: Reduce greenhouse gas emissions and improve air quality.	<p>Consistent. The reduction of energy use, improvement of air quality, and promotion of more environmentally sustainable development are encouraged through the development of alternative transportation methods, green design techniques for buildings, and other energy-reducing techniques. The Project is required to comply with the provisions of the California Building Energy Efficiency Standards and the Green Building Standards Code (CALGreen). The Project will also be required to install solar as a mitigation measure.</p> <p>In addition, according to SCAG's Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028 (SCAG 2013). As the Project includes a warehouse component, it would meet the growing demand for warehousing space, and would do so in an area that is proximate to regional highways (i.e., I-105, I-110 and SR-91), thereby reducing the need for</p>

Table 3.5-4. Project Consistency with the Regional Transportation Plan/ Sustainable Communities Strategy

SCAG Goals	Consistency Analysis
	longer distance trips which could result in additional air pollutant and GHG emissions.
GOAL 6: Support healthy and equitable communities.	<p>Consistent. This policy pertains to health and equitable communities, which are addressed at the policy-level by the City's Safety Element. The Project would be designed consistent with applicable health and safety requirements, including the California Building Code.</p> <p>Additionally, as discussed in Section 3.1, Air Quality, health risk assessments were prepared for the Project, which concluded that, with implementation of MM-AQ-1 and MM AQ-2, the Project would not have a significant adverse effect on the health of the local community.</p> <p>By providing a tax-generating and jobs-producing land use, the Project would drive economic growth within the City and region, thereby supporting equity in the City.</p>
GOAL 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.	<p>Consistent. As climate change continues to increase the number of instances of disruption to local and regional systems, it will become increasingly more urgent for local jurisdictions to employ strategies to reduce their individual contributions.</p> <p>The Project would involve a mixed-use development that would increase the emission of GHG and air pollutants. However, as discussed in Section 3.1, Air Quality, and herein, the Project would implement mitigation measures to reduce air quality and greenhouse gas emissions to the maximum extent feasible. Moreover, siting the Project in a location that is proximate to regional highways (i.e., I-105, I-110 and SR-91) would facilitate the integration of a regional transportation network.</p>
GOAL 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	<p>Consistent. Development of the proposed Project would provide quick and efficient access to multiple freeways, thereby eliminating the need for truck traffic to take longer routes through residential areas and supporting efficient travel. The Project would also include passenger EV charging stations, per CALGreen</p>

Table 3.5-4. Project Consistency with the Regional Transportation Plan/ Sustainable Communities Strategy

SCAG Goals	Consistency Analysis
	standards. The Project would include 124 automobile parking stalls, including 25 EV capable parking spaces and 6 EVCS spaces (charging stations)
GOAL 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Consistent. The Project does not involve housing development; therefore, this goal is not applicable. However, the Project site is located within a relatively short walking distance to local bus routes.
GOAL 10: Promote conservation of natural and agricultural lands and restoration of habitats.	No conflict identified. The Project site is entirely developed and located within an urban area. No natural and agricultural lands are located within the immediate Project vicinity.

Source: Southern California Association of Governments, *Regional Transportation Plan/Sustainable Communities Strategy*, 2020.

Consistency with the CARB 2022 Scoping Plan

As previously noted, CARB’s 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85% below 1990 levels by 2045 in accordance with AB 1279. The transportation, electricity, and industrial sectors are the state’s largest GHG contributors. The 2022 Scoping Plan intends to achieve the AB 1279 targets primarily through zero-emission transportation (e.g., electrifying cars, buses, trains, and trucks). Additional GHG reductions would be achieved through decarbonizing the electricity and industrial sectors.

Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include implementing SB 100, which would achieve 100% clean electricity by 2045; achieving 100% zero-emission vehicle sales in 2035 through Advanced Clean Cars II; and implementing the Advanced Clean Fleets regulation to deploy zero-emission electric vehicle buses and trucks. Additional transportation policies include the Off-Road Zero-Emission Targeted Manufacturer Rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Off-Road Zero-Emission Targeted Manufacturer Rule, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375. In addition, the 2022 Scoping Plan emphasizes the decarbonization of buildings in commercial and residential uses through policies and codes that prescribe all-electric developments. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology.

As shown in Table 3.5-5, approximately 92% of the Project’s GHG emissions would be from energy and mobile sources, which would be further reduced by the 2022 Scoping Plan measures described

above. It is noted that the City has no control over vehicle emissions (approximately 70% of the Project's total emissions). However, these emissions would decline in the future due to the statewide measures discussed above, as well as cleaner technology and fleet turnover. Several of the state's plans and policies would contribute to a reduction in the Project's mobile source emissions, including the following:

- **CARB's Advanced Clean Truck Regulation:** Adopted in June 2020, CARB's Advanced Clean Truck Regulation requires truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8.
- **Executive Order N-79-20:** Executive Order N-79-20 establishes the goal for all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, to be zero-emission by 2035 and all medium and heavy-duty vehicles to be zero-emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new ZEVs "towards the target of 100 percent."
- **CARB's Mobile Source Strategy:** CARB's Mobile Source Strategy takes an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's targets by increasing the adoption of ZEV buses and trucks.
- **CARB's Sustainable Freight Action Plan:** The Sustainable Freight Action Plan which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. This Plan applies to all trucks accessing the Project site and may include existing trucks or new trucks that are part of the statewide goods movement sector.
- **CARB's Emissions Reduction Plan for Ports and Goods Movement:** CARB's Emissions Reduction Plan for Ports and Goods Movement identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories.

While these measures are not directly applicable to the Project, any commercial activity associated with goods movement would be required to comply with these measures as adopted. The Project would not obstruct or interfere with efforts to increase ZEVs or state efforts to improve system efficiency. Compliance with applicable state standards (e.g., continuation of the Cap-and-Trade regulation; CARB's Mobile Source Strategy, Sustainable Freight Action Plan, and Advanced Clean Truck Regulation; Executive Order N-79-20; SB 100/renewable electricity portfolio improvements that require 60% renewable electricity by 2030 and 100% renewable by 2045, etc.) would ensure consistency with state and regional GHG reduction planning efforts, including the 2022 Scoping Plan. It is also noted that the Project would not convert any Natural and Working Lands (NWL) and/or decrease the state's urban forest carbon stock, which are areas of emphasis in the 2022 Scoping Plan.

As noted, many of the 2022 Scoping Plan measures are not directly applicable to the Project; however, there are Project-specific operational emission reduction measures that can be implemented to ensure consistency with CARB strategies for the reduction of GHGs. Without implementation of these Project-specific measures, the Project has the potential to conflict with the state's reduction strategies, resulting in a potentially significant impact. The Project has incorporated

these measures as PDF-GHG-1, which serves to decarbonize buildings, by designing the building to be all-electric and prohibiting connection to natural gas infrastructure. The Project also includes MM-AQ-2, which requires the use of all-electric cargo handling equipment. In addition, the Project includes MM-GHG-1, which requires the provision of on-site renewable energy. With implementation of PDF-GHG-1, MM-AQ-2 and MM-GHG-1, the Project would not conflict with the 2022 Scoping Plan and would be consistent with applicable GHG reduction strategies to decarbonize buildings and increase renewable energy production; accordingly, the impact would be less than significant.

City of Gardena Climate Action Plan Consistency

The City adopted the Gardena CAP in 2017, which is a planning tool with optional GHG reduction strategies and is not a qualified CAP for use in CEQA streamlining. The Project is in support of Measures EE:C4 and EE:D1 of the Gardena CAP, which are to upgrade older commercial buildings and require new buildings to achieve or exceed Title 24 standards, and Measure EGS: A2, which aims to accelerate the implementation of renewable energy technologies. As such, the proposed Project would be consistent with the Gardena CAP.

Quantification of Emissions

In accordance with CEQA Guidelines 15064.4(c) the Project’s construction and operational emissions have been quantified for disclosure purposes only. The Project’s significance has been evaluated based on its potential to conflict with applicable GHG reduction plans.

Short-Term Construction Greenhouse Gas Emissions

Project construction activities would generate direct CO₂, N₂O, and CH₄ emissions from construction equipment, transport of materials, and construction workers commuting to and from the Project site. Construction GHG emissions are typically summed and amortized over a 30-year period (SCAQMD 2009). Total GHG emissions generated during all construction phases were combined and are presented in Table 3.5-5.

Table 3.5-5. Construction-Related Greenhouse Gas Emissions

Category	MTCO ₂ e
Construction	755
30-Year Amortized Construction	25.16

Source: CalEEMod version 2022.1. Refer to Appendix F.

As indicated in Table 3.5-5, Project construction-related emissions would total approximately 755 MTCO₂e over the course of construction. Construction GHG emissions amortized over a 30-year period would be 25.16 MTCO₂e per year. Once construction is complete, construction-related GHG emissions would cease.

Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions would occur over the Project's lifetime. GHG emissions would result from direct emissions such as Project-generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from the Project, the emissions associated with solid waste generated from the Project, and any fugitive refrigerants from air conditioning or refrigerators.

The Project's operational GHG emissions are provided in Table 3.5-6. The proposed Project is forecast to generate 725 average daily vehicle trips (ADT), which includes 75 average daily truck trips. Special event trips (220 daily trips) were conservatively assumed to occur 36 times in the year, as they are held at most three times per month. Annual emissions for special events were calculated by multiplying the maximum single day emissions from these events by 36 (the number of events per year).

As shown in Table 3.5-6, the Project would potentially generate a net of approximately 3,687 MTCO_{2e} annually from both construction and operations prior to mitigation and with the incorporation of MM-GHG-1 and MM-GHG-2, the Project would generate a net of 2,994 MTCO_{2e}.

Table 3.5-6. Operational Project Greenhouse Gas Emissions

Emissions Source	Unmitigated MTCO _{2e} per Year	Mitigated MTCO _{2e} per Year
Existing Conditions	167	167
Proposed		
Construction Amortized Over 30 Years	25.16	25.16
Area Source	5.45	5.45
Energy ¹	972.74	877.38 ²
Mobile ³	1,875.34	1,875.34
Mobile (Special Events) ²	26.60	26.60
Refrigerants	0.00	0.00
Stationary – Yard Trucks and Forklifts ⁴	656.34	58.22
Stationary – Emergency Generators	10.43	10.43
Waste	96.03	96.03
Water and Wastewater	186.32	186.32
Total Emissions	3,854.42	3,160.94
<i>Net Emissions (Project – Existing)</i>	<i>3,687.42</i>	<i>2,993.94</i>

Source: CalEEMod version 2022.1. Refer to Appendix F.

Notes: MMT CO₂e = million metric tons of carbon dioxide equivalent.

- ¹ The Project will be designed to be all-electric and would not utilize natural gas as described in PDF GHG-1. Thus, natural gas emissions are excluded from this table.
- ² MM GHG-1 requires total on-site electricity consumption to be a maximum of 2,226,107 kWh/year. Any on-site consumption above this amount shall be produced by on-site renewable resources (e.g., solar photovoltaic panels).
- ³ Includes special events, which would be held approximately two to three times per month, including weekday evening events (after 6 p.m.) and weekend daytime events. Special events being held at most three times per month would constitute a 3% increase in annual ADT. In order to account for special events, mobile emissions were conservatively increased by 3%.
- ⁴ MM AQ-2 requires cargo handling equipment (e.g., yard trucks, hostlers, yard goats, etc.) to be zero emission (i.e., electric). Mitigated emissions include energy (electricity) emissions for the electrified equipment.

Most Project emissions (approximately 75% of unmitigated and 88% of mitigated) would occur from mobile and energy sources. As noted above, energy and mobile sources are targeted by statewide measures such as low carbon fuels, cleaner vehicles, strategies to promote sustainable communities and improved transportation choices that result in reducing VMT, continued implementation of the Renewable Portfolio Standard (the target is now set at 60% renewables by 2030), and extension of the Cap and Trade program (requires reductions from industrial sources, energy generation, and fossil fuels). The passage of AB 398 in July 2017 extended the duration of the Cap and Trade program from 2020 to 2030. With continued implementation of various statewide measures, the Project's operational energy and mobile source emissions would continue to decline in the future.

The current version of CalEEMod assumes compliance with the 2019 Title 24 Building Energy Efficiency Standards (CAPCOA 2022). However, construction of the proposed Project would be required to comply with the 2022 Title 24 Standards at a minimum and, depending on timing of Project buildout, may be required to comply with future, more stringent energy codes.

The Project would also comply with the appliance energy efficiency standards in California Code of Regulations Title 20. The Title 20 standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances. The Project would be constructed according to the standards for high-efficiency water fixtures for indoor plumbing and water efficient irrigation systems required in 2022 Title 24, Part 11 (CALGreen).

At the state and global level, improvements in technology, policy, and social behavior can also influence and reduce operational emissions generated by a project. The state is currently on a pathway to achieving the Renewable Portfolio Standards goal of 33% renewables by 2020 and 60% renewables by 2030 per SB 100. Despite these goals, most of the Project's emissions would still be from mobile and energy sources. Future mobile source emissions are greatly dependent on changes in vehicle technology, fuels, and social behavior, which can be influenced by policies to varying degrees. Taking known future policies into account, CARB estimates that about 96% of future vehicles in Los Angeles County would still run on fossil fuels, even with increased electric vehicle mode share. This is assumed to also apply to the Project vehicle fleet, absent data that may suggest otherwise. Due to these external factors, average emissions from transportation in 2050 would mostly still generate GHG emissions, but the quantity is uncertain in light of potential changes in technology and policy over the next 30 years.

As discussed above, the Project would implement operational GHG reduction measures to be consistent with state strategies for GHG reduction. measures, which would serve to further reduce operational GHG emissions. As such, impacts would be **less than significant with mitigation**.

3.5.5 Mitigation Measures

MM-AQ-2 Electric Cargo Handling Equipment. All outdoor cargo handling equipment (such as yard trucks, hostlers, yard goats, pallet jacks, and forklifts) shall be zero emission (i.e., powered by electricity or other alternative fuels). The warehouse building shall include the necessary charging stations for cargo handling equipment. The building manager or their designee shall be responsible for enforcing these requirements.

MM-GHG-1 Establish On-Site Solar Power. Prior to the issuance of a Building permit, the Project Applicant shall provide written proof to the City of Gardena Community Development Director that the total annual electricity demand from on-site operations does not exceed 2,226,107 kWh/year. On-site electrical demand exceeding 2,226,107 kWh/year shall be supplied by on-site renewable sources (e.g., solar photovoltaic panels). Further, the Project will be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every 3 years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10) require buildings to be designed to have 15% of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

3.5.6 Level of Significance After Mitigation

Threshold GHG-1: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Threshold GHG-2: Would the Project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The Project would result in potentially significant impacts with regard to potential conflicts with GHG reduction strategies. Implementation of PDF-GHG-1, MM-GHG-1, and MM-AQ-2 would serve to decarbonize the building, increase renewable energy, and transition cargo handling equipment to less carbon-intensive fuel (electric, which includes increasingly more renewables) which helps the Project show consistency with the Scoping Plan strategies for reducing GHG emissions. Therefore, the Project’s impacts are **less than significant with mitigation**.

3.5.7 Cumulative Effects

As discussed previously, global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all

other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project, such as the Project, would be considered a cumulatively considerable contribution to global climate change. As shown in the analysis, the Project is consistent with the RTP/SCS. With the implementation of mitigation, the Project is consistent with GHG reduction strategies include in CARB's 2022 Scoping Plan and the City of Gardena CAP, which have been adopted to address GHGs on cumulative basis. Based on the preceding, the Project would **not have a cumulative impact** on GHGs.

3.5.8 References

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3.6 Hazards and Hazardous Materials

This section describes the existing hazards and hazardous materials conditions of the Project site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed Project.

The analysis for this section is based on information from the following documents:

- Phase I Environmental Site Assessment, prepared by Roux, January 19, 2022 (Appendix G1)
- Phase II Environmental Site Assessment, prepared by Roux, March 29, 2022 (Appendix G2)
- Remedial Action Plan, prepared by GeoSyntec, June 30, 2022 (Appendix G3)

3.6.1 Existing Conditions

3.6.1.1 Environmental Setting

As described in Section 2, Project Description, the Project site is located at the southwest corner of Artesia Boulevard and Normandie Avenue. The Project would cover approximately 6.33 acres, which currently contain three industrial structures, a paved, open area along Artesia Boulevard, and one residential dwelling to the south of the industrial properties. The Project site is bordered by Dominguez Channel to the south, multi-family residential to the west, and mixed commercial uses to the north and east (shopping centers, restaurants).

Groundwater has been identified in two hydraulic zones beneath the Project site: Zone A at approximately 15 to 25 feet below ground surface and Zone B at approximately 75 to 80 feet below ground surface.

3.6.1.2 Historical Site Uses and Previous Environmental Investigations

Gardena Sumps

As discussed in the Phase I ESA (Appendix G1), the Project site was marshy lands until the 1920s, when it was developed as a clay mine. Following clay mining, the excavation pits were used by petroleum companies to dispose of waste oils, sludges, rinse waters, acids, and tank bottom sludges. These backfilling activities occurred during the 1940s and 1950s,¹ and are collectively referred to as “Gardena Sumps.” By 1951 all the sumps had been covered with dirt and repurposed for industrial uses and parking. The approximate outline of the Gardena Sumps, including areas impacted by the Haack, Cooper North, Cooper South, and Haack Rework Area, are shown on Figure 2-3, Site Contamination.

Investigations and regulatory involvement with the Department of Toxic Substances Control (DTSC) began in the early 1980s (at the time, DTSC was the Department of Health Services [DHS]). DTSC has issued various orders, including Remedial Action Orders (RAOs) and a Determination of Imminent

¹ According to the Gardena Sump project site summary on DTSC EnviroStor database, the petroleum disposal activities occurred between the 1930s and the late 1950s.

and/or Substantial Endangerment and Issuance Order (DISEIO), and placed a lien on the Cooper property based on response costs DTSC incurred for this property. Following these agency actions, the sumps were covered with geosynthetic liners, asphalt, and concrete, and the site was fenced. Atlantic Richfield Company (ARC) is subject to a consent agreement with DTSC and a Final Remedial Action Plan (Final RAP) that DTSC approved July 17, 2022 to remediate the Gardena Sumps site (DTSC 2023). DTSC and the owners of the Cooper property have entered into a settlement agreement by which DTSC would release its lien upon the satisfaction of specified conditions (DTSC 2022a).

As discussed in the Final RAP, prepared by GeoSyntec on June 30, 2022, and included herein as Appendix G3, multiple investigations and human health risk assessments have been completed for the Gardena Sumps site. Investigation activities have included sampling of soil, soil gas, and groundwater; over 300 subsurface samples have been collected to fully characterize the nature and extent of the sludge and sludge-induced impacts at the Gardena Sumps site. The Final RAP outlines the response actions that ARC must undertake to remediate the Gardena Sumps site to commercial/industrial use standards, and describes the contaminants of concern as arsenic, hexavalent chromium, naphthalene, and benzo(a)pyrene toxicity equivalents² in soil; benzene and hydrogen sulfide in air; and dibenz(a,h)anthracene in groundwater (collectively, COCs). Fate and transport evaluation has concluded that the undisturbed sludges do not pose a threat to surface water, or shallow or deep groundwater, air quality, or surrounding soils. Treatment and stabilization studies were also conducted, which determined the buried sludges can be neutralized, and lead can be fixated within the sludge, reducing leachability.

The RAP discusses and takes into account the proposed Project, stating “to the extent that the redevelopment plans are approved in such a manner so as to be consistent with the remedy, [ARC] will coordinate with the developer, as necessary, to carry out redevelopment at the site to the extent practical and appropriate.”

The Final RAP requires ARC to undertake the following remedial actions:

- Excavate the Haack Rework Area and part of the overflow along the eastern perimeter of the Cooper Sumps (reference Figure 2-3)
- Consolidate excavated materials above the Cooper North and Cooper South Sumps
- Place a cap consisting of a stabilization layer, foundation layer, low-hydraulic conductivity layer, and erosion resistance layer above the sumps
- Install a vapor control and monitoring system with flexible gas collection system designed to accommodate long-term operation
- Implement institutional controls, including a health and safety plan, construction quality assurance plan, and risk management plan

² When multiple chemicals have similar toxicological properties, their concentrations can be expressed in equivalency factors to accommodate toxicological calculations. For polyaromatic hydrocarbons (PAHs), benzo(a)pyrene toxicity equivalents are often used to evaluate carcinogenicity. This is not the same as the concentration of benzo(a)pyrene; it represents the total concentration of carcinogenic PAHs detected at a site and represents them as a single factor.

- Record a land use covenant that would limit future uses of the Project site to industrial and commercial uses that are consistent with the Project's proposed uses
- Require long-term operation and maintenance of the cap, vapor control and monitoring system, and gas collection system
- Install a retaining wall system along the north side of the Haack sump
- Install, operate, maintain, and repair a groundwater monitoring system

The RAP outlines the sequence of work to complete the proposed remedial actions, site safety procedures, traffic control, worker protections, community relations, permitting requirements, and schedule.

Phase I ESA

The Phase I ESA (Appendix G1) identified two recognized environmental conditions (RECs) on the Project site:

- Historical Sump Operations (Gardena Sumps, discussed above)
- Historical Aircraft Magnesium Operations

Aircraft Magnesium was a manufacturer of aluminum and magnesium aircraft parts that occupied the Haack Property (western side of the Project site) from 1960 to 1994. According to documents reviewed during the Phase I ESA, operations included discharge of industrial wastewater from parts washers, a pickling tank, manufacturing operations with aluminum and magnesium alloys, and use of nitric acid. A sump and receptor located on the Haack property were closed in 1994. The industrial operations, inground conveyances, and documented discharges were identified as a REC.

The Phase I ESA also identified three "other environmental features," which are conditions that do not meet the definition of a REC but may warrant further attention.

- The northern-adjointing property located across Artesia Boulevard was occupied by multiple drycleaning facilities from 1993 through 2020. While no subsurface investigations were identified and no releases documented, drycleaning operations are typically associated with incremental releases of tetrachloroethylene (PCE), which is volatile and mobile in groundwater.
- The Haack portion of the Project site (western side) was occupied by light industrial operations beginning in the 1980s, in addition to the Aircraft Magnesium operations that occurred until 1994. While no significant chemical use was obtained, light industrial use can be associated with incremental release of hazardous materials over time.
- A French drain and small sump were observed on the Project site along the southern boundary of the northernmost industrial building on the Haack property. The use of the feature, and its history, is unknown. While no direct evidence of releases to this sump were documented or known, there was a potential for subsurface impacts due to ongoing incremental releases into this sump and drain.

Phase II ESA

In response to the RECs identified in the Phase I ESA, a subsurface investigation (Phase II ESA) was conducted to evaluate potential impacts to future site construction workers and occupants on the Haack parcel (west of the Gardena Sumps). The Phase II ESA, which is provided as Appendix G2, included a sampling plan that took into account future Project site development, with a commercial structure on the west side and parking/pavement on the east side, similar to the proposed Project (reference Figure 2-4, Site Plan). Soil and soil vapor samples were collected within the footprint of the proposed building, and analytical results were compared to commercial screening levels based on future site development. The Gardena Sumps areas were not evaluated.

The sample concentrations reported in the Phase II ESA were compared to Environmental Screening Levels (ESLs) (SFBRWQCB 2019). As further discussed in Section 3.6.2, Relevant Plans, Policies, and Ordinances, ESLs are used statewide as guidance levels for evaluating risks to human health and the environment. As the proposed Project includes construction and operation of a commercial building, ESLs were used to evaluate exposure during construction (construction worker soil), exposure during operation (commercial soil and soil vapor), and exposure to nuisance odors caused by subsurface soil vapors (odor/nuisance levels, soil vapor). Table 3.6-1 summarizes the observed concentrations that exceed applicable ESLs.

Table 3.6-1. Summary of Contaminants of Concern

Sample ID	Sample Location	Sample Depth (ft-bgs)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)
Soils				
SV-6-0.5	West side of proposed building	0.5	2,800	1,100
SV-7-2	East side of proposed building	2	35,000	48,000
ESL – Commercial Soil			1,200	180,000
ESL – Construction Worker Soil			1,100	54,000
Soil Vapor				
SV-1 through SV-7, SV-9	Entire building footprint	5 to 10	6,749 to 32,624	10 to 51
SV-8	East side of proposed building	5	46,443	97
ESL – Odor/Nuisance Levels, Soil Vapor			3,300	1,100,000
ESL – Commercial Soil Vapor			83,000	67

Notes: ft-bgs = feet below ground surface; mg/kg = milligram per kilogram; TPH-GRO = total petroleum hydrocarbons – gasoline range organics; TPH-DRO = total petroleum hydrocarbons – diesel range organics; TPH-ORO = total petroleum hydrocarbons – oil range organics; PCE = tetrachloroethylene; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter.

Bold results indicate concentrations were detected above one or more applicable screening levels shown.

Complete results with reporting limits presented in Appendix G2.

ESL = environmental screening levels (SFBRWQCB 2019). ESLs shown are established for exposure to soil and soil vapor in a commercial setting (Commercial Soil and Commercial Soil Vapor, respectively), exposure to soil in a construction setting (Construction Worker Soil), and odor/nuisance levels in a commercial setting (i.e., the contaminant of concern can be smelled; Odor/Nuisance Levels, Subslab Soil Vapor).

Based on the findings of the Phase II ESA, the following conclusions were made:

- Diesel and oil range hydrocarbons that exceed applicable commercial screening levels were identified in soils at three separate locations (LARWQCB SSLs; LARWQCB 1996).
- Metals, VOCs, and semi-volatile organic compounds (SVOCs) identified in soils did not exceed applicable commercial screening levels (DTSC SLs; DTSC 2022b).
- VOCs identified in soil vapor did not exceed applicable commercial screening levels (DTSC SLs).
- Methane was not detected above 10% of the lower explosive limit (LEL), 5,000 parts per million by volume (ppmv).

Based on concentrations observed in the 2022 Phase II ESA (Appendix G2), there is a potential for exposure to petroleum hydrocarbons, both in soil and soil vapor, during construction and operation of the proposed Project. One location, SV-8, which is near the eastern portion of the proposed building, contained gasoline-range organics at concentrations above screening levels for exposure to soils at commercial levels.

Roux provided the following recommendations for the commercial development portion of the Project in the Phase II ESA that would complement the response actions that ARC must undertake under the Final RAP and enhance this remedy's ability to achieve cleanup standards appropriate for the Project's commercial/industrial uses:

- Incorporate vapor intrusion mitigation into the building construction plans.
- Prepare a soil management plan for future building construction and grading activities.
- Prepare an operations, maintenance, and monitoring (OM&M) plan for future sample collection to ensure vapor intrusion mitigation is properly functioning and equipment/systems are properly maintained.
- Ensure that a land use covenant (LUC) as an institutional control under the Final RAP accounts for future development and mitigation, clarifies that the Project's commercial and industrial uses are permitted, and discloses risks, restrictions, and requirements to future buyers and occupants.³

The Phase II ESA, including the above recommendations, assumed ARC will implement the Final RAP for the Gardena Sumps as it is required to do, including, but not limited to each of the remedial actions the Final RAP requires as outlined above, monitoring, sampling, and maintenance of the chosen remedy, and reporting and compliance with DTSC and other regulatory agencies, as necessary.

³ The LUC is not yet implemented, but rather is a part of the Final RAP (Appendix G3).

3.6.1.3 Hazardous Materials Sites

In addition to the Project site being located on the Gardena Sumps cleanup site, a search was conducted for nearby contaminated sites that could potentially impact the environmental conditions of the Project site.

Cortese List Sites

Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to compile a list of hazardous waste and substances sites (Cortese List). While the Cortese List is no longer maintained as a single list, the following databases provide information that meet the Cortese List requirements:

1. List of Hazardous Waste and Substances sites from Department of Toxic Substances Control EnviroStor database (Health and Safety Codes 25220, 25242, 25356, and 116395);
2. List of LUST Sites by County and Fiscal Year from the State Water Resources Control Board GeoTracker database (Health and Safety Code 25295);
3. List of solid waste disposal sites identified by the State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit (Water Code Section 13273[e] and 14 CCR Section 18051);
4. List of “active” Cease and Desist Orders and Cleanup and Abatement Orders from the State Water Resources Control Board (Water Code Sections 13301 and 13304); and
5. List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by the Department of Toxic Substances Control.

The Gardena Sumps site is a Cortese List site, and is discussed in Section 3.6.1.2, Historical Site Uses and Previous Environmental Investigations; additionally, four Hazardous Waste and Substances sites were identified on the EnviroStor database within 1 mile of the Project site, and three LUST sites were identified on the GeoTracker database within 0.50 miles of the Project site.⁴ These sites and their details are noted in Table 3.6-2.

Table 3.6-2. Summary of Cortese List Sites

Site Name and Address	Distance/Direction from Project Site	Comments
Momin Lodge 1918 Artesia Boulevard	0.59 miles west	This is an active State Response site undergoing cleanup with oversight by DTSC. Manufacturing activities had occurred on this site between the 1950s and 1990s; solvent releases during this time resulted in VOC contamination to soil, groundwater, and soil vapor beneath the property. Groundwater monitoring is ongoing at

⁴ The search radius for due diligence purposes under ASTM E1527-21 is 1 mile for state response and federal response sites, and 0.50 miles for LUST sites.

Table 3.6-2. Summary of Cortese List Sites

Site Name and Address	Distance/Direction from Project Site	Comments
		<p>the site; soil vapor extraction pilot studies have been completed.</p> <p>Groundwater flow is east-northeast, and recent groundwater monitoring data suggests impacts extend off site to the eastern-adjointing property (GSI 2023). However, based on the distance (greater than 0.50 miles) from the Project site, it is unlikely these impacts extend to and therefore impact the Project site.</p>
ALS Industries 1942 Artesia Boulevard	0.64 miles west	This site was identified as a possible contributor to contamination identified both upgradient (see Freeman Products/Avnet Inc.) and downgradient (see Momin Lodge). However, investigations conducted by DTSC determined no releases had occurred at this site, and closure was received in 2013. As such, this site does not likely impact the environmental conditions of the Project site.
Freeman Products/ Avnet Inc. 2040 Artesia Boulevard	0.75 miles west	This is an active State Response site undergoing cleanup with oversight by DTSC. Manufacturing activities occurred at the site between 1963 to 1994, solvent releases during this time resulted in VOC contamination to soil, groundwater, and soil vapor beneath the property. With groundwater flow toward the east-northeast, VOC contamination has been identified both on and east of this site (Ramboll 2023). Based on the distance (0.75 miles) from the Project site, it does not appear these impacts extend to and therefore impact the Project site.
Prime Dry Cleaners 16402 Normandie Avenue	0.63 miles north	This is an active State Response site undergoing cleanup with oversight by DTSC. A Remedial Action Order (RAO) was issued for this site due to historical industrial uses and the likely presence of tetrachloroethylene (PCE) contamination on the site (DTSC 2022c). No investigations have been conducted since the RAO was issued. While contamination is likely present, this site's location and distance from the Project site indicate it is not likely to impact the environmental conditions of the Project site.
Carlin Foods Corp.	0.32 miles north	These LUST sites have all received regulatory closure, indicating remedial actions have

Table 3.6-2. Summary of Cortese List Sites

Site Name and Address	Distance/Direction from Project Site	Comments
16911 Normandie Avenue	0.40 miles west	occurred to the satisfaction of the overseeing regulatory agency (Los Angeles Regional Water Quality Control Board). While contamination may be allowed to remain in some closure cases, it does not typically impact off-site locations. Based on the distance from the Project site and the regulatory status of the LUST cases, it is unlikely these sites have impacted the environmental condition of the Project site.
Chevron 9-2445 17400 Western Avenue	0.45 miles west	
ARCO 1235 1800 Artesia Boulevard		

Non-Cortese List Hazardous Materials Sites

Dudek also reviewed other online databases that provide environmental information on release and cleanup cases in the State of California. While these databases are not included in the Cortese List, they may provide additional information regarding potential environmental contamination on the Project site. Table 3.6-3 provides a summary of the databases searched.

Table 3.6-3. Online Database Listings

Database	Details
California Environmental Protection Agency (CalEPA) https://siteportal.calepa.ca.gov/nsite/	The CalEPA Regulated Site Portal is a website that combines data about environmentally regulated sites and facilities in California into a single, searchable database and interactive map. Data sources include California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxics Release Inventory (TRI).
Department of Toxic Substance Control (DTSC) EnviroStor https://www.envirostor.dtsc.ca.gov/	The DTSC's data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons for further investigation.

Table 3.6-3. Online Database Listings

Database	Details
Regional Water Quality Control Board (RWQCB) GeoTracker http://geotracker.waterboards.ca.gov/	The California RWQCB's data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, various unregulated projects, and permitted facilities. Sites include LUSTs, Department of Defense, Cleanup Program, Irrigated Lands, Oil and Gas Production, Permitted USTs, and Land Disposal Sites.
National Pipeline Mapping System https://www.npms.phmsa.dot.gov/	The National Pipeline Mapping System Public Map Viewer is a web-based application designed to assist the general public with displaying and querying data related to gas transmission and hazardous liquid pipelines, liquefied natural gas plants, and breakout tanks under Department of Transportation Pipeline and Hazardous Material Safety Administration jurisdiction.
California Geologic Energy Management (CalGEM) Well Finder https://maps.conservation.ca.gov/doggr/wellfinder/	CalGEM Well Finder is a web-based application that plots reported locations and other information for oil and gas wells and other types of related facilities across California.
CalRecycle Solid Waste Information System (SWIS) https://www2.calrecycle.ca.gov/SolidWaste/Site/Search	The SWIS database contains information on solid waste facilities, operations, and disposal sites throughout the State of California.

The Project site was identified as a land disposal site in the GeoTracker database under “Gardena Sumps Site.” The listing is related to the land dumping of oil in the sumps on the Project site, which are discussed in Section 3.6.1.2.

Multiple cleanup sites and regulatory permitting sites were identified within 1 mile of the Project site. Based on regulatory status, type and extent of contamination at these sites, and distance from the Project site, no additional contamination was identified that could have impacted the environmental condition of the Project site.

One idle oil and gas well was identified on the CalGEM Well Finder database, located approximately 500 feet southeast of the Project site. Well logs indicate the well was abandoned in 1925. The Project site location was also evaluated in the Los Angeles County Solid Waste Information Management System (SWIMS) database to determine the need for methane mitigation (LADPW 2023). The site was identified as “not within 300 feet of an oil or gas well or 1,000 feet of a methane producing site. A methane mitigation system may not be required.”

3.6.1.4 Schools

A search for existing and proposed schools was conducted to identify K-12 schools within 0.25 miles of the Project site (GreenInfo 2021; CDE 2023). Moneta Continuation High School, 17951 South Budlong Avenue, is located 0.13 miles southeast of the Project site. This school campus includes the Gardena Early Education Center (1350 W 177th Street) and the high school sports fields.

3.6.2 Relevant Plans, Policies, and Ordinances

Federal

U.S. Environmental Protection Agency

Title 40 USC, Chapter 1, Subchapter I, Parts 260-265 – Solid Waste Disposal Act/Federal Resource Conservation and Recovery Act of 1976. The Solid Waste Disposal Act, as amended and revised by the Resource Conservation and Recovery Act (RCRA), establishes requirements for the management of solid wastes (including hazardous wastes), landfills, USTs, and certain medical wastes. The statute also addresses program administration; implementation and delegation to the states; enforcement provisions and responsibilities; and research, training, and grant funding. Provisions are established for the generation, storage, treatment, and disposal of hazardous waste, including requirements addressing generator record keeping, labeling, shipping paper management, placarding, emergency response information, training, and security plans.

Title 40 USC, Chapter 1, Subchapter I, Part 273 – Universal Waste. This regulation governs the collection and management of widely generated waste, including batteries, pesticides, mercury-containing equipment, and bulbs. This regulation streamlines the hazardous waste management standards and ensures that such waste is diverted to the appropriate treatment or recycling facility.

Title 40 USC, Chapter 1, Subchapter D, Part 112 – Oil Pollution Prevention. Oil Pollution Prevention regulations require the preparation of a Spill Prevention, Control, and Countermeasure (SPCC) Plan if oil is stored in excess of 1,320 gallons in aboveground storage (or have a buried capacity of 42,000 gallons). SPCC regulations place restrictions on the management of petroleum materials and, therefore, have some bearing on hazardous materials management.

Title 40 USC, Chapter 1, Subchapter C, Part 61 – National Emission Standards for Hazardous Air Pollutants, Subpart M – National Emission Standard for Asbestos. This regulation established National Emission Standards for Hazardous Air Pollutants (NESHAP) and names asbestos-containing material (ACM) as one of these materials. ACM use, removal, and disposal are regulated by USEPA under this law. In addition, notification of friable ACM removal prior to a proposed demolition project is required by this law.

Title 42 USC, Chapter 116 – Emergency Planning and Community Right-to-Know Act. The Emergency Planning and Community Right-to-Know Act (EPCRA) provides for public access to information about chemical hazards. The EPCRA and its regulations included in Title 40 U.S.C.

Parts 350-372 establish four types of reporting obligations for facilities storing or managing specified chemicals: emergency planning, emergency release notification, hazardous chemical storage reporting requirements, and toxic chemical release inventory. USEPA maintains a database, termed the Toxic Release Inventory, which includes information on reportable releases to the environment.

Title 15 USC, Chapter 53, Subchapter I, Section 2601 et seq. – Toxic Substances Control Act of 1976. The Toxic Substances Control Act (TSCA) of 1976 empowers USEPA to require reporting, record-keeping, and testing, as well as to place restrictions on the use and handling of chemical substances and mixtures. This regulation phased out the use of asbestos and ACM in new building materials and also sets requirements for the use, handling, and disposal of ACM as well as for lead-based paint (LBP) waste. As discussed above, USEPA has also established NESHAP, which govern the use, removal, and disposal of ACM as a hazardous air pollutant and mandate the removal of friable ACM before a building is demolished and require notification before demolition. In addition to asbestos, ACM, and LBP requirements, this regulation also banned the manufacturing of polychlorinated biphenyls (PCBs) and sets standards for the use and disposal of existing PCB-containing equipment or materials.

Regional Screening Levels (RSLs)

The federal EPA provides regional screening levels for chemical contaminants to provide comparison values for residential and commercial/industrial exposures to soil, air, and tap water (drinking water). RSLs are available on the EPA's website and provide a screening level calculation tool to assist risk assessors, remediation project managers, and others involved with risk assessment and decision-making. RSLs are also used when a site is initially investigated to determine if potentially significant levels of contamination are present to warrant further investigation. In California, the Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) incorporated the EPA RSLs into the HERO human health risk assessment. HERO created Human Health Risk Assessment (HHRA) Note 3, which incorporates HERO recommendations and DTSC-modified screening levels (DTSC-SLs) based on review of the EPA RSLs. The DTSC-SL should be used in conjunction with the EPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities.

U.S. Department of Labor, Occupational Safety and Health Administration

Title 29 USC, Part 1926 et seq. – Safety and Health Regulations for Construction. These standards require employee training; personal protective equipment; safety equipment; and written procedures, programs, and plans for ensuring worker safety when working with hazardous materials or in hazardous work environments during construction activities, including renovations and demolition projects and the handling, storage, and use of explosives. These standards also provide rules for the removal and disposal of asbestos, lead, LBP, and other lead materials. Although intended primarily to protect worker health and safety, these requirements also guide general facility safety. This regulation also requires that an engineering survey be prepared prior to demolition.

Title 29 USC, Part 1910 et seq. – Occupational Safety and Health Standards. Under this regulation, facilities that use, store, manufacture, handle, process, or move hazardous materials are required to conduct employee safety training; inventory safety equipment

relevant to potential hazards; have knowledge on safety equipment use; prepare an illness prevention program; provide hazardous substance exposure warnings; prepare an emergency response plan and prepare a fire prevention plan.

U.S. Department of Transportation

Title 49 USC, Part 172, Subchapter C – Shipping Papers. The Department of Transportation established standards for the transport of hazardous materials and hazardous wastes. The standards include requirements for labeling, packaging, and shipping hazardous materials and hazardous wastes, as well as training requirements for personnel completing shipping papers and manifests.

State

California Unified Program for Management of Hazardous Waste and Materials

California Health and Safety Code (HSC), Division 20, Chapter 6.11, Sections 25404–25404.9 Sections – Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. Under the California Environmental Protection Agency (CalEPA), the Department of Toxic Substances Control (DTSC) and Enforcement and Emergency Response Division (EERD) administer the technical implementation of California’s Unified Program, which consolidates the administration, permit, inspection, and enforcement activities of several environmental and emergency management programs at the local level (DTSC 2024). Certified Unified Program Agencies (CUPAs) implement the hazardous waste and materials standards. This program was established under the amendments to the California HSC made by SB 1082 in 1994. The programs that make up the Unified Program are:

- Aboveground Petroleum Storage Act (APSA) Program
- Area Plans for Hazardous Materials Emergencies
- California Accidental Release Prevention (CalARP) Program
- Hazardous Materials Release Response Plans and Inventories (Hazardous Materials Business Plans, or HMBPs)
- Hazardous Material Management Plan (HMMP) and Hazardous Material Inventory Statements (HMIS)
- Hazardous Waste Generator and On-site Hazardous Waste Treatment (Tiered Permitting) Program
- Underground Storage Tank Program

The CUPA for the Project site is the Los Angeles County Fire Department, Health and Hazardous Materials Division (HHMD).

Title 19 CCR, Chapter 2, Subchapter 3, Sections 2729–2734/California HSC Division 20, Chapter 6.95, Sections 25500–25520. This regulation requires the preparation of an HMBP by facility operators. The HMBP identifies the hazards, storage locations, and storage quantities for each hazardous chemical stored on site. The HMBP is submitted to the CUPA

for emergency planning purposes. The Project site is currently subject to these requirements, and there is an HMBP in place.

Hazardous Waste Management

Title 22 CCR, Division 4.5 - Environmental Health Standards for the Management of Hazardous Waste. In the State of California, the Department of Toxic Substances Control (DTSC) regulates hazardous wastes. These regulations establish requirements for the management and disposal of hazardous waste in accordance with the provisions of the California Hazardous Waste Control Act and federal RCRA. As with federal requirements, waste generators must determine if their wastes are hazardous according to specified characteristics or lists of wastes. Hazardous waste generators must obtain identification numbers; prepare manifests before transporting waste off site; and use only permitted treatment, storage, and disposal facilities. Standards also include requirements for record keeping, reporting, packaging, and labeling. Additionally, while not a federal requirement, California requires that hazardous waste be transported by registered hazardous waste transporters.

In addition, Chapter 31 - Waste Minimization, Article 1 - Pollution Prevention and the Hazardous Waste Source Reduction and Management Review of these regulations require that generators of 12,000 kilograms/year of typical, operational hazardous waste evaluate their waste streams every 4 years and, as applicable, select and implement viable source reduction alternatives. This Act does not apply to non-typical hazardous waste, including ACM and PCBs, among others.

Title 22 California HSC, Division 20, Chapter 6.5 - California Hazardous Waste Control Act of 1972. This legislation created the framework under which hazardous wastes must be managed in California. It provides for the development of a state hazardous waste program (regulated by DTSC) that administers and implements the provisions of the federal RCRA program. It also provides for the designation of California-only hazardous wastes and development of standards that are equal to or, in some cases, more stringent than, federal requirements. The CUPA is responsible for implementing some elements of the law at the local level.

Human Health Risk Assessment Note 3 - DTSC-Modified Screening Levels (DTSC-SLs). HHRA Note Number 3 presents recommended screening levels (derived from the EPA RSLs using DTSC-modified exposure and toxicity factors) for constituents in soil, tap water, and ambient air. The DTSC-SL should be used in conjunction with the EPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities.

Aboveground and Underground Petroleum Storage Tanks

Title 22 California HSC, Division 20, Chapter 6.67, Sections 25270 to 25270.13 - Aboveground Petroleum Storage Act. This law applies if a facility is subject to SPCC regulations under Title 40 U.S.C. Part 112, or if the facility has 10,000 gallons or more of petroleum in any or combination of ASTs and connecting pipes. If a facility exceeds these criteria, it must prepare a SPCC plan.

Low-Threat Underground Storage Tank (UST) Case Closure Policy. This policy applies to petroleum UST sites subject to Chapter 6.7 of the Health and Safety Code. This policy establishes both general and media-specific criteria. If both the general and applicable media-specific criteria are satisfied, then the leaking UST case is generally considered to present a low threat to human health, safety and the environment. This policy recognizes, however, that even if all of the specified criteria in the policy are met, there may be unique attributes of the case or site-specific conditions that increase the risk associated with the residual petroleum constituents. In these cases, the regulatory agency overseeing corrective action at the site must identify the conditions that make case closure under the policy inappropriate.

Regional Water Boards and local agencies have been directed to review all cases in the petroleum UST Cleanup Program using the framework provided in this policy. These case reviews shall, at a minimum, include the following for each UST case:

1. Determination of whether or not each UST case meets the criteria in this policy or is otherwise appropriate for closure based on a site-specific analysis.
2. If the case does not satisfy the criteria in this policy or does not present a low-risk based upon a site-specific analysis, impediments to closure shall be identified.
3. Each case review shall be made publicly available on the State Water Board's GeoTracker web site in a format acceptable to the Executive Director.

Environmental Cleanup Levels

Environmental Screening Levels

Environmental Screening Levels (ESLs) provide conservative screening levels for over 100 chemicals found at sites with contaminated soil and groundwater. They are intended to help expedite the identification and evaluation of potential environmental concerns at contaminated sites. The ESLs were developed by San Francisco Bay Regional Water Quality Control Board; however, they are used throughout the state. While ESLs are not intended to establish policy or regulation, they can be used as a conservative screening level for sites with contamination. Other agencies in California currently use the ESLs (as opposed to RSLs). In general, the ESLs could be used at any site in the State of California, provided all stakeholders agree (SFBRWQCB 2019). In recent experience, regulatory agencies in various regions use ESLs as regulatory cleanup levels. The ESLs are not generally used at sites where the contamination is solely related to a leaking underground storage tank (LUST); those sites are instead subject to the Low-Threat Underground Storage Tank Closure Policy.

California Integrated Waste Management Board

Title 14 CCR, Division 7, Chapter 8.2 - Electronic Waste Recovery and Recycling Act of 2003. This regulation sets requirements regarding the use and disposal of hazardous substances in electronics. When discarded, the DTSC considers the following materials manufactured before 2006 to be hazardous waste: cathode ray tube devices, liquid crystal display (LCD) desktop monitors, laptop computers with LCD displays, LCD televisions, plasma televisions, and portable DVD Players with LCD screens.

California Department of Transportation/California Highway Patrol

Title 13 CCR, Division 2, Chapter 6. California regulates the transportation of hazardous waste originating or passing through the state. The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies. CHP enforces materials and hazardous waste labeling and packing regulations that prevent leakage and spills of material in transit and provides detailed information to cleanup crews in the event of an incident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are all part of the responsibility of CHP. CHP conducts regular inspections of licensed transporters to ensure regulatory compliance. Caltrans has emergency chemical spill identification teams at locations throughout the state. Hazardous waste must be regularly removed from generating sites by licensed hazardous waste transporters. Transported materials must be accompanied by hazardous waste manifests.

Occupational Safety and Health

Title 8 CCR – Safety Orders. Under the California Occupational Safety and Health Act of 1973, the California Occupational Safety and Health Administration (Cal/OSHA) is responsible for ensuring safe and healthful working conditions for California workers. Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in Title 8 of the CCR. Cal/OSHA hazardous substances regulations include requirements for safety training, availability of safety equipment, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA also enforces hazard communication program regulations, which contain training and information requirements, including procedures for identifying and labeling hazardous substances. The hazard communication program also requires that Material Safety Data Sheets be available to employees and that employee information and training programs be documented.

In Division 1, Chapter 4, Subchapter 4 – Construction Safety Orders of Title 8, construction safety orders are listed and include rules for demolition, excavation, explosives work, working around fumes and vapors, pile driving, vehicle and traffic control, crane operation, scaffolding, fall protection, and fire protection and prevention, among others.

Cal/OSHA Asbestos and Carcinogen Unit enforces asbestos standards in construction, shipyards, and general industry. This includes identification and removal requirements of asbestos in buildings, as well as health and safety requirements of employees performing work under the Asbestos-In-Construction regulations 8 CCR 1529. Only a Cal/OSHA-Certified Asbestos Consultant (CAC) can provide asbestos consulting (as defined by the Business and Professions Code, 7180–7189.7, and triggered by the same size and concentration triggers as for registered contractors). These services include building inspection, abatement project design, contract administration, supervision of site surveillance technicians, sample collection, preparation of asbestos management plans, and clearance air monitoring.

Asbestos and Air Quality

Enforcement of the NESHAP Regulation, HSC Section 39658(b)(1). The California Air Resources Board (CARB) is responsible for overseeing compliance with the federal Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAPs) in Los Angeles County. The Asbestos NESHAP Program enforces compliance with the federal National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulation for asbestos and investigates all related complaints, as specified by HSC Section 39658(b)(1). Of the 35 air districts in California, 16 of these districts do not have an asbestos program in place. In these “non-delegated” districts, a demolition/renovation notification is required for compliance with the Asbestos NESHAP. (This notification is not equivalent to a permit.) CARB reviews and investigates the notifications. The program also administers two annual statewide asbestos NESHAP task force meetings for air districts and US EPA to facilitate communication and enforcement continuity and assists US EPA in training district staff to enforce the asbestos NESHAP.

Contractors State License Board

The California Department of Consumer Affairs Contractors State License Board manages the licensing of asbestos abatement contractors.

Lead-Based Paint

The California Department of Public Health enforces lead laws and regulations related to the prevention of lead poisoning in children, prevention of lead poisoning in occupational workers, accreditation and training for construction-related activities, lead exposure screening and reporting, disclosures, and limitations on the amount of lead found in products. Accredited lead specialists are required to find and abate lead hazards in a construction project and to perform lead-related construction work in an effective and safe manner. The specific regulations are as follows:

California Health and Safety Code Sections 124125 to 124165. Declared childhood lead exposure as the most significant childhood environmental health problem in the state. Established the Childhood Lead Poisoning Prevention Program and instructed it to continue to take steps necessary to reduce the incidence of childhood lead exposure in California.

California Health and Safety Code Sections 105275 to 105310. Reaffirmed California’s commitment to lead poisoning prevention activities; provided CDPH with broad mandates on blood lead screening protocols, laboratory quality assurance, identification and management of lead exposed children, and reducing lead exposures.

California Health and Safety Code Section 105250. Establishes a program to accredit lead-related construction training providers and certify individuals to conduct lead-related construction activities.

California Civil Code Section 1941.1; California Health and Safety Code Sections 17961, 17980, 124130, 17920.10, 105251 to 105257. Deems a building to be in violation of the State Housing Law if it contains lead hazards and requires local enforcement agencies to enforce provisions related to lead hazards. Makes it a crime for a person to engage in

specified acts related to lead hazard evaluation, abatement, and lead-related constructions courses, unless certified or accredited by the Department. Permits local enforcement agencies to order the abatement of lead hazards or issue a cease and desist order in response to lead hazards.

California Civil Code Sections 1102 to 1102.16. Requires the disclosure of known lead-based paint hazards upon sale of a property.

California Education Code Sections 32240 to 322450. Implemented a lead poisoning prevention and protection program for California schools for a survey to ascertain risk factors that predicted lead contamination in public schools. The survey was completed in 1998. Findings of the survey are under Materials and Products.

California Labor Code Sections 6716 to 6717. Provides for the establishment of standards that protect the health and safety of employees who engage in lead-related construction work, including construction, demolition, renovation, and repair.

California Health and Safety Code Sections 116875 to 116880. Requires the use of lead-free pipes and fixtures in any installation or repair of a public water system or in a facility where water is provided for human consumption.

California Health and Safety Code Sections 105185 to 105197. Establishes an occupational lead poisoning prevention program to register and monitor laboratory reports of adult lead toxicity cases, monitor reported cases of occupational lead poisoning to ascertain lead poisoning sources, conduct investigations of take-home exposure cases, train employees and health professionals regarding occupational lead poisoning prevention, and recommended means for lead poisoning prevention.

California Building Standards Commission

Title 24 of the CCR – California Building Standards Code. The California Building Standards Code is a compilation of three types of building standards from three different sources:

- Building standards that have been adopted by state agencies without change from building standards contained in national model codes;
- Building standards that have been adopted and adapted from the national model code standards to meet California conditions; and
- Building standards, authorized by the California legislature, that constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns.

Among other rules, the Code contains requirements regarding the storage and handling of hazardous materials. The Chief Building Official at the local government level (i.e., City of Gardena/Los Angeles County) must inspect and verify compliance with these requirements prior to issuance of an occupancy permit.

California Accidental Release Prevention Program

Similar to the EPA Risk Management Program, the California Accidental Release Prevention (CalARP) Program (19 CCR 2735.1 et seq.) regulates facilities that use or store regulated substances, such as toxic or flammable chemicals, in quantities that exceed established thresholds. Under the regulations, industrial facilities that handle hazardous materials above threshold quantities are required to prepare and submit a hazardous materials business plan (HMBP) to the local CUPA via the California Environmental Reporting System. As part of the HMBP, a facility is further required to specify applicability of other state regulatory programs. The overall purpose of CalARP is to prevent accidental releases of regulated substances and reduce the severity of releases that may occur. The CalARP Program meets the requirements of the EPA Risk Management Program, which was established pursuant to the Clean Air Act Amendments.

California Dig Alert

CA Government Code 4216. In accordance with CA Government Code 4216.2, an excavator planning to conduct an excavation shall notify the appropriate regional notification center of the intent to excavate between 2 and 14 calendar days prior to excavation activities. When the excavation is proposed within 10 feet of a “high priority subsurface installation,” which includes high pressure natural gas and petroleum pipelines, the operator of the high priority subsurface installation shall notify the excavator of the existing of the installation and set up an on-site meeting to determine actions required to verify location and prevent damage to the installation. The excavator shall not begin excavating until the on-site meeting is complete.

Local

South Coast Air Quality Management District

Rule 1403: Work Practice Requirements for Asbestos. SCAQMD Rule 1403 governs work practice requirements for asbestos in all renovation and demolition activities. The rule includes requirements for asbestos surveying, notifications, ACM removal procedures, schedules, handling and clean-up procedures, and storage, disposal, and landfill requirements for waste materials. All operators are also required to maintain records and use appropriate labels, signs, and markings.

Rule 1466: Control of Particulate Emissions from Soils with Toxic Air Contaminants. SCAQMD Rule 1466 is designed to minimize the amount of off-site fugitive dust emissions containing toxic air contaminants by reducing particulate emissions in ambient air during earth-moving activities. The rule applies to any owner or operator conducting earth-moving activities of soil with toxic air contaminants. Operators must apply appropriate management practices to reduce potential air emissions.

Rule 403: Dust Control Information. SCAQMD Rule 403 applies to any activity capable of generating fugitive dust, including earth-moving activities, and requires best available dust control measures to be applied during activities capable of generating fugitive dust. Operations on properties of 50 or more acres, or any earth-moving activities with daily throughput of 3,850 cubic meters or more three times in one 365-day period are considered

large operations, and have additional requirements, including notifications and reports to be submitted to SCAQMD, and require trained personnel to oversee operations.

Rule 1166: Volatile Organic Compound Emissions from Decontamination of Soil. SCAQMD Rule 1166 sets requirements to control the emissions of VOCs during excavation, grading, handling and treating VOC-contaminated soil. Persons who plan to excavate underground storage tanks or associated piping shall follow requirements set forth in the Rule, including permitting, notification, and air monitoring. Additionally, rules apply to persons handling VOC-contaminated soils, including segregation, wetting to reduce dust, and visual inspections of stockpiles.

Los Angeles County Building Code

Title 26, Chapter 1, Section 110: Prohibited Uses of Building Sites. Section 110.4 states permits shall not be issued for new buildings or enclosed structures, additions, or conversions of a building or structure adjacent to or within 300 feet of an active, abandoned, or idle oil or gas well unless an engineered plan is prepared to ensure such wells are properly operated and maintained, or are abandoned. No permits shall be issued until proper documentation is submitted.

Section 110.5 states permits shall not be issued for new buildings or enclosed structures, additions, or conversions of a building or structure on contaminated soil unless designed by a professional engineer. Such design, or report evaluating the conditions of the site, shall contain information on the investigation and recommendation to prevent accumulation of hazardous materials and gases within the structure. The final structure shall be reviewed and approved by the design engineer with a statement attesting the building has been constructed in accordance with recommendations to address contaminated soil issues.

Los Angeles County General Plan

Safety Element

The purpose of the Safety Element is to reduce the potential risk of death, injuries, and economic damage resulting from natural and human-made hazards. The Safety Element works in conjunction with the Operational Area Emergency Response Plan (OAERP), which is prepared by the County's Chief Executive Office – Office of Emergency Management (CEO OEM). CEO OEM also prepares the All-Hazard Mitigation Plan, which provides policy guidance for minimizing threats from natural and human-made hazards and has been approved by FEMA and California Emergency Management Agency (CalEMA). The Safety Element includes policies for fire-related land use and building regulations in Los Angeles County, which specifically pertain to properties in Very High Fire Hazard Severity Zones.

The Safety Element also includes policies for emergency response within Los Angeles County. Emergency services within the County are provided by the Los Angeles County Fire Department and Los Angeles County Sheriff's Department, in cooperation with local agencies. For the Project site, Los Angeles County Fire Department is first responders for fire and hazardous material emergencies. The

nearest fire stations are Station 79, 18030 S Vermont Avenue, Gardena, and Station 158, 1650 W 162nd Street, Gardena.

Los Angeles County Methane Zones

Los Angeles County Code Title 26, Sections 110.3, 110.4, and 110.5, amended by Ordinance No. 2019-0056: [Methane Mitigation Standards](#). The County of Los Angeles, Department of Public Works (DPW), has developed methane policies and mitigation standards for construction within designated methane zones. Policies include construction and mitigation requirements when potential gas hazards are within 1,000 feet of fill sites containing disposable materials, within 300 feet of a nearby oil and gas wells, or on contaminated soils. The policies also include standard specifications for methane gas mitigation.

Gardena General Plan

The Public Safety Plan portion of the Gardena General Plan is designed to identify potential hazards that can significantly impact the City. Policies focus on protecting life and property from hazardous conditions, with emphasis on emergency preparedness and response (City of Gardena 2022).

PS Goal 4: [Protect Public Health, Safety, and the Environment from Exposure to Hazardous Materials and Other Dangers](#).

Policy PS4.1: [Sensitive Receptors](#). Ensure that the storage, processing, and transfer of hazardous materials are not located in areas that could potentially harm residents and other sensitive receptors (i.e., schools, parks, hospitals) and are adequately buffered from environmentally sensitive areas.

Policy PS4.2: [Alternative Sources](#). Encourage and support innovative technologies that treat and dispose of hazardous waste or use alternative sources to hazardous materials.

Policy PS4.3: [Updated Inventory](#). Maintain an updated inventory of businesses that handle, store, process, and transport hazardous materials and waste within the City.

Policy PS4.4: [Planning Procedures](#). Maintain planning procedures for the handling and transportation of hazardous materials and ensure that the procedures are in compliance with applicable county, state and federal regulations.

Policy PS4.5: [Land Uses](#). Require a conditional use permit for land uses that generate, use, store, or process hazardous materials.

Gardena Municipal Code

Gardena Municipal Code Title 18, Section 18.42.200 lists pre-permit requirements required before acquiring permits for new construction. Included in these requirements are adherence to air quality regulations, including SCAQMD Rule 403 for fugitive dust, Rule 1113 for architectural coatings, Rule 1403 for asbestos-containing materials, and Regulation XIII for nitrogen oxide emissions. Additionally, construction and demolition waste recycling plans must be submitted for review and approval by the City's building division.

3.6.3 Project Design Features

PDF-HAZ-1: Remedial Action of the Gardena Sumps Site. ARC will coordinate with the Applicant to implement the Final RAP. The Final RAP includes: (a) excavation of degraded and soil-sludge mixture; (b) consolidation of this excavated mixture above the Cooper North and Cooper South Sumps; (c) grading for excavated areas; (d) grading and installation, maintenance, and repair of an engineered cap over the Cooper North and Cooper South sumps, including stabilization, foundation, low hydraulic conductivity and erosion resistance layers; (e) installation of a retaining wall system along the north side of the Haack sump; (f) installation, operation, maintenance and repair of a soil vapor control and monitoring system that will include soil vapor probes and associated infrastructure; (g) installation, operation, maintenance and repair of a groundwater monitoring system; and (h) restoration of vegetation and site conditions. The Final RAP will be implemented before the Applicant commences construction of the proposed Project. The portion of the proposed Project site that overlaps the sump areas and the top of the engineered cap will be paved and utilized as a parking lot. The Applicant will undertake measures to protect the remedy during site operation. As part of the Final RAP, a land use covenant will be established for the site to prohibit sensitive uses thereon, such as residential uses, but will permit the Proposed Project's commercial and industrial uses, as well as the City's temporary uses. The Applicant will comply with all institutional controls that DTSC may require as part of the ongoing use of the site, except for those assigned to ARC as part of its Final RAP.

PDF-HAZ-2: Vapor Intrusion Mitigation. The Applicant will install a soil vapor barrier and ventilation systems beneath the proposed structure to protect building occupants against indoor soil vapor intrusion. Vapor barrier systems will meet guidelines described in the Vapor Intrusion Mitigation Advisory published by DTSC and CalEPA in 2011 (VIMA). Vapor barriers will be designed to meet the standards outlined in the VIMA and will be in general conformance with General Construction, Membrane Installation, and Ventilation Trench for Passive Gas Control System Requirements of the Los Angeles County Methane Gas Mitigation Standards. The system will include a vapor barrier membrane and passive sub-slab venting system. The system will be designed by a California-licensed engineer. Monitoring probes will be installed below the barrier system, to evaluate the effectiveness of the system. An OM&M Plan will be prepared to define the ongoing sampling required to confirm the vapor intrusion mitigation system (VIMS) is operating as designed. The OM&M Plan will include a decision tree and contingency plans in the event unexpected conditions are identified.

3.6.4 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to hazards and hazardous materials are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hazards and hazardous materials would occur if the Project would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

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?
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
4. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Based on the results of the Initial Study prepared for the Project (Appendix A), the Project would result in no impacts related to safety hazards from close proximity to an airport and less-than-significant impacts regarding interference with an adopted emergency response or evacuation plan and exposure of people or structures to wildland fires. As such, the following thresholds are evaluated in this section of the Draft EIR:

HAZ-1. Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

HAZ-2. Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

HAZ-3. Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

HAZ-4. Would the Project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

3.6.5 Impact Analysis

Threshold HAZ-1. Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction

Construction of the Project would include demolition of the existing buildings and hardscape on the west side of the Project site. The east side of the Project site, which contains the Gardena Sumps, will be remediated by ARC in accordance with PDF-HAZ-1 prior to Project construction. Construction

of the east side of the Project site would only include paving and painting, as necessary, to create the proposed parking lot; the Applicant's construction would not interfere or damage the engineered cap. With implementation of PDF-HAZ-1, hazardous materials beneath the Project site caused by the Gardena Sumps would not be impacted by proposed Project construction, and these materials would not impact construction activities or construction workers.

Based on information obtained from the Phase I ESA (Appendix G1), the industrial buildings on the west side of the Project site have been present since at least the 1970s, some may have been constructed as early as the 1950s. Based on the age of the structures, there is a potential for asbestos-containing materials, lead-based paints, and other hazardous building materials to be present in the existing buildings. Hazardous building materials could include mercury thermometers and switches, fluorescent bulbs, and polychlorinated biphenyl (PCB)-containing ballasts. Demolition of the buildings and transportation and disposal of the building materials could cause a release to the environment if they are present in the existing buildings, resulting in a potentially significant impact absent mitigation. All projects that involve commercial or industrial building renovations are required to comply with applicable federal, state, and local requirements, as summarized below.

1. For asbestos: South Coast Air Quality Management District (SCAQMD) Rule 1403; Cal/OSHA Asbestos and Carcinogen Unit; California Department of Public Health; California Department of Resources, Recycling, and Recovery (CalRecycle); and EPA National Emission Standards for Hazardous Air Pollutants (NESHAP).
2. For lead: California Labor Code Sections 6716 to 6717; CCR, Title 8, Section 1532.1 et seq.; CCR, Title 17, Section 35001 et seq.; Los Angeles County Environmental Health Lead Program; and EPA Lead Renovation, Repair, and Painting Rule
3. For universal wastes: DTSC universal waste rules; CalRecycle; and EPA Solid Waste Rules (40 CFR Part 273)

Because lead and hazardous building materials surveys are not explicitly required by law prior to demolition of a building, there is the potential for significant impacts associated with the release of these materials. As such, to reduce potentially significant impacts, a survey will be required in accordance with **MM-HAZ-1**. Hazardous building materials identified in the survey will be managed in accordance with the rules and regulations outlined above. Demolition debris that contains hazardous materials would be segregated and disposed of or recycled off site. Transportation and disposal of these materials would be done in accordance with federal, state, and local laws and regulations. Material disposal and recycling would be completed at the closest available facilities to reduce travel times and distances.

Construction of the west side of the Project site would also include grading and excavation for utilities and the building foundation and footings. The Phase II ESA (Appendix G2) identified small areas of diesel contamination above risk-based screening levels (ESLs) for construction and commercial exposure, and gasoline-range organics and PCE concentrations in soil vapor above ESLs for commercial exposure. Excavation and relocation/removal of these soils could result in hazards to the public or environment such that impacts would be potentially significant if the contaminated soil is not appropriately managed. Due to this contamination, and as recommended in the Phase II ESA, a soil management plan (SMP) shall be prepared in accordance with **MM-HAZ-2**. The SMP will include processes and procedures for managing contaminated soils and will include health and safety and

monitoring procedures for contaminated soil vapor. Handling, transportation, and disposal of contaminated soils will be done in accordance with federal, state, and local laws and regulations.

Hazardous materials that may be used during construction and demolition activities of the proposed Project include gasoline, diesel fuel, oil, lubricants, grease, welding gases (e.g., acetylene, oxygen, and argon), solvents, and paints. These materials would be used and stored in designated construction staging areas within the boundaries of the Project site and would be transported, handled, and disposed of in accordance with all applicable federal, state, and local laws and regulations. The use of these materials for their intended purpose would not pose a significant risk to the public or environment. Hazardous wastes accumulated during Project construction may include unused or off-specification paint and primer, paint thinner, solvents, and vehicle- and equipment-maintenance-related materials, many of which can be recycled. Empty containers for such materials (e.g., drums and totes) may also be returned to vendors, if possible, and would otherwise be removed from the Project site upon completion of the Project's construction. Hazardous waste that cannot be recycled would be transported by a licensed hazardous waste hauler using a Uniform Hazardous Waste Manifest and disposed of at an appropriately permitted facility. The use of these substances is subject to applicable federal, state, and local health and safety laws and regulations that are intended to minimize health risk to the public associated with hazardous materials.

During construction, if hazardous materials and/or petroleum products are stored on the Project site above applicable regulatory thresholds, the applicable documents and plans will be submitted accordingly. These thresholds include those outlined in the Hazardous Material Business Plan rules (California Health and Safety Code, Division 20, Chapter 6.95, Article 1; 19 CCR, Division 2, Chapter 4) and Spill Prevention, Control, and Countermeasure Plan rules (SPCC; 40 CFR, Chapter 1, Subchapter D, Part 112). Appropriate plans would be prepared as required by regulation and submitted as required to the local Certified Unified Program Agency, which for the Project site is the LACoFD and kept on site through construction of the Project (SPCC Plans are not submitted to a regulatory agency). BMPs and spill prevention and response procedures required by these rules would be implemented.

With implementation of **MM-HAZ-1** and **MM-HAZ-2**, and adherence to applicable federal, state, and local rules and regulations, impacts due to routine use and transportation of hazardous materials during construction of the proposed Project would be **less than significant with mitigation incorporated**.

Operation

Operation of the proposed Project would include self-storage, warehouse, and office/retail space. The parking lot area in the northeast corner could also be used for special events, such as food trucks, farmer's markets, car shows, live entertainment, food giveaways, and mobile vaccination events. Daily operations are anticipated to include maneuvering forklifts, lift equipment, and large semi-trucks through and around the site and backing into the loading docks. As with construction, hazardous materials handled and stored during Project operation would be required to comply with applicable laws, rules and regulations depending on applicable storage thresholds. Implementation of PDF-HAZ-1 would also prevent hazardous materials below the surface from impacting people on site and the environment. Hazardous material handling in excess of applicable regulatory thresholds would require creation of emergency response plans, implementation of secondary containment, spill prevention and response procedures, and reporting to the local response agencies. While actual

future occupants are unknown at this time, each occupant would also be required to comply with the same applicable environmental laws, rules and regulations. As such, routine handling and transportation of hazardous materials as part of proposed Project operation would result in **less-than-significant** impacts with compliance with applicable laws, rules and regulations.

Threshold HAZ-2. Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction

As discussed under Threshold HAZ-1, demolition of the on-site structures without proper hazardous material mitigation could result in the release of hazardous materials to the environment. This would be mitigated with implementation of **MM-HAZ-1**. Excavation of contaminated soils could result in a release of hazardous constituents in soil and soil vapor; this would be mitigated with implementation of **MM-HAZ-2**. Also discussed in Threshold HAZ-1, hazardous materials handled during construction in reportable quantities would be reported, permitted, and handled in accordance with applicable local and state laws and regulations. These permits and associated material handling, control, and spill countermeasure plans are designed to prevent releases of hazardous materials, and how to immediately respond to and contain a hazardous material release, should it occur. Hazardous materials required for construction would not be handled on site in such quantities that a reasonably foreseeable upset or accident condition would likely occur. Also, with implementation of **PDF-HAZ-1**, hazardous materials beneath the Project site caused by the Gardena Sumps would not be impacted by proposed Project construction, and these materials would not impact construction activities or construction workers. With implementation of **MM-HAZ-1** and **MM-HAZ-2** and adherence to federal, state, and local rules and regulations, impacts during construction due to reasonably foreseeable upset and accident conditions involving the release of hazardous materials to the environment would be **less than significant with mitigation** incorporated.

Operation

As discussed in Threshold HAZ-1, the Phase II ESA identified elevated concentrations of PCE and gasoline-range organics in soil vapors above ESLs for commercial exposure scenarios. Operation of the proposed Project without appropriate vapor intrusion mitigation could result in upset and accident conditions releasing these hazardous materials to the environment. **PDF-HAZ-2** outlines vapor intrusion mitigation that would be included in building design and would include monitoring post construction to verify appropriate operation. Special events held in the northeastern portion of the subject property would not involve long-term placement of occupied spaces, and as such vapor intrusion is not a concern in this area. Additionally, as outlined in **PDF-HAZ-1**, operation of the proposed Project would not interfere with or negatively impact the remedy implemented by ARC on the eastern side of the Project site and would prevent the hazardous materials below surface from impacting people on site and the environment. The land use covenant implemented as part of **PDF-HAZ-1** would further reduce or eliminate the potential for future releases from subsurface contaminants by requiring compliance with institutional controls to protect the elements of the RAP, such as the engineered cap and prohibit sensitive uses such as residences and schools. Similar to construction, operations that use hazardous materials above applicable thresholds would be required to prepare and implement spill prevention and response procedures, and, if required, report

to local regulatory agencies. With PDF-HAZ-1 and PDF-HAZ-2 and adherence to applicable rules and regulations, accident and upset causing releases of hazardous materials during operation of the proposed Project would be **less than significant with mitigation** incorporated.

Threshold HAZ-3. Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

As outlined in the RAP, which would be implemented as PDF-HAZ-1, the chosen remedy for the Gardena Sumps site includes limited excavation and capping of the former oil sumps. This remedy was chosen as it would reduce the potential for emissions of hazardous materials. Details of this analysis can be reviewed in the RAP (Appendix G3). Protections in place as part of PDF-HAZ-1 (implementation of the RAP), PDF-HAZ-2 (vapor intrusion mitigation), MM-HAZ-1 (abatement of hazardous materials before demolition), and MM-HAZ-2 (soil management plan) all have an element of emission reduction and would prevent impacts to people on site and the environment. Construction and earthmoving activities would also be regulated under SCAQMD Rules 1166, 403, and 1466, which further reduce fugitive dusts and emissions during earthmoving activities on sites with contaminated soils. Operations at the Project site would be held to rules and regulations, as well as land use requirements established by the City and County. Acutely hazardous material and waste handling is not anticipated to occur during Project construction or operation, as these are not typically associated with proposed construction or operation. Impacts would be **less than significant with mitigation** incorporated.

Threshold HAZ-4. Would the Project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

As discussed in previous sections, the Project site is located on the Gardena Sumps site, which is a State Response Site listed in accordance with Government Code Section 65962.5 (Cortese List site). PDF-HAZ-1 includes remediation of the Gardena Sumps site under DTSC regulatory oversight. The implementation of the RAP, the institutional controls that DTSC has required, and the land use covenant that requires compliance with these controls and prohibits sensitive uses on the Project Site, which form a part of PDF-HAZ-1, would ensure that future site use and operations do not result in a release of hazardous materials. Construction and operation of the proposed Project would not begin until the RAP has been implemented by the installation of this remedy's essential elements, such as the engineered cap and soil vapor probes. MM-HAZ-2 would also provide further protection in the event contaminated soil and groundwater are encountered during construction following implementation of the RAP by requiring proper on-site treatment or off-site disposal of such impacted soil or groundwater. Operation would include vapor mitigation as outlined in PDF-HAZ-2, which would prevent indoor soil vapor intrusion, further reducing impacts due to subsurface contamination associated with the site's location on the Cortese List. With implementation of PDF-HAZ-1 and PDF-HAZ-2, and MM-HAZ-2, impacts would be **less than significant with mitigation**.

3.6.6 Mitigation Measures

MM-HAZ-1 Pre-Demolition Hazardous Materials Abatement. Demolition or renovation plans and contract specifications shall incorporate abatement procedures for the survey and

removal of materials containing asbestos, lead, polychlorinated biphenyls, hazardous materials, hazardous wastes, and universal waste items. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District.

MM-HAZ-2 Soil Management Plan. Prior to commencement of any earthmoving activities, a Soil Management Plan (SMP) shall be developed that addresses potential impacts in soil and soil vapor from releases on or near the Project site. The SMP shall include training procedures for identification of contamination. The SMP shall describe procedures for assessment, characterization, management, and disposal of contaminated soils in accordance with all applicable state and local regulations, including SCAQMD Rules 1466, 403, and 1166. The SMP shall include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. The Applicant or its designee shall implement the SMP during construction activities for the proposed Project. As the site is currently under regulatory oversight by DTSC and shall likely have a land use covenant in place at the time of construction, the SMP shall be submitted to DTSC for review and approval prior to earthmoving activities.

3.6.7 Level of Significance After Mitigation

Thresholds HAZ-1, HAZ-2, HAZ-3 and HAZ-4. MM-HAZ-1 would require abatement of hazardous building materials prior to demolition, removing these materials for appropriate off-site disposal. Removal of these materials before construction activities would reduce the potential for releases of hazardous materials during routine activities and due to upset/accident conditions to levels that are **less than significant**.

MM-HAZ-2 requires preparation and implementation of an SMP, which would outline proper procedures for handling, stockpiling, transportation, and disposal of contaminated soils. The SMP would also outline health and safety and monitoring for contaminated soil vapor during earthmoving activities. Controls and practices implemented by the SMP would reduce the potential for releases of hazardous materials during construction activities and due to upset/accident conditions to levels that are **less than significant**.

3.6.8 Cumulative Effects

Because cumulative projects would be fully regulated, thus reducing potential for public safety risks, cumulative impacts associated with exposure to hazards and hazardous materials would be less than significant. Through mitigation and compliance with regulatory requirements, the construction or operation of the proposed Project itself would not create significant human or environmental health or safety risks that could combine with other project impacts to create a significant and cumulatively

considerable impact. For these reasons, the proposed Project **would not result in cumulatively considerable impacts** related to hazards and hazardous materials.

3.6.9 References

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3.7 Hydrology and Water Quality

This section describes the existing hydrology and water quality conditions of the Project site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, cumulative impacts, and identifies mitigation measures related to implementation of the proposed 1450 Artesia Specific Plan Project (Project or proposed Project).

Information contained in this section is based in part on the Preliminary Hydrology and Low Impact Development (LID) Report, which was prepared for the Project site by Kimley Horn on April 12, 2024 (Appendix H). Other documentation used in this analysis includes mapping compiled by the Federal Emergency Management Agency (FEMA) as well as the sources listed in Section 3.7.8, References.

3.7.1 Existing Conditions

This section describes the existing conditions on the Project site and vicinity and identifies the resources that could be affected by the Project.

Regional Watershed

The Project is located within the Dominguez Channel Watershed, which covers approximately 70,000 acres and is located in the southern portion of the Los Angeles Basin. Approximately 43,400 acres of the watershed drains to the 15.7-mile-long Dominguez Channel, which begins in Hawthorne and discharges into the East Basin of the Los Angeles Harbor. The remaining approximately 26,600 acres, which include Wilmington Drain and Machado Lake, drain directly to the Los Angeles Harbor independently of Dominguez Channel. Over 90% of the watershed is developed. Residential use covers about 41%, and another 44% is industrial, commercial, and transportation-related. Overall, the watershed is approximately 61% impervious. Constructed waterways are predominant; however, some small, natural creeks are located in the hills of the Palos Verdes Peninsula (LA Sanitation 2023). The Dominguez Channel is located approximately 150 feet south of the Project boundary.

Topography

The Project site and surrounding area are characterized as an urban, developed commercial and residential area, with limited pervious surfaces. The developed portion of the Project site on the western side is at an elevation of approximately 29 feet above mean sea level (amsl) with a slight gradient towards the south southeast. The current grade ranges from about elevation 38 feet amsl in the southern portion of the site to about 19 feet amsl along the east edge of the site. The eastern portion of the site where the former sump disposal areas (also known as the Gardena Sumps or Cooper and Haack Sumps) were located, appears to currently be at an elevation that is a few feet below the surrounding grade.

Existing Drainage Conditions

The existing 6.53-acre Project site is currently partially developed with a mix of uses that includes a variety of trailer storage structures that include several small businesses and a residential single-family home building. However, the tributary runoff area for the Project site extends south and east

into the LA County Flood Control (LACFD) and Southern Pacific Railroad property, which increases the total analysis area to 8.37 acres. According to the Preliminary Drainage report, the total impervious and pervious areas are 5.05 acres and 3.32 acres, respectively, or 60% impervious (Appendix H). This calculation considers the existing conditions of the site prior to implementation of the final Remediation Action Plan. The Project site is divided into two drainage management areas (DMAs) in a generally low-lying coastal plain that is relatively flat with gentle drainage to the northwest (DMA 1) and northeast (DMA 2). Ultimately, on-site drainage discharges to the Dominguez Channel, south of the site.

The Los Angeles County Department of Public Works (LACDPW) Hydrology Manual requires that a storm drain conveyance system be designed for a 25-year storm event (Q25) and that the combined capacity of a storm drain and street flow system accommodate flow from a 50-year storm event (Q50) due to the sump condition created by the proposed development. The existing site peak flows generated for the site for storm events ranging for the 50-year peak flow rate is shown in Table 3.7-1, Existing Hydrology Results (Appendix H).

Table 3.7-1. Existing Hydrology of the Project Site

Storm Event	Existing (Peak Flow Rate cfs)	Volume (cu-ft)
50-Year (DMA 1)	9.6	49,686
50-Year (DMA 2)	11.1	59,938

Notes: cfs = cubic feet per second; cu-ft = cubic feet; DMA = drainage management area.

Surface Water Quality

Stormwater runoff is a significant contributor to local and regional pollution. Urban stormwater runoff is the largest source of unregulated pollution in the waterways and coastal areas of the United States. Federal, state, and regional regulations require the City of Gardena (City) to control the discharge of pollutants to the storm drain system, including the discharge of pollutants from construction sites and areas of new development or significant development.

The Project site is located in the Dominguez Channel and Los Angeles/Long Beach Harbors Watershed Management Area, which is characterized by a generally low topographic gradient. The Dominguez Channel drains a highly industrialized area with numerous sources of pollution resulting from polycyclic aromatic hydrocarbons and contains remnants of persistent legacy pesticides, including dichlorodiphenyltrichloroethane (DDT), as well as polychlorinated biphenyls, all of which contribute to poor sediment quality both within the channel and in downstream Inner Harbor areas. Although highest in the Dominguez Channel Estuary and Inner Harbor Consolidated Slip sediments, DDT has historically been present throughout the harbor. Oil pumping has a historical presence in the area, and there are existing wells still in operation. Metals remain elevated at some locations in the sediments of the Inner Harbor. The Dominguez Channel is listed on the Clean Water Act Section 303(d) list as impaired due to the prevalence of bacteria and other microbes, metals, and total toxic chemicals (EPA 2023).

In accordance with state policy for water quality control, the Los Angeles Regional Water Quality Control Board (RWQCB) employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and

discharge conditions and prohibitions. The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (LARWQCB 2014) has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction. The existing and proposed beneficial uses of water bodies downstream of the Project site (previously described) include groundwater recharge, warm freshwater habitat, water contact recreation, and non-contact water recreation; potential uses include municipal and domestic supply, industrial service supply, and wildlife habitat.

Once a water body has been listed as impaired on the 303(d) list, a total maximum daily load (TMDL) for the constituent of concern (pollutant) must be developed for that water body. A TMDL is an estimate of the daily load of pollutants that a water body may receive from point sources, non-point sources, and natural background conditions (including an appropriate margin of safety), without exceeding its water quality standards. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL. In general, dischargers within each watershed are collectively responsible for meeting the required reductions and other TMDL requirements by an assigned deadline. TMDLs that have been established for the Dominguez Channel, Dominguez Channel Estuary, and Los Angeles Inner/Outer Harbor, based on amendments from the initial 2012 adoption, include cadmium, chromium, copper, mercury, lead, zinc, chlordane, dieldrin, toxaphene, DDT, PCBs, certain PAH compounds, benthic community effects and toxicity (LARWQCB 2022).

Enhanced Watershed Management Program

Based on the Enhanced Watershed Management Program Work Plan, Dominguez Channel Watershed Management Area (City of Los Angeles 2015), available receiving water monitoring data was used to evaluate potential stormwater and non-stormwater discharge data. Water quality data was obtained from the LACDPW, Port of Los Angeles, and City of Los Angeles Department of Public Works, Bureau of Sanitation. Monitoring data were available from the Dominguez Channel, Dominguez Channel Estuary, the Consolidated Slip (of the Los Angeles Inner Harbor), the Inner Harbor, Outer Harbor, Fish Harbor, and the Wilmington Drain. The assessment of discharge quality is considered tentative pending completion of a Coordinated Integrated Monitoring Program. The data was compared to water quality criteria to evaluate the number of exceedances. Water quality data from the Dominguez Channel and Torrance lateral included exceedances of dissolved metal, toxicity, diazinon, ammonia, cyanide, dissolved oxygen, *E. coli*, and fecal coliform. Point sources include stormwater and urban runoff flowing through municipal separate storm sewer systems (MS4s), as well as other MS4 discharges, such as those from refineries, generating plants, port operations, and the Terminal Island Water Reclamation Plant, which discharges into the Outer Harbor. Nonpoint sources include contaminated sediments already in receiving waters and atmospheric deposition.

The Dominguez Channel Watershed Management Area also contains two Superfund sites, which have historically been large contributors of organic pollutants, including the Montrose Chemical Corporation site and the Del Amo Facility site. The water quality issues identified for the Dominguez Channel and Los Angeles Harbor are expected to be addressed with best management practices (BMPs) to address existing TMDLs. Regional stormwater management plans were evaluated in an effort to identify whether planned projects met Enhanced Watershed Management Plan criteria for regional projects and represent feasible implementation options. The Dominguez Channel Watershed Management Plan Group then incorporated applicable BMPs into the Enhanced Watershed Management Plan, thus replacing the previous plans, to address the various TMDLs. The Enhanced

Watershed Management Plan identifies projects to be implemented, including the following (City of Los Angeles 2015):

1. Minimum control measures, excluding implementation of low-impact development (LID) ordinances for new and re-development
2. LID ordinance implementation for new and re-development processed
3. Regional projects
4. Distributed projects, which are primarily green streets

The Enhanced Watershed Management Plan is part of an adaptive management process of the MS4 permit, which states that every 2 years, the plan will adapt to become more effective, based on progress achievements, re-evaluation of water quality priorities, and availability of new information. Currently, most of the projects identified in the Enhanced Watershed Management Plan are not explicitly funded from a dedicated revenue source. Obtaining funds for all of the activities identified in the plan is anticipated to take many years. A compliance schedule has been developed to address water quality issues, based on TMDL categories (City of Los Angeles 2015). As previously discussed, most of the TMDLs were delisted from the 303(d) list in 2012 (LARWQCB 2022), indicating that water quality has improved downstream of the Project site.

The Dominguez Channel Watershed Management Area Group has also established an outfall monitoring program associated with non-stormwater discharges, which is intended to be a collaborative effort between all of the agencies in the group. As specified in the Coordinated Integrated Monitoring Program, the Dominguez Channel Watershed Management Area Group will report non-stormwater discharges that occur in their jurisdiction and actions taken to evaluate if those discharges are persistent, exempt and, if non-exempt, actions taken and/or BMPs implemented to eliminate those discharges. Per Part III.2 of the MS4 Permit, “exempt non-stormwater discharges often include non-emergency firefighting activities, discharges from drinking water supplies, dewatering of lakes, landscape irrigation, swimming-pool discharges, decorative fountain dewatering, car washes, and street/sidewalk washing” (City of Los Angeles 2015).

Groundwater

Regionally, the Central Basin and the West Coast Groundwater Basin are the two main groundwater basins in the vicinity of the City of Gardena. Specifically, the Project site is underlain by the West Coast Groundwater Basin. The Newport-Inglewood Fault Zone serves as a water barrier separating the Central Basin and the West Coast Basin.

In accordance with the Sustainable Groundwater Management Act (SGMA), the California Department of Water Resources has classified groundwater basins in the state in regard to prioritizing a requirement to create and implement a Groundwater Sustainability Plan (GSP). Both the Central Basin and West Coast Basin have a very low priority regarding enacting a GSP (DWR 2023). In addition, both groundwater basins are adjudicated, in accordance with the West Coast Basin Judgment, and thus have a managed groundwater extraction rate, reducing the potential for over-extraction.

Development of the yield of the Central Basin is dependent on the use of local storm runoff, imported and recycled water for groundwater recharge, and the injection of imported water from the backside

of the Alamos Seawater Intrusion Barrier. The Central Basin is replenished through subsurface flows from the San Gabriel Valley and precipitation that falls directly on the Montebello Forebay and percolates into the Basin.

Groundwater for the West Coast Basin originates from subsurface flow from the Central Basin and injection along with the seawater barrier system. Virtually all of the major rivers flowing through the Central and West Coast Basins have been developed into a comprehensive system of dams, flood control channels and percolation ponds for artificially recharging the basins. Los Angeles County studies have indicated that 90% of the rain and runoff in the county either percolates naturally into the ground or are captured in the flood control reservoirs for later release to recharge groundwater basins. The replenishment of Central and West Coast Basins with recycled water is an important source of water.

According to the Geotechnical Exploration for the Proposed Warehouse Redevelopment 1440 - 1462 Artesia Boulevard Gardena, California, dated February 4, 2022, which included drilling borings on site, groundwater was encountered at depths of between approximately 25 and 17 feet below ground surface (Appendix E). In addition, the California Geological Survey (CGS) performed a groundwater elevation evaluation for the Torrance Quadrangle within the alluvial soils and the historically shallowest groundwater depth is reported to be approximately 10 feet below ground surface (Appendix E). However, fluctuations of groundwater levels and the presence of localized zones of perched water are not uncommon and can be encountered during and following the rainy season.

Water Supply

Water supply in the City is provided by the Golden State Water Company (GSWC) Southwest District, which serves more than 54,000 customers (54,994 according to the 2020 UWMP) in Southwest Los Angeles County, including all of Gardena and Lawndale, and portions of Carson, Compton, El Segundo, Hawthorne, Inglewood, Redondo Beach, and unincorporated Athens, Del Aire, El Camino Village, Lennox and Gardena Heights (GSWC 2021).

Water delivered to customers in the Southwest System, as defined above, is a blend of groundwater pumped from the West and Central Coast Groundwater Basins and imported water from the Colorado River Aqueduct and State Water Project (imported and distributed by Metropolitan Water District of Southern California). GSWC owns 13 active groundwater wells, which pump from the Central and West Coast subbasins of the Coastal Plain of Los Angeles Groundwater Basin (GSWC 2021). GSWC has a total Allowed Pumping Allocation (APA) of 16,439 acre-feet per year (AFY) for all seven service areas subject to the Central Basin Adjudication. The West Coast Basin adjudication limit for groundwater extraction across the entire basin is 64,468 AFY of which GSWC maintains legal right to 7,502 AFY as its Annual Production Allowance (APA) (GSWC 2021).

Historically, GSWC has been able to reliably serve customers' water supply needs from year to year. However, interrupted or significantly reduced water supply, such as during a drought or as a result of an earthquake, could threaten this reliability. In addition to the direct supply sources from the two groundwater basins and purchased water, GSWC has some flexibility in the management of groundwater so as to move APA in accordance with the rules governing the adjudicated supplies (GSWC 2021). All of these supplies are available in normal, single dry, and five consecutive dry years.

In addition, GSWC maintains a water shortage contingency plan, which addresses long-term drought scenarios, as well as catastrophic supply interruptions that could occur suddenly.

Regional imported water supplies are conjunctively managed by the Central and West Basin Municipal Water Districts, and the Metropolitan Water District of Southern California. GSWC coordinates its urban water management planning with each of these entities. During an actual or threatened temporary shortage of imported water to the West Basin Municipal Water District, the Water Replenishment District of Southern California is authorized by the West Coast Basin Judgment to enter into agreements with water purveyors in the basin, which allow the over-extraction of groundwater. This authorized over-extraction can last for 4 months and may be used to produce a maximum of 10,000 acre-feet of water. According to the 2020 UWMP, however, GSWC projects that it will be able to serve 100% of projected demands in normal, single-dry and multiple-dry years until 2045 (GSWC 2021).

Flood Hazards

Flooding problems in Los Angeles County can range from a few isolated areas where a number of streets are flooded to inundation of residences and businesses causing substantive damage (City of Gardena 2023). Historically, there have been 16 flooding events that documented property damage, injuries, and/or fatalities since 1994 (City of Gardena 2023). However, according to the City's Hazard Mitigation Plan, the City is not prone to urban flooding and has not experienced a large-scale flood event (City of Gardena 2023).

Although the Dominguez Channel, located just south of the Project site, is designated as Zone A, a Special Flood Hazard Area (without base flood elevation), no portion of the Project site is located within a Special Flood Hazard Area (i.e., 100-year flood zone) (FEMA 2023). The Project site as well as much of the entire City is located outside the 500-year flood zone where there is an annual 0.2% chance of a flooding event occurring (City of Gardena 2022).

Flooding can also occur due to catastrophic failure of a dam and is considered to be the most likely cause of flooding within the City (City of Gardena 2023). Although the City has never been previously impacted by a dam failure, there have been at least 85 dam failures across California in recorded history. According to mapping compiled by the California Department of Safety of Dams, the City of Carson is not within an identified dam inundation map (DSOD 2023).

3.7.2 Relevant Plans, Policies, and Ordinances

Federal

Clean Water Act

Increasing public awareness and concern for controlling water pollution led to the enactment of the federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act (CWA) (33 USC 1251 et seq.). The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the waters of the United States. The CWA established basic guidelines for regulating discharges of pollutants into the waters

of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

Section 303 of the Clean Water Act (Beneficial Use and Water Quality Objectives)

The Los Angeles RWQCB is responsible for the protection of the beneficial uses of waters within the proposed Project area in Los Angeles County. The Los Angeles RWQCB uses its planning, permitting, and enforcement authority to meet its responsibilities adopted in the Basin Plan to implement plans, policies, and provisions for water quality management.

In accordance with state policy for water quality control, the Los Angeles RWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Basin Plan for the Los Angeles Region has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction. Under CWA Section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. A TMDL defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. The Los Angeles RWQCB has developed TMDLs for select reaches of water bodies.

Section 402 of the Clean Water Act (National Pollutant Discharge Elimination System)

The CWA was amended in 1972 to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit program, as authorized by Section 402 of the CWA, was established to control water pollution by regulating point sources that discharge pollutants into waters of the United States (33 USC 1342). In the State of California, the EPA has authorized the State Water Resources Control Board (SWRCB) permitting authority to implement the NPDES program.

Regulations (Phase II Rule) that became final on December 8, 1999, expanded the existing NPDES Program to address stormwater discharges from construction sites that disturb land equal to or greater than 1.0 acre and less than 5.0 acres (small construction activity). The regulations also require that stormwater discharges from small MS4s be regulated by an NPDES General Permit for Stormwater Discharges Associated with Construction Activity, Order No. 99-08-DWQ. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which describes BMPs the discharger would use to protect stormwater runoff. The SWPPP must contain a visual monitoring program, a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. On September 2, 2009, the SWRCB issued a new NPDES General Permit for Stormwater Associated with Construction Activities (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002) that became effective July 1, 2010.

National Flood Insurance Program

The National Flood Insurance Act of 1968 established the National Flood Insurance Program in order to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The Act also required the identification of all floodplain areas within the United States and the establishment of flood-risk zones within those areas. FEMA is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing flood insurance rate maps that delineate the areas of known special flood hazards and their risk applicable to the community. The program encourages the adoption and enforcement by local communities of floodplain management ordinances that reduce flood risks. In support of the program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

Federal Antidegradation Policy

The Federal Antidegradation Policy (40 CFR 131.12) requires states to develop statewide antidegradation policies and identify methods for implementing those policies. Pursuant to the Code of Federal Regulations, state antidegradation policies and implementation methods shall, at a minimum, protect and maintain: (1) existing in-stream water uses; (2) existing water quality where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

State

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—Assembly Bill 1739 (Dickinson), Senate Bill 1168 (Pavley), and Senate Bill 1319 (Pavley)—collectively known as the Sustainable Groundwater Management Act (SGMA), which requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, California Department of Water Resources provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt GPS for crucial (i.e., medium- to high-priority) groundwater basins in California.

California Porter-Cologne Water Quality Control Act

Since 1973, the California SWRCB and its nine RWQCBs have been delegated the responsibility for administering permitted discharge into the waters of California. The Project falls within the Los Angeles RWQCB. The Porter-Cologne Water Quality Act (California Water Code Section 13000 et seq.; CCR, Title 23, Chapter 3, Chapter 15) provides a comprehensive water-quality management system for the protection of California waters. Under the Act, “any person discharging waste, or proposing to

discharge waste, within any region that could affect the quality of the waters of the state” must file a report of the discharge with the appropriate RWQCB. Pursuant to the act, the RWQCB may then prescribe “waste discharge requirements” that add conditions related to control of the discharge. Porter-Cologne Water Quality Act defines “waste” broadly, and the term has been applied to a diverse array of materials, including non-point source pollution. When regulating discharges that are included in the federal CWA, the state essentially treats Waste Discharge Requirements and NPDES as a single permitting vehicle. In April 1991, the SWRCB and other state environmental agencies were incorporated into the California Environmental Protection Agency.

The RWQCB regulates urban runoff discharges under the NPDES permit regulations. NPDES permitting requirements cover runoff discharged from point (e.g., industrial outfall discharges) and nonpoint (e.g., stormwater runoff) sources. The RWQCB implements the NPDES program by issuing construction and industrial discharge permits.

Under the NPDES permit regulations, BMPs are required as part of a SWPPP. The EPA defines BMPs as “schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the United States.” BMPs include “treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage” (40 CFR 122.2).

California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High-Quality Water in California, was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state (e.g., isolated wetlands and groundwater), not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual basin plans, such high quality shall be maintained, and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of such water resource.

California Toxics Rule

The EPA has established water quality criteria for certain toxic substances via the California Toxics Rule. The California Toxics Rule established acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water, such as inland surface waters and enclosed bays and estuaries, that are designated by each RWQCB as having beneficial uses protective of aquatic life or human health.

California Water Code

The California Water Code includes 22 kinds of districts or local agencies with specific statutory provisions to manage surface water. Many of these agencies have statutory authority to exercise some forms of groundwater management. For example, a Water Replenishment District (Water Code Section 60000 et seq.) is authorized to establish groundwater replenishment programs and collect fees for that service, whereas a Water Conservation District (Water Code Section 75500 et seq.) can levy groundwater extraction fees. Through special acts of the Legislature, 13 local agencies have been granted greater authority to manage groundwater. Most of these agencies, formed since 1980, have the authority to limit export and control some in-basin extraction upon evidence of overdraft or

the threat of an overdraft condition. These agencies can also generally levy fees for groundwater management activities and for water supply replenishment.

Assembly Bill 3030 – Groundwater Management Act

In 1992, Assembly Bill 3030 was passed, which increased the number of local agencies authorized to develop a groundwater management plan and set forth a common framework for management by local agencies throughout California. These agencies could possess the same authority as a water replenishment district to “fix and collect fees and assessments for groundwater management” (Water Code Section 10754), provided they receive a majority of votes in favor of the proposal in a local election (Water Code Section 10754.3).

CALGreen

Formerly known as the California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations, CALGreen is designed to improve public health, safety, and general welfare by utilizing design and construction methods that reduce the negative environmental impact of development and to encourage sustainable construction practices. CALGreen provides mandatory direction to developers of all new construction and renovations of residential and non-residential structures with regard to all aspects of design and construction, including, but not limited to, site drainage design, stormwater management, and water use efficiency. Required measures are accompanied by a set of voluntary standards designed to encourage developers and cities to aim for a higher standard of development.

Local

Municipal National Pollutant Discharge Elimination System Permit

The City is a co-permittee under the “Waste Discharge Requirements for Municipal Stormwater and Urban Runoff Discharges within the County of Los Angeles,” issued by the Los Angeles RWQCB (Order No. R4-2021-0105), adopted July 23, 2021. This order applies to the following:

1. LACFCD;
2. Unincorporated areas of Los Angeles County under County jurisdiction, with the exception of a portion of Antelope Valley and the City of Avalon;
3. 84 cities within the LACFCD, with the exception of the City of Long Beach

This permit also serves as an NPDES permit under the federal CWA (NPDES No. CAS614001), as well as waste discharge requirements under California law (the Municipal NPDES Permit), and as a co-permittee under the Municipal NPDES Permit the City is required to adopt ordinances and implement procedures with respect to the entry of non-stormwater discharges into the MS4s.

The Los Angeles MS4 Order incorporates most of the pre-existing requirements of the previous 2001 Los Angeles MS4 Order, including the water quality-based requirement to not cause or contribute to exceedances of water quality standards in the receiving water. The Los Angeles MS4 Order also requires Permittees to comply with new water quality-based requirements to implement 33 watershed-based total maximum daily loads (TMDLs) for the region. The Order links both of these

water quality-based requirements to the programmatic elements of the Order by allowing Permittees to comply with the water quality-based requirements, in part, by developing and implementing a watershed management program (WMP) or enhanced watershed management program (EWMP).

Los Angeles County Low Impact Development Manual

The County of Los Angeles prepared the 2014 Low Impact Development Standards Manual (LID Standards Manual) to comply with the requirements of the NPDES MS4 Permit for stormwater and non-stormwater discharges from the MS4, within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4-2012-0175), also known as the Los Angeles Water Quality Ordinance. This permit covers 84 cities, including Gardena, and the unincorporated areas of Los Angeles County. Under the permit, the LACFCD is designated as the principal permittee, and the county, along with 84 incorporated cities, is designated as a permittee. In compliance with the permit, the permittees have implemented a stormwater quality management program, with the ultimate goal of accomplishing the requirements of the permit and reducing the amount of pollutants in stormwater and urban runoff, wherein new development/redevelopment projects are required to prepare a LID report.

The Los Angeles County LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the county, with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. The LID Standards Manual addresses the following objectives and goals (LACPW 2014):

- Lessen the adverse impacts of stormwater runoff from development and urban runoff on natural drainage systems, receiving waters, and other water bodies
- Minimize pollutant loadings from impervious surfaces by requiring development projects to incorporate properly designed, technically appropriate BMPs and other LID strategies
- Minimize erosion and other hydrologic impacts on natural drainage systems by requiring development projects to incorporate properly designed, technically appropriate hydromodification control development and technologies

City of Gardena General Plan

The City of Gardena General Plan was adopted in 2006 and includes goals and policies within the required elements including the Public Safety Plan and the Conservation Plan. The Public Safety Plan within the General Plan for the City was updated in February 2022. The Conservation Plan was adopted in 2006. The following is a list of goals and policies applicable to the proposed Project relating to Hydrology and Water Quality:

Public Safety Plan

PS Goal 5. A community that is protected from flood hazards

PS 5.1: Regulatory Compliance. Coordinate with local, state, and federal agencies to ensure that the City's regulations related to flood control are in compliance with federal, state, and local standards.

PS 5.2: FEMA Coordination. Coordinate with the Federal Emergency Management Agency (FEMA) to ensure that Federal Insurance Rate Maps correctly depict flood hazards in the City.

PS 5.3: Municipal Code. Implement the standards and requirements defined in the *Municipal Code* to reduce flood hazards and address flood-prone areas within the City.

PS 5.4: California Building Code. Adhere to the latest building, site, and design codes in the California Building Code and FEMA flood control guidelines to avoid or minimize the risk of flooding hazards for new development in the City.

PS 5.5: Stormwater Runoff. Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development (LID) to reduce stormwater runoff.

Conservation Plan

CN Goal 2. Conserve and protect groundwater supply and water resources.

CN 2.1: Encourage water conservation through education and water-conserving technology.

CN 2.2: Comply with the water conservation measures set forth by the California Department of Water Resources.

CN 2.3: Promote the use of reclaimed water for irrigation of public lands and for industrial uses, as feasible.

CN 2.4: Increase the quantity and maintain the quality of the City's water table to provide an independent source of water.

CN 2.5: Encourage citizens to report illegal dumping and vigorously prosecute illicit dumping of toxic or hazardous materials into the ground water.

CN 2.6: Encourage and support the proper disposal of hazardous waste and waste oil. Monitor businesses that generate hazardous waste materials to ensure compliance with approved disposal procedures.

3.7.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to hydrology and water quality are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hydrology and water quality would occur if the Project would:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

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:
 - i. Result in substantial erosion or siltation on- or off-site;
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - iv. Impede or redirect flood flows?
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Based on the results of the Initial Study prepared for the Project (Appendix A), the Project would result in no impacts related to impeding or redirecting flood flows. The Project would result in less-than-significant impacts regarding violating any water quality standards that could degrade water quality, substantial erosion or siltation on or off site, substantially increasing the rate or amount of surface runoff such that flooding would occur, and risk of release of pollutants due to inundation from a tsunami or seiche. As such, the following thresholds are evaluated in this section of the Draft EIR:

HYD-1. Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

HYD-2. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- i) 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?

HYD-3. Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

3.7.4 Impact Analysis

Threshold HYD-1. Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

Construction

The proposed Project would require the use of water for dust suppression during Project demolition, grading, and construction activities. The amount of water that would be required to control dust

during grading and construction would be relatively minimal and short-term such that it should not significantly impact existing groundwater supplies.

Operation

Once completed, the Project would require potable water to serve the Project site, water the landscaping and provide required fire flow. The City and the Project site would receive water service from the GSWC – Southwest Water System. According to the GSWC, the Southwest Water System is a blend of groundwater pumped from the adjudicated West and Central Coast Groundwater Basins and imported water from the Colorado River Aqueduct and State Water Project (imported and distributed by Metropolitan Water District of Southern California) (GSWC 2021). Additionally, GSWC has entitlement of groundwater resources in the West and Central Coast Groundwater Basins. Furthermore, GSWC leases additional water rights from entities that no longer pump groundwater but have entitlements, in the attempt to meet the increase in water demand from its service area. As such, GSWC currently has no immediate concern with the availability of water supply to the City and projected growth in its service area until 2045 (GSWC 2021). In addition, GSWC will continue its long range planning efforts to ensure future stability of service beyond 2045. Therefore, impacts associated with groundwater supplies would be **less than significant**, and no mitigation is required.

According to the Preliminary Hydrology and LID Report (Appendix H), development of the Project site with respect to the analysis area would increase the percentage of impervious surfaces from 60% to 67%. While this increase in impervious surfaces could reduce the amount of on-site groundwater recharge, the proposed Project would be required to meet the City's Storm Water Management and Discharge Control Ordinance, including Low Impact Development (LID) structural and nonstructural Best Management Practices (BMPs) and source control BMPs. Due to the legacy contaminants at the Project site, infiltration on site is not feasible. Additionally, given the limited surface area of landscaping in the proposed condition harvest and reuse is also considered not feasible. However, the LID Manual states that in the event a site is unable to retain 100% of the storm water quality design volume on site and implement harvest and reuse BMPs, a Biofiltration (BIO-1) BMP sized at 1.5-times the required mitigation volume is acceptable. The proposed Project would include a Modular Wetland System to treat stormwater runoff and meet water quality requirements and an on-site retention feature, or underground cistern, to mitigate the stormwater runoff volume for the design storm. Therefore, considering the modest increase of impervious surfaces in the analysis area from 60% to 67% combined with the implementation of required LID features, and the adjudication of the underlying groundwater basins, the potential impacts related to groundwater supplies and recharge would be **less than significant**, and no mitigation is required.

Threshold HYD-2. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- i) 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?***

The proposed Project would comply with existing local, state, and federal regulations related to drainage and runoff. Furthermore, according to the Preliminary Hydrology and LID Report (Appendix H), in order to maintain the 50-year storm event peak flow rate as calculated for the existing condition,

the Project would need to detain all incremental flow leaving the site in excess of the 9.6 CFS. The mitigated peak flow would be controlled via a sump pump that would discharge at the required existing flow rate. The total amount of detention needed to mitigate the increased flow is 1,952 cubic feet. Additionally, consistent with the County's LID Manual and the City's requirements, the biofiltration BMP sized at 1.5-times the required mitigation volume results in 25,139 cubic feet. To meet both Hydrology and LID requirements for the proposed Project, the detention requirements for both analyses are required to be summed to create a total on-site detention requirement. The total on-site detention for the Project shall be approximately 27,139 cubic feet. The detention required for hydrology purposes would be in excess of the LID requirement such that all 25,139 cubic feet of required LID detention would be stored for treatment prior to being stored for hydrology purposes. Therefore, proposed BMP features would accommodate the increase in flows due to site development and the potential impacts associated with stormwater drainage system capacity would be **less than significant**, and no mitigation is required.

Threshold HYD-3. Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project site is located within the jurisdiction of the Los Angeles Regional Water Quality Control Board (RWQCB) Basin Plan (LARWQCB 2014). As noted above, the RWQCB regulates urban runoff discharges under the NPDES permit regulations. NPDES permitting requirements cover runoff discharged from point (e.g., industrial outfall discharges) and nonpoint (e.g., stormwater runoff) sources. The RWQCB implements the NPDES program by issuing construction and industrial discharge permits.

Under the NPDES permit regulations, BMPs are required as part of a SWPPP. The EPA defines BMPs as "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the United States." BMPs include "treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage" (40 CFR 122.2). Preparation and implementation of a SWPPP consistent with the NPDES General Construction Permit would be required for all construction activities and consistent with the objectives and policies of the Basin Plan.

During operation of the Project, the Project design plans would include drainage control features consistent with the City's Storm Water Management and Discharge Control Ordinance, including LID structural and nonstructural BMPs and source control BMPs, which is also consistent with the objectives and policies of the Basin Plan.

Compliance with these existing regulatory regional and local regulations related to water quality control plans would reduce potential water quality impairment of surface waters. Therefore, the proposed Project would not conflict with a water quality control plan, and impacts would be less than significant.

The Project site is located within the West Coast Groundwater Subbasin of the Coastal Plain of Los Angeles; however, water supply for the Project would be sourced from GSWC, which includes both the West Coast and Central Subbasins as water supply sources. According to the Department of Water Resources (DWR) in its designations pursuant to SGMA, both subbasins are considered very low priority because they are adjudicated and are not required to prepare and implement a

Groundwater Sustainability Plan. The adjudication limits the allowable annual extraction of groundwater per water rights holder within the basin in order to prevent seawater intrusion and an unhealthy groundwater level. As part of the adjudication, the court appointed the DWR to serve as Watermaster to account for all water rights and groundwater extraction amounts per year. As noted above, the GSWC in its 2020 UWMP determined that water supply reliability for projected demands and supplies until 2045 can be met in normal, single year, and multiple dry year scenarios. As a result, the proposed Project would not conflict or obstruct a sustainable groundwater management plan and the impact would be **less than significant**, and no mitigation is required.

3.7.5 Mitigation Measures

Impacts would be less than significant. As such, no mitigation measures are required.

3.7.6 Level of Significance After Mitigation

Potential impacts related to Hydrology and Water Quality with adherence to existing regulatory requirements would be less than significant with no mitigation required.

3.7.7 Cumulative Effects

The geographic context for the analysis of cumulative impacts associated with water quality is the encompassing Dominguez Channel and Los Angeles/Long Beach Harbors Watershed. Cumulative development in the watershed could include increases to impervious areas and new potential sources of pollutants in stormwater runoff. Construction activities associated with development could temporarily increase the number of exposed surfaces that could contribute to sediments in stormwater runoff. Additionally, materials associated with construction activities could be deposited on surfaces and carried to receiving waters in stormwater runoff. Continued development and redevelopment within the watershed could also increase the amount of impervious surface, which could increase stormwater runoff rates and amounts, as well as result in changes in land use that may increase the amount of pollutants in stormwater runoff. All cumulative development in the watershed would be subject to the existing regulatory requirements to protect water quality and minimize increases in stormwater runoff. For example, the Construction General Permit requires the development and implementation of a SWPPP for all construction sites larger than 1 acre to mitigate potential impacts to water quality from polluted stormwater runoff.

Every 2 years, the Los Angeles RWQCB must re-evaluate water quality within its geographic region and identify those water bodies not meeting water quality standards. For those impaired water bodies, a TMDL must be prepared and implemented to reduce pollutant loads to levels that would not contribute to a violation of water quality standards. All development within the Dominguez Channel and Los Angeles/Long Beach Harbors Watershed would be subject to the water quality standards outlined in the Basin Plan and must comply with any established TMDLs. The continuing review process would ensure that cumulative development within the watershed would not substantially degrade water quality.

Los Angeles County and other co-permittee cities within the Dominguez Channel and Los Angeles/Long Beach Harbors Watershed are subject to the requirements of their respective MS4 Permits. Currently,

the MS4 Permits require that the project designers and/or contractors of all new development and redevelopment projects that fall under specific priority project categories must develop WQMPs that include LID design requirements related to water quality. The LID features would address long-term effects on water quality within the watershed and ensure BMPs and LID designs minimize potential water quality concerns to the maximum extent practicable. Therefore, impacts associated with water quality standards and polluted runoff in the watersheds would be minimized and the proposed Project's contribution to cumulative impacts would not be cumulatively considerable.

Development of related cumulative projects would increase land use intensities in the water supply service area, resulting in increased water usage. As with the proposed Project, related cumulative projects would also include groundwater as a source of water supply. However, the GSWC's 2020 UWMP has planned for the provision of regional water during normal, dry, and multiple dry years. The plan uses regional population, land use plans, and projections of future growth as the basis for planning water system improvements (including water treatment plants) and demonstrating compliance with state water conservation goals and policies. As such, to the extent that related projects are generally consistent with regional growth patterns and projections, cumulative projects would not be expected to result in increased water usage causing the need for new entitlements, resources, and/or treatment facilities that are not already being planned to accommodate regional growth forecasts and would not deplete groundwater supplies.

Certain qualifying projects would be subject to water supply assessment requirements, which assess the sufficiency of supply for existing and future demands, to serve as evidentiary basis during CEQA review on such projects. Further, compliance with the CALGreen would be required for new developments. This would ensure that many of the related projects, as well as the proposed Project, do not result in wasteful or inefficient use of limited water resources and may in fact result in an overall decrease in water use per person. Due to water planning efforts and water conservation standards, impacts to groundwater supplies would be minimized and the contributions of the proposed Project to cumulative impacts **would not be cumulatively considerable**.

3.7.8 References

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- LARWQCB. 2022. Amendment to the Water Quality Control Plan - Los Angeles Region to Revise the Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters, adopted October 13, 2022.

3.8 Land Use and Planning

This section describes the existing land use and planning conditions of the 1450 Artesia Specific Plan Project (Project) site and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, and references. Information contained in this section is based on review of local, regional, and statewide policies and regulations encompassing the Project site, including the following:

- California State Planning and Zoning Law
- Southern California Association of Governments Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy)
- South Coast Air Quality Management District 2022 Air Quality Management Plan
- City of Gardena General Plan
- City of Gardena Municipal Code

3.8.1 Existing Conditions

City of Gardena

Gardena is a city of 5.9 square miles (3,749 acres) and approximately 60,000 residents in the inland South Bay region of the Los Angeles metropolitan area. The City of Gardena (City) is regionally accessible by several major freeways including Interstate (I) 405, I-110, I-105 and State Route (SR) 91 (Artesia Freeway). The City's sphere of influence is limited to the area within City limits (City of Gardena 2006a). The City is bordered by the unincorporated West Athens community and the city of Hawthorne to the north, the cities of Los Angeles and Torrance to the south, the city of Los Angeles to the east, and the cities of Torrance and Hawthorne and Los Angeles County to the west.

Proposed Project Site

The Project site is located at the corner of Artesia Boulevard and Normandie Avenue, two major thoroughfares within the City (Figure 2-1, Project Location). The 1450 Artesia Specific Plan would cover approximately 6.33 acres collectively consisting of the sites located on Assessor Parcel Numbers 6106-036-010, 6106-036-012, 6106 036-034, 6106-036-035, 6106-036-036, 6106-036-037 (collectively, the Property). The Property currently contains three industrial structures (8,080 square feet, 825 square feet, and 3,159 square feet), a paved, open area along Artesia Boulevard (1450 Artesia Boulevard), and one occupied residential dwelling unit behind the industrial properties adjacent to the Dominguez Channel (1472 West Artesia Boulevard) (Figure 2-2, Project Footprint).

In 2004 the City completed a citywide retail analysis, which examined retail opportunities within and surrounding the City and summarized the opportunity for retail development at distinct locations within the City. The report found Artesia Boulevard offered a prime location for commercial development to attract quality commercial uses.

The City subsequently changed the General Plan land use designation for the majority of these properties from Industrial to General Commercial during the 2006 General Plan update. Additionally,

in 2006 the City adopted the Artesia Corridor Specific Plan to promote revitalization efforts within the area referred to as the Artesia Corridor. The Artesia Corridor Specific Plan's land use was described as "375,000 square feet of General Commercial, 40,000 square feet of restaurant, and up to 300 residential units on 44-acre area." The Artesia Corridor Specific Plan provided for a mix of residential and commercial uses. Mixed use residential and commercial has been developed within parts of the Artesia Corridor.

On February 15, 2023, the City Council adopted the 6th Cycle Housing Element for 2021 – 2029. At the same time, it also adopted Resolution No. 6620 updating the Land Use Plan, including changes to the Land Use Map, Urgency Ordinance No. 1847 amending the Zoning Code and revising the Zoning Map, and Resolution No. 6621 adopting a color palette for buildings, fences, and walls. The Resolution and Ordinance also rescinded the Artesia Corridor Specific Plan, changed the land use designation for five of the six areas in the Specific Plan, and rezoned all six Specific Plan areas. The property that is the subject of the proposed Project retained the land use designation of Specific Plan and the zoning was changed to 1450 Artesia Specific Plan with a notation that it would be developed for industrial and commercial uses once a specific plan was adopted. The 1450 Artesia Specific Plan area includes former Artesia Corridor Specific Plan Areas 4B and 5, including the approximately 0.23-acre parcel situated at the Project site's southwest corner that is currently occupied by one single-family residential dwelling unit.

The northeastern section of the Project site contains what is known as the Gardena Sumps. This area is contaminated with oil sludge contamination from three sumps. On June 17, 2022, the Department of Toxic Substances Control (DTSC) approved a Remedial Action Plan (RAP) for the Gardena Sumps on two properties (known as the Cooper and Haack properties), which was submitted by ARC. The RAP, which will be carried out by ARC, proposes excavation of impacted soils on a portion of the site, known as the Haack Rework Area, relocation of those contaminated soils to another portion of the site, known as the Cooper Sumps area, installation of an engineered cap with a specialized geosynthetic cover and clean soil cover over the Haack Sump and Cooper Sumps, and soil vapor probes. These areas are shown in Figure 2-3, Site Contamination. ARC will be submitting a Remedial Design Implementation Plan to DTSC, detailing the implementation of the RAP.

The northwestern portion of the Project site, which overlaps with the Haack property, currently contains a mix of uses totaling approximately 12,064 square feet and a variety of trailer-type storage structures that house several small businesses, including a U-Haul rental agency, a metal fabricating shop, a sandblasting and painting company and an auto body repair shop (Appendix G3). The southern portion of the Project site contains one residential dwelling unit. The Haack Rework area overlaps the northernmost portion of the two easternmost residential properties (Figure 2-2).

Surrounding Land Uses

The area north of the Project site across Artesia Boulevard consists of a strip mall with a variety of retail and fast-casual restaurant uses. Multi-family and single-family residential uses are located north of the strip mall. The eastern edge of the Project site is bounded by a Southern Pacific Railroad line. To the east of the Project site across Normandie Avenue is another strip mall with a variety of retail, fast food and fast casual restaurant uses. A row of single-family homes is also located to the east across Normandie Boulevard. Multi-family residential uses are located to the west of the Project site with another strip mall farther west. The southern side of the Project site is bounded by the Los

Angeles County Department of Public Works Dominguez Flood Channel. An equestrian stable is located south of the Channel.

3.8.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal regulations relevant to land use and planning that apply to the proposed Project.

State

California State Planning and Zoning Law

This law, which is codified in California Government Code Sections 65000–66037, delegates most of the state’s local land use and development decisions to cities and counties. The California Government Code establishes specific requirements pertaining to the regulation of land uses by local governments, including General Plan requirements, Specific Plans, subdivisions, and zoning. California Government Code Section 65302 requires that all California cities and counties include the following seven elements in their General Plans:

- Land Use
- Circulation
- Housing
- Conservation
- Open Space
- Noise
- Safety

Cities and counties that have identified disadvantaged communities must also address environmental justice in their General Plans, including air quality.

Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375)

This statute requires California’s regional planning agencies to include a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy in their Regional Transportation Plans (RTP). Senate Bill (SB) 375 was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under the law, California’s regional planning agencies are required to include an SCS in their RTPs. The SCS provides a plan for meeting the regional emissions reduction targets established by the California Air Resources Board. If the emissions reduction targets cannot be met through the SCS, an Alternative Planning Strategy may be developed that shows how the targets would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 also offers local governments regulatory and other incentives to encourage more compact new development and transportation alternatives.

The requirements of SB 375 are reflected in the 2020–2045 RTP/SCS adopted by the Southern California Association of Governments (SCAG), which serves as the regional planning agency in the six-county metropolitan region composed of Orange, Los Angeles, Ventura, Riverside, San Bernardino, and Imperial Counties. The 2020–2045 RTP/SCS is discussed in further detail below.

Local and Regional

Southern California Association of Governments

SCAG is a regional council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties, which encompass over 38,000 square miles. SCAG is the federally recognized metropolitan planning organization for this region and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the Southern California region's metropolitan planning organization, SCAG cooperates with the South Coast Air Quality Management District, the California Department of Transportation, and other agencies in preparing regional planning documents.

2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The 2020–2045 RTP/SCS (also known as the Connect SoCal Plan) was adopted on September 3, 2020, and presents the land use and transportation vision for the region through the year 2045, providing a long-term investment framework for addressing the region's challenges (SCAG 2020). The RTP/SCS explicitly lays out goals related to housing, transportation, equity and resilience in order to adequately reflect the increasing importance of these topics in the region, and where possible the goals have been developed to link to potential performance measures and targets. The RTP/SCS development process involved working closely with local governments throughout the region to collect and compile data on land use and growth trends. The core vision of the RTP/SCS is to build upon and expanded land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern.

SCAQMD 2022 Air Quality Management Plan

An Air Quality Management Plan (AQMP) is a plan for the regional improvement of air quality. The Project site is within the South Coast Air Basin under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD 2022 AQMP, adopted by the SCAQMD Governing Board in December 2022, is the applicable AQMP (SCAQMD 2022). The Project's consistency with the 2022 AQMP is analyzed in detail in Section 3.1, Air Quality.

Gardena General Plan

The General Plan is the City's guiding document for long-range planning and policymaking. The current General Plan includes the following elements (City of Gardena 2006a):

Community Development Element. The Community Development Element includes four plans: the Land Use Plan, Economic Development Plan, Community Design Plan and Circulation Plan.

The Land Use Plan was updated in 2023. Its purpose is to improve the use of the land and relationships between the different land uses in the way that best serves the health, safety, welfare and convenience of the general public. As Gardena is a fully developed city with a largely established land use pattern, the Land Use Plan focuses on refinements to the land use patterns and policies to

encourage community rejuvenation and address changes in the marketplace and demands for housing imposed by the state (City of Gardena 2023a). The 1450 Artesia Specific Plan (proposed Project) is explicitly included in Table LU-1, Gardena Specific Plans of the Land Use Plan as a future plan to be adopted.

The Economic Development Plan was adopted in 2006 as part of the original 2006 City of Gardena General Plan. The Economic Development Plan guides the expansion of the City's local economy through the creation of new quality jobs, attraction and retention of businesses, and the revitalization of the existing commercial and industrial establishments. The goal of the Economic Development Plan is to provide City residents with employment, and commercial retail and services and to generate revenues to support various local programs and services and the City's financial challenges (City of Gardena 2006b).

The Community Design Plan was adopted in 2006 as part of the original 2006 City of Gardena General Plan. The Community Design Plan focuses on the aesthetic qualities of existing and future developments in the City and its relationship to the surrounding environment. The goal of the Community Design Plan is to make Gardena visually attractive and in turn positively impact the economic stability and growth of the City through policy guidance for the built environments (City of Gardena 2006c).

The Circulation Plan was updated in 2020. The purpose of the Circulation Plan is to design and improve the circulation system to meet the future needs of Gardena's residents and visitors through development of a circulation system should promote the safe and efficient movement of both people and goods through the City. The policies in the Circulation Plan aim to enhance the development and maintenance of a transportation system that supports the safe and convenient movement of people through the City in all modes. The Circulation Plan guides the planning, development, and enhancement of the City's circulation system based upon the lands patterns and intensities identified in the Land Use Plan and also in consideration of the Complete Streets Act (Assembly Bill 1358), which requires planning for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the local context of the community (City of Gardena 2020).

Housing Element. The Housing Element was recently updated. The 2021-2029 Housing Element (Housing Element) was adopted in January of 2022 and readopted in February 2023 in response to HCD's comments. The Housing Element identifies strategies and programs that focus on conserving and improving existing affordable housing, providing adequate sites for residential development, assisting in the provision of affordable housing, removing governmental and other constraints on housing development and affirmatively furthering fair housing (City of Gardena 2023b).

Environmental Justice Element. The Environmental Justice (EJ) Element was adopted in 2022. The EJ Element identifies goals and policies that promote environmental justice citywide with a focus on reducing disproportionate impacts on Disadvantaged Communities (DACs) (City of Gardena 2022a). 13 out of the 14 census tracts within the City are considered DACs.

Community Resources Element. The Community Resources Element includes two plans: the Open Space Plan and Conservation Plan. The Open Space Plan encourage the preservation of existing open spaces and recreation facilities and the development of new resources. It outlines goals and policies that

maintain and upgrade existing recreation programs and considers new parks, open space provisions and recreation programs to meet the needs of City residents (City of Gardena 2006d). The Conservation Plan provides direction regarding the conservation, development, and utilization of natural resources by establishing goals and policies that reconcile conflicting demands on the limited natural resources within the City (City of Gardena 2006e).

Community Safety Element. The Community Safety Element includes two plans: the Public Safety Plan and Noise Plan. The Public Safety Plan, adopted in February 2022, identifies potential hazards that can significantly impact the City, with a focus on protecting life and property from hazardous conditions. The plan includes emergency preparedness and response in the event of a disaster and addresses the fire and law enforcement services needed to safeguard and enhance the overall livability of the community. It also includes specific policies addressing climate adaptation and resiliency to reduce potential impacts of hazards that can be exacerbated by climate change (City of Gardena 2022b).

The Noise Plan establishes goals, policies, and programs for achieving and maintaining environmental noise control so that residents in the City will be protected from excessive noise. The Noise Plan is the basis for achieving land use compatibility with respect to noise through the long-range planning and project review processes (City of Gardena 2006f).

City of Gardena Climate Action Plan

Gardena's Climate Action Plan (CAP), developed in cooperation with the South Bay Cities Council of Governments, was approved in December 2017. The CAP identifies community-wide strategies to lower GHG emissions from a range of sources within the jurisdiction, including transportation, land use, energy generation and consumption, water, and waste (City of Gardena 2017). An analysis of the proposed Project's compliance with the policies set forth in the CAP is included in Section 3.5, Greenhouse Gas Emissions.

Municipal Code

Title 18 of the Gardena Municipal Code is the Zoning Ordinance. The Zoning Ordinance and associated Zoning Map provide information on the allowable uses for each piece of property within the City. The Zoning Ordinance and associated Zoning Map act as implementation tools for the Land Use Plan. Both the Zoning Ordinance and Zoning Map designate specific zoning districts within the City and establishing each district's allowed intensities and development standards.

3.8.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to land use and planning are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to land use and planning would occur if the Project would:

1. Physically divide an established community?
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?

Based on the results of the Initial Study prepared for the Project (Appendix A), the Project would result in less-than-significant impacts related to physically dividing an established community. As such, the following threshold is evaluated in this section of the Draft EIR:

LU-1. Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

3.8.4 Impact Analysis

Threshold LU-1. Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Project consistency with 2020–2045 RTP/SCS Goals is detailed in Table 3.8-1. As shown in Table 3.8-1, the proposed Project would be consistent with the 2020–2045 RTP/SCS.

Table 3.8-1. Consistency with 2020–2045 RTP/SCS Goals

RTP/SCS Goal	Project Consistency Analysis
Goal 1 Encourage regional economic prosperity and global competitiveness.	Consistent. This policy would be implemented at the jurisdiction level by cities and counties within the SCAG region as part of local land use and policy planning efforts. Nonetheless, the Project would involve construction of mixed-use commercial/industrial (warehouse) development on a currently blighted and underutilized property. Thus, the Project would establish a jobs-producing and tax-generating land use that would meet contemporary industry standards. ,
Goal 2 Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent. Although this Project is not a transportation improvement project, the Project is located near existing transit routes on Artesia Boulevard, Western Avenue, and access to I-110 and SR-91, which would help to facilitate regional goods movement from the warehouse component throughout Southern California.
Goal 3 Enhance the preservation, security, and resilience of the regional transportation system.	Consistent. A local transportation assessment (Appendix J2) has been prepared to determine the Project's potential effect on the regional and local circulation system. The Project would not adversely affect the local or circulation system.
Goal 4 Increase person and goods movement and travel choices within the transportation system.	Consistent. The Project would include construction and operation of mixed-use development that includes a warehouse component. The Project site would be easily and efficiently accessible to regional highways (i.e., I-105, I-110 and SR-91), which would help to facilitate regional goods movement throughout Southern California.
Goal 5	Consistent. The Project would involve a mixed-use development that inherently involves the emission of GHG

Table 3.8-1. Consistency with 2020-2045 RTP/SCS Goals

RTP/SCS Goal	Project Consistency Analysis
Reduce greenhouse gas emissions and improve air quality.	<p>and air contaminant emissions. As discussed in Section 3.1, Air Quality, and Section 3.5, Greenhouse Gas Emissions, the Project would implement mitigation measures to reduce air quality and greenhouse gas emissions to the maximum extent feasible.</p> <p>In addition, according to SCAG's Comprehensive Regional Goods Movement Plan and Implementation Strategy, the region will run out of suitably zoned vacant land designated for warehouse facilities in or around 2028 (SCAG 2013). As the Project includes a warehouse component, it would meet the growing demand warehousing space and would do so in an area that is proximate to regional highways (i.e., I-105, I-110 and SR-91), thereby reducing the need for longer distance trips that could result in additional air pollutant and GHG emissions.</p>
Goal 6 Support healthy and equitable communities.	<p>Consistent. This policy pertains to health and equitable communities, which are addressed at the policy-level by the City's Safety Element. The Project would be designed consistent with applicable health and safety requirements, including the California Building Code.</p> <p>Additionally, as discussed in Section 3.1, Air Quality, health risk assessments were prepared for the Project, which concluded that, with implementation of MM-AQ-1, the Project would not have a significant adverse effect on the health of the local community.</p> <p>By providing a tax-generating and jobs-producing land use, the Project would drive economic growth within the City and region, thereby supporting equity in the City.</p>
Goal 7 Adapt to a changing climate and support an integrated regional development pattern and transportation network.	<p>Consistent. As climate change continues to increase the number of instances of disruption to local and regional systems, it will become increasingly more urgent for local jurisdictions to employ strategies to reduce their individual contributions.</p> <p>The Project would involve a mixed-use development that inherently involves the emission of GHG and air contaminant emissions. However, as discussed in Section 3.1, Air Quality, and Section 3.5, Greenhouse Gas Emissions, the Project would implement mitigation measures to reduce air quality and greenhouse gas emissions to the maximum extent feasible. Moreover, siting the Project in a location that is proximate to regional highways (i.e., I-105, I-110 and SR-91)</p>

Table 3.8-1. Consistency with 2020-2045 RTP/SCS Goals

RTP/SCS Goal	Project Consistency Analysis
	would facilitate the integration of a regional transportation network.
Goal 8 Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	Consistent. Development of the proposed Project would provide quick and efficient access to multiple freeways, thereby eliminating the need for truck traffic to take longer routes through residential areas and supporting efficient travel. The Project would also include passenger EV charging stations, per CALGreen standards. The Project would include 124 automobile parking stalls, which would require 25 EV capable parking spaces and 6 EVSC parking spaces (charging stations).
Goal 9 Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Consistent. The Project does not involve housing development; therefore, this goal is not applicable. However, the Project site is located within a relatively short walking distance to local bus routes.
Goal 10 Promote conservation of natural and agricultural lands and restoration of habitats.	No conflict identified. The Project site is entirely developed and located within an urban area. No natural and agricultural lands are located within the immediate Project vicinity.

Source: SCAG 2020.

As described in Section 3.8.1, Existing Conditions, above, the Project site has a land use designation of Specific Plan and is zoned as the 1450 Artesia Specific Plan with a notation that it would be developed for industrial and commercial uses once a specific plan was adopted. The proposed Project includes approval of the 1450 Artesia Specific Plan and development of improvements consistent with the zoning. Therefore, the proposed Project is consistent with the land use designation and zoning (Title 18 of the Gardena Municipal Code) of the Project site.

Project consistency with applicable General Plan goals and policies is detailed in Table 3.8-2. Although the General Plan contains numerous goals and policies beyond those discussed in Table 3.8-2, those goals and policies are not relevant to the proposed Project, are discussed in other technical sections of this document, or are not closely related to the “purpose of avoiding or mitigating an environmental effect” and are therefore not analyzed. In some cases, mitigation measures identified within this Draft EIR for the purposes of reducing impacts to other CEQA Guidelines Appendix G environmental resource areas (i.e., air quality and noise) would assist the Project in maintaining consistency with applicable goals, objectives, and policies adopted for the purpose of avoiding or mitigating environmental effects. As shown in Table 3.8-2, the proposed Project would be consistent with the General Plan.

Table 3.8-2. Consistency with Applicable City of Gardena General Plan Policies

Policy	Project Consistency Analysis
Land Use Plan	
LU 2.1: Require ample landscaping and high level maintenance in all new and existing commercial and industrial developments.	Consistent. The Specific Plan includes aesthetically pleasing and drought-tolerant landscaping to provide a high level of aesthetic standards.
LU 2.2: Encourage the assembly of smaller commercial properties into larger centers and discourage the subdivision of larger commercial/industrial sites into smaller parcels.	Consistent. The Project would not include the subdivision of larger commercial/industrial sites into smaller parcels and would instead consolidate smaller commercial and residential properties into a larger single Project.
LU 3.1: Require adequate off-street parking, internal circulation and loading spaces for commercial developments.	Consistent. The Specific Plan provides off-street parking and loading design standards for the Specific Plan Area that are consistent with the City's Municipal Code and all applicable City requirements and standards.
LU 3.2: Encourage the upgrade and rehabilitation of existing commercial and industrial building facades and sites.	Consistent. The Project would upgrade and rehabilitate an existing underutilized and blighted industrial site by building a new, aesthetically pleasing mixed use development.
LU 3.3: Attract commercial and industrial uses that minimize adverse impacts on surrounding land uses and are economically beneficial to the City in terms of revenue generation and employment opportunities	Consistent. The Project includes the development of the 1450 Artesia Specific Plan, which considers and minimized impacts to surrounding land uses and would increase employment and generate property and sales taxes for the City at a currently underutilized site. Additionally, under the Development Agreement the Applicant would be providing a monetary benefit to the City.
LU 3.4: Promote the development and preservation of attractive commercial and industrial development with ample landscape treatment, adequate parking and the full range of customer amenities.	Consistent. The Specific Plan includes Design Guidelines for the architecture, landscape and streetscape and lighting of the proposed Project as well as Development Regulations and Requirements for vehicle parking. The Project would redevelop an underutilized, blighted and environmentally impacted property with economically vibrant industrial and commercial uses along a major development corridor within the City.
LU 3.5: New commercial and industrial developments shall meet or exceed local and state requirements pertaining to noise, air, water, seismic safety and any other applicable environmental regulations.	Consistent. As discussed, and assessed throughout this EIR, the Project would comply with all applicable environmental regulations.

Table 3.8-2. Consistency with Applicable City of Gardena General Plan Policies

Policy	Project Consistency Analysis
LU 3.6: Require the mitigation or remediation of potentially hazardous conditions in the City.	Consistent. Remediation of the contaminated areas within the Project site will be completed prior to the start of Project construction. The Final Remedial Action Plan from the Department of Toxic Substance Control (DTSC) includes provisions for a legal land use covenant to limit future uses of the site as well as long-term monitoring and maintenance of the cap and underlying groundwater, which the Project would comply with.
LU 3.7: Require all outdoor storage to be concealed from view from the public right of ways and adjoining land uses.	Consistent. The Specific Plan requires outdoor storage and trash receptacles to conceal the views of materials and products from streets and nearby properties. All outdoor storage of facilities for fuel, raw materials, and products would be required to be concealed from view from adjacent property and public rights-of-way. No material or waste would be deposited upon a subject lot in such form or manner that it may be transferred off the lot by natural causes or forces. All materials or wastes that might cause fumes or dust, that constitute a fire hazard, or that may be edible by or otherwise be attractive to rodents or insects shall be stored outdoors only in closed containers.
LU 3.8: Require loading and unloading of materials to be conducted completely on private property and out of sight from a public street.	Consistent. All warehouse operations would be conducted within the Project site and away from adjacent public areas.
LU 3.9: Ensure new development provides adequate improvements, dedications, and fees to the City to fully cover the cost of the City services and facilities.	Consistent. The Specific Plan and any development it facilitates would be required to pay any applicable fees to the City prior to building permit issuance. Additionally, Developer would make a \$1,000,000 contribution to the City as part of the Development Agreement.
Economic Development Plan	
ED 1.5: Support regional-serving commercial development at key focus areas – Artesia Boulevard Corridor and the areas around the three intersections along Rosecrans Avenue at Van Ness, Western and Normandie.	Consistent. The proposed Project would redevelop an underutilized, blighted and environmentally impacted property along the Artesia Boulevard Corridor with economically vibrant warehouse and self-storage uses.

Table 3.8-2. Consistency with Applicable City of Gardena General Plan Policies

Policy	Project Consistency Analysis
Community Design Plan	
DS 2.3: Encourage a variety of architectural styles, massing, floor plans, color schemes, building materials, façade treatments, elevation and wall articulations.	Consistent. The Project's Specific Plan includes Development Standards and Design Guidelines that support this policy. For example, the Specific Plan states that "long, blank walls should be broken up with vertical and horizontal façade articulation achieved through stamping, colors, materials, and modulation with fencing."
DS 2.12: Provide well-designed and safe parking areas that maximize security, surveillance, and efficient access to building entrances.	Consistent. The Specific Plan includes Development Regulations and Requirements that outline parking standards, including safety standards.
DS 2.14: Require design standards be established to provide for attractive building design features, safe egress and ingress, sufficient parking, adequate pedestrian amenities, landscaping, and proper signage.	Consistent. The Specific Plan includes Development Regulations and Requirements that outline landscaping, parking, lighting and signage requirements as well as Design Guidelines that address architecture, landscape and streetscape and lighting. A Circulation Plan, which addresses on-site circulation and ingress/egress, is also included as part of the Specific Plan. Pedestrian access to the Project site is provided by an existing sidewalk along Artesia Boulevard.
DS 3.1: Consider the adoption of specific plans at identified focus areas that provide design and landscape standards that support either a street-oriented or village-type development pattern.	Consistent. The Project includes approval of a Specific Plan for the development of a street-oriented mixed-use Project that includes landscape and streetscape standards.
DS 3.3: Promote the segregation of residential parking from commercial and office parking.	Consistent. The Specific Plan includes Development Regulations and Requirements that outline parking standards. Parking requirements for operation of the proposed Project would be met on site.
DS 3.5: Encourage underground parking or surface parking with effective landscape buffers to minimize the visual impact of parking areas.	Consistent. The Specific Plan includes a Landscape Plan that proposes aesthetically pleasing and drought-tolerant landscaping along the perimeter of the Project site adjacent to public roadways.
DS 4.3: Encourage commercial developments to include interesting rooflines, building shapes, and patterns of shade and shadow while demonstrating sensitivity to the	Consistent. The Project's Specific Plan includes Development Standards and Design Guidelines that support this policy. For example, the Specific Plan states that the Specific Plan

Table 3.8-2. Consistency with Applicable City of Gardena General Plan Policies

Policy	Project Consistency Analysis
contextual influences of the surrounding area and compatibility with surrounding neighborhoods.	“should encourage industrial building design to consider the visual and physical relationship to adjacent uses.”
DS 4.8: Require loading areas, access and circulation driveways, trash and storage areas, and rooftop equipment to be concealed from view and located as far as possible from adjacent residences.	Consistent. The Specific Plan includes Development Standards for outdoor storage, enclosure of mechanical equipment, parking and loading and on-site circulation and access.
DS 4.9: Reduce the impact of monotonous walls with vertical and horizontal design elements or landscaping.	Consistent. The Project’s Specific Plan includes Development Standards and Design Guidelines that support this policy. For example, the Specific Plan states that “long, blank walls should be broken up with vertical and horizontal façade articulation achieved through stamping, colors, materials, and modulation with fencing.”
DS 4.12: Enhance the physical appearance of the industrial and commercial areas through better “edge” identification, signage and landscaping.	Consistent. The Project’s Specific Plan includes Development Standards and Design Guidelines for landscaping, signage. Specifically, the Specific Plan states that landscaping along “external edges will be more intense than interior landscaping but shall also preserve and enhance strategic view corridors into the project to take advantage of frontage along these major traffic corridors.”
DS 5.1: Industrial projects should be designed to convey visual interest and a positive image.	Consistent. The Specific Plan includes Development Regulations and Requirements that outline landscaping, parking, lighting and signage requirements as well as Design Guidelines that address architecture, landscape and streetscape and lighting.
DS 5.2: Encourage the design of industrial buildings to consider the visual and physical relationship to adjacent uses. An industrial structure, which dominates the surrounding environment by its relative size, shall be discouraged.	Consistent. The Specific Plan includes Design Guidelines that address architectural style and scale.
DS 5.3: Industrial projects shall be required to: incorporate landscape setbacks and buffers; aesthetically treat horizontal and vertical design elements on building and perimeter walls; and conceal storage yards, parking, and	Consistent. The Specific Plan includes a Landscape Plan that proposes aesthetically pleasing and drought-tolerant landscaping along the perimeter of the Project site adjacent to public roadways.

Table 3.8-2. Consistency with Applicable City of Gardena General Plan Policies

Policy	Project Consistency Analysis
service areas to minimize visual impacts on the public.	
DS 5.4: Long, blank walls should be broken up with vertical and horizontal façade articulation achieved through stamping, colors, materials, modulation and landscaping.	Consistent. The Specific Plan includes Design Guidelines that address design principles, architectural style and scale, siding material, color, architectural features and landscaping.
DS 6.1: Encourage the use of common design elements in signs for commercial and industrial centers.	Consistent. The Specific Plan includes Design Guidelines that address design principles, architectural style and scale, siding material, color, architectural features and landscaping.
DS 6.2: Prohibit the use of pole signs, roof signs, temporary lettering of window signs, banner signs and temporary signs.	Consistent. Per the Specific Plan, all signage would be consistent with Chapter 18.58 of the City General Plan.
Circulation Plan	
CI 1.1: Prioritize long-term sustainability for the City of Gardena, in alignment with regional and state goals, by promoting infill development, reduced reliance on single-occupancy vehicle trips, and improved multi-modal transportation networks, with the goal of reducing air pollution and greenhouse gas emissions, thereby improving the health and quality of life for residents.	Consistent: The Specific Plan would develop an infill site that is served by existing transportation facilities and arterial and collector roadways including Artesia Boulevard and Normandie Avenue. It would reduce reliance on single-occupancy trips because the Project site is served by bus transit. See Section 3.10, Transportation, for a discussion about the Project's consistency with thresholds related to VMT.
CI 1.2: Minimize truck traffic through Gardena and minimize adverse impacts by regulating off-street truck parking, intrusions into neighborhoods, and noise levels.	Consistent: The Specific Plan area is served by arterial and collector roadway facilities that are designated truck routes. Therefore, development of Specific Plan is consistent with this goal because it provides on-site parking for trucks and would minimize intrusion into neighborhoods. Consistency with noise levels is addressed under Noise Plan.
Economic Development Plan	
ED 1.4: Encourage high quality mixed-use development in underutilized commercial and industrial areas where it will improve the City's tax base and image.	Consistent. The Project would redevelop an underutilized, blighted and environmentally impacted property with economically vibrant industrial and commercial uses along a major development corridor within the City and would increase employment and generate property and sales taxes for the City at a currently underutilized site.

Table 3.8-2. Consistency with Applicable City of Gardena General Plan Policies

Policy	Project Consistency Analysis
ED 1.5: Support regional-serving commercial development at key focus areas – Artesia Boulevard Corridor and the areas around the three intersections along Rosecrans Avenue at Van Ness, Western and Normandie.	Consistent. The Project would redevelop an underutilized, blighted and environmentally impacted property along the Artesia Boulevard Corridor with economically vibrant industrial and commercial uses.
Environmental Justice Element	
EJ 1.2: Attract new clean industry to the City which do not emit smoke, noise, offensive odors, or harmful industrial wastes.	Consistent. The Project would not emit smoke, noise, offensive odors, or harmful industrial wastes as discussed in Section 3.6, Hazards and Hazardous Materials, as well as Chapter 4, Other CEQA Considerations, of this EIR.
EJ 1.3: Require the mitigation or remediation of hazardous conditions in the City. (See also Policy LU 3.7)	Consistent. Remediation of the contaminated areas within the Project site will be completed prior to the start of Project construction. The Final Remedial Action Plan from DTSC includes provisions for a legal land use covenant to limit future uses of the site as well as long-term monitoring and maintenance of the cap and underlying groundwater, which the proposed Project would comply with.
EJ 1.5: Prioritize long-term sustainability for the City of Gardena, in alignment with regional and state goals, by promoting infill development, reduced reliance on single-occupancy vehicle trips, and improved multi-modal transportation networks, with the goal of reducing air pollution and greenhouse gas emissions, thereby improving the health and quality of life for residents. (See Policy CI 1.1)	Consistent. The Project is an infill development located on a site with regional access to the larger Southern California transportation network.
EJ 1.12: Incorporate noise considerations into land use planning decisions. (See Goal N 2)	Consistent. The City incorporated noise considerations into its review of the Specific Plan. Section 3.9, Noise, of this EIR includes analysis of the Project's potential for generating noise impacts on the surrounding environment both during construction and operation, and imposed mitigation measures as appropriate. Consistent with Policy 2.5, the Project would conduct interior noise level studies and achieve interior noise level standards as required by the Building Code. Therefore, the Project would be consistent with this policy

Table 3.8-2. Consistency with Applicable City of Gardena General Plan Policies

Policy	Project Consistency Analysis
EJ 2.4: Consider distributing City events across multiple parks as feasible.	Consistent. The Specific Plan includes the use of 36,000 square feet (0.8 acres) of the Project's parking area for City-sponsored special events. These events would occur two to three times per month and include food trucks, farmer's markets, and food giveaways.
Conservation Plan	
CN 2.2: Comply with the water conservation measures set forth by the California Department of Water Resources.	Consistent. The Project would comply with all applicable regulations, including the water conservation measures set forth by the Department of Water Resources.
CN 3.1: Comply with the requirements set forth in the City's Source Reduction and Recycling Element.	Consistent. The Project would comply with the applicable requirements of the City's Source Reduction and Recycling Element.
CN 4.1: Encourage innovative building designs that conserve and minimize energy consumption.	Consistent. Development proposals within the Specific Plan area must be designed to achieve best practices for architectural design and land development that enhance the City's infrastructure, reduce consumption of non-renewable resources, and limit pollutants and greenhouse gas emissions.
CN 4.2: Require compliance with Title 24 regulations to conserve energy.	Consistent. The Project would conform to the most recent CALGreen sustainability standards in effect at the time of building plan submission.
CN 5.3: Protect and preserve cultural resources of the Gabrielino Native American Tribe found or uncovered during construction.	Consistent. The Project includes mitigation for tribal monitoring and the unanticipated discovery of tribal cultural resources, as outlined in Section 3.11, Tribal Cultural Resources, of this EIR.
Public Safety Plan	
PS 1.7: Development Review. Ensure that law enforcement, crime prevention, and fire safety concerns are considered in the review of planning and development proposals in the City.	Consistent. The City has considered law enforcement, crime prevention, and fire safety concerns in its review of the Specific Plan. The Project would comply with all applicable Fire Code and fire safety regulations.
PS 2.2: Building and Fire Codes. Require that all buildings and facilities within Gardena comply with local, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards.	Consistent. The Project would comply with all applicable Fire Code and fire safety regulations.

Table 3.8-2. Consistency with Applicable City of Gardena General Plan Policies

Policy	Project Consistency Analysis
<p>PS 2.7: New Development.</p> <p>a. Require adequate fire protection services, fire protection plans, and emergency vehicle access for new development.</p> <p>b. Locate, design, and construct new development to minimize the risk of structural loss from fires.</p> <p>c. Install visible home and street addressing and signage.</p>	<p>Consistent. The Project would comply with all applicable Fire Code and fire safety regulations.</p>
<p>PS 3.1: California Building Code. Require compliance with seismic safety standards in the California Building Code, as adopted and amended.</p>	<p>Consistent. Design and development of the Project would comply with the seismic safety standards in the California Building Code.</p>
<p>PS 3.2: Geotechnical Studies. Require geotechnical studies for all new development projects in the City, including those located in an Alquist-Priolo Earthquake Fault Zone or areas subject to liquefaction.</p>	<p>Consistent. A geotechnical study was prepared for the Project site (see Appendix E), and the Project is required to comply with all recommendations contained therein.</p>
<p>PS 5.4: California Building Code. Adhere to the latest building, site, and design codes in the California Building Code and FEMA flood control guidelines to avoid or minimize the risk of flooding hazards for new development in the City.</p>	<p>Consistent. The Project would conform to the California Building Code in effect at the time of building plan submission.</p>
<p>PS 5.5: Stormwater Runoff. Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development (LID) to reduce stormwater runoff.</p>	<p>Consistent. As discussed in Section 3.7, Hydrology and Water Quality, collected stormwater would be carried to a subsurface retention basin installed downstream of storage for additional volume control and treatment. It would screen, separate, and act as biofiltration LID solution prior to off-site release.</p>
Noise Plan	
<p>N 2.4: Require mitigation of all significant noise impacts as a condition of project approval.</p>	<p>Consistent. With the incorporation of MM-NOI-1 during Special Events on the Project site, noise impacts during both construction and operation would be less than significant.</p>
<p>N 2.5: Require proposed projects to be reviewed for compatibility with nearby noise-sensitive land uses with the intent of reducing noise impacts.</p>	<p>Consistent. A noise study and is included as Appendix I of this EIR. As discussed therein, as well as within Section 3.9, Noise, the Project would be compatible with nearby noise-sensitive land uses.</p>

Table 3.8-2. Consistency with Applicable City of Gardena General Plan Policies

Policy	Project Consistency Analysis
N 2.7: Require new commercial/industrial operations located in proximity to existing or proposed residential areas to incorporate noise mitigation into the project design.	Consistent. A noise study and is included as Appendix I of this EIR. As discussed therein, as well as within Section 3.9, Noise, the Project would be compatible with nearby noise-sensitive land uses. With the incorporation of MM-NOI-1 during Special Events on the Project site, noise impacts during both construction and operation would be less than significant.
N 3.2: Require compliance with noise regulations. Review and update Gardena's policies and regulations affecting noise.	Consistent. As discussed in Section 3.9, Noise, construction and operation would comply with Chapter 8.36 (Noise) of the City's Municipal Code.
N 3.3: Require compliance with construction hours to minimize the impacts of construction noise on adjacent land.	Consistent. As discussed in Section 3.9, Noise, construction hours would comply with Chapter 8.36 (Noise) of the City's Municipal Code.

Source: City of Gardena 2006a.

3.8.5 Mitigation Measures

Impacts related to land use and planning were found to be less than significant, and no mitigation required.

3.8.6 Level of Significance After Mitigation

Impacts related to land use and planning would be less than significant, and no mitigation is required.

3.8.7 Cumulative Effects

The proposed Project would establish the 1450 Artesia Specific Plan and allow for the development of the proposed mixed-use Project consisting of a 268,000 gross-square-foot (GSF) building with associated surface parking, and landscaping and circulation improvements, and including a self-storage use (three levels totaling 186,000 GSF over ground floor warehouse and a leasing office with up to 1,480 storage units), an industrial warehousing use (one level totaling 72,000 GSF plus 10 loading docks), and an office/retail use (a mezzanine totaling 10,000 GSF). Implementation of the Project's Specific Plan would eliminate any inconsistencies between the Project site's General Plan land use designation and zoning code. Presumably, as development occurs elsewhere throughout the City of Gardena and the larger South Bay and Los Angeles County areas, any proposal to change the underlying land use or development intensity for a specific property would similarly be resolved through an amendment to the applicable land use plan. Given that amendments to land use plans are discretionary in nature, any action involving an amendment would be subject to CEQA and reviewed on a case-by-case basis. Should any amendment result in a significant environmental effect, mitigation measures would be identified to reduce those impacts. Additionally, the periodic and frequent nature of regional planning efforts such as updates to Connect SoCal Plan and AQMP

allow for changes in land use to be integrated into a regional planning context, thereby accounting for ever-changing land use patterns. Given these factors, the Project would not result in any cumulatively considerable land use and planning conflicts in the context of compliance with applicable environmental plans, policies, and regulations beyond those identified in other sections of this EIR.

3.8.8 References

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3.9 Noise

This section describes the existing noise conditions of the Project site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed Project.

The analysis for this section is based on information from the following document:

- Acoustical Assessment, prepared by Kimley-Horn and Associates, dated April 2024 (Appendix I)

3.9.1 Existing Conditions

Existing Noise Sources

The City of Gardena (City) is impacted by various noise sources. Mobile sources of noise, especially cars, trucks, and trains are the most common and significant sources of noise. Other noise sources are the various land uses (i.e., residential, commercial, institutional, and recreational and parks activities) throughout the City that generate stationary-source noise.

Mobile Sources

Artesia Boulevard and Normandie Avenue are located directly north and east of the Project site and are the primary sources of mobile noise in the Project vicinity. Additional contributions to the ambient noise environment in the Project area include the I-110 freeway, located approximately 0.89 miles east of the Project site, and the Union Pacific rail line, which runs in a north-south direction along the west side of Normandie Avenue directly east of the Project site. According to the Gardena General Plan, there is a maximum of two train pass-bys along the Union Pacific rail line each day, and thus this is not considered to be a substantial source of noise.

Stationary Sources

The primary sources of stationary noise in the Project vicinity are those associated with residential properties to the west and commercial uses to the north of the Project site, and on-site operations from a U-Haul rental facility and sandblasting operations. Stationary noise sources associated with residential uses can include mechanical equipment (e.g., heating ventilation and air conditioning [HVAC] equipment), dogs barking, idling vehicles, vehicle movements, and residents talking. Stationary noise sources associated with the commercial uses to the north and existing on-site operations consist of mechanical equipment, idling vehicles, vehicle movement, freight loading/unloading and customers talking. The noise associated with these sources is generally transient in nature.

Noise Measurements

To quantify existing ambient noise levels in the Project area, Kimley-Horn and Associates conducted one long-term and five short-term noise measurements on June 15, 2022; see Appendix I. The noise measurement sites were representative of typical existing noise exposure within and immediately

adjacent to the Project site. Short-term (10-minute) measurements were taken between 2:27 p.m. and 3:47 p.m. A long-term (24 continuous hours) measurement was taken between 4:18 p.m. on June 15th and 4:38 p.m. on June 16th, 2022. Measurements of L_{eq} are considered representative of the noise levels throughout the day. The average noise levels measured at each location are listed in Table 3.9-1 and the locations are shown on Figure 3.9-1, Noise Measurement Locations.

Table 3.9-1. Existing Noise Measurements

Site	Location	L_{min} (dBA)	L_{max} (dBA)	L_{eq} (dBA)
Short-Term Noise Measurements (10-minute)				
1	Education center at the southeast corner of the West 177th Street and Normandie Avenue intersection	28.8	71.2	59.8
2	Northeast corner of the West Cassidy Street and Normandie Avenue intersection	51.3	79.2	69.6
3	Commercial center near the northwest corner of Artesia Boulevard and Normandie Avenue	56.3	84.9	71.3
4	In residential neighborhood near the corner of West 173rd Street and Halldale Avenue	45.0	69.6	51.8
5	Multi-use residences directly west of the Project site	46.6	62.4	53.1
Long-Term Noise Measurement (24-hour)				
LT-1	Northwestern portion of Project site adjacent to residential use to the west	35.9	90.5	60.7 (24-hour)

Source: Appendix I

Noise-Sensitive Receptors

Noise-sensitive receptors that are locations where noise exposure can have a negative effect on human activities involving communications, concentration or sleep. Land uses considered to be noise-sensitive receptors include residences, schools, churches, parks, childcare centers, and long-term health care facilities. Table 3.9-2 lists the closest noise-sensitive receptors to the Project site, which include single- and multifamily residential and educational uses. As shown in Table 3.9-2, the closest noise-sensitive receptors to the Project site are live/work and multifamily residences located approximately 15 feet to the west along Artesia Boulevard and an occupied single-family residence 15 feet to the southwest of the Project site, which has been acquired by the Project Applicant and will be demolished and the property included into the Project footprint.

Table 3.9-2. Closest Noise-Sensitive Receptors

Receptor Description	Distance and Direction from the Project	Description
Live/Work and multifamily residences	Adjacent to the west	Live/Work and multifamily residences adjacent to Project, along Artesia Boulevard
Single-family residences	150 feet to the east	Northeast corner of W. Cassidy Street and Normandie Avenue
Single-family residences	425 feet to the north	Along West 173rd Street
School	465 feet to the southeast	Gardena Early Education Center, southeast corner of West 177th Street and Normandie Avenue
Multifamily residences	1,080 feet to the south	Along West 179th Street

Source: Appendix I.

3.9.2 Relevant Plans, Policies, and Ordinances

To limit population exposure to physically or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise.

State

California Government Code

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

Title 24 – Building Code

The state’s noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been

designed to limit interior noise in habitable rooms to acceptable noise levels. For new multifamily residential buildings, the acceptable interior noise limit for new construction is 45 dBA CNEL.

Local

City of Gardena Municipal Code

The City also has regulations to control unnecessary, excessive, and annoying noise, as set forth in the City’s Noise Ordinance (Chapter VIII, Noise Regulation, of the Gardena Municipal Code [GMC]). The City’s Noise Ordinance establishes acceptable ambient sound levels to regulate intrusive noises (e.g., stationary mechanical equipment and vehicles other than those traveling on public streets) within specific land use zones and provides procedures and criteria for the measurement of the sound level of noise sources. These procedures recognize and account for differences in the perceived level of different types of noise and/or noise sources.

The Gardena Municipal Code establishes the following noise provisions relative to the Project:

A.

Table 3.9-3. Allowable Exterior Noise Level (dBA)

Type of Land Use	15-Minute Average Noise Level (L_{eq})		Maximum Noise Level (L_{max})	
	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.	7 a.m. to 10 p.m.	10 p.m. to 7 am
Residential	55	50	75	70
Residential portions of mixed-use	60	50	80	70
Commercial	65	60	85	80
Industrial or manufacturing	70	70	90	90

Section 8.36.040 – Exterior Noise Standards

- A. The exterior noise standards in Table 3.9-3, unless otherwise specifically indicated, shall apply to all property within the City. The Land Use category refers to the affected receiver property:

In the event the alleged offensive noise contains a pure tone such as a whine, screech, or hum, or contains repetitive, impulsive or impact noise such as hammering or riveting, or contains music or speech conveying informational content, each of the above noise standards shall be reduced by 5 dB.

- A. No person shall operate or cause to be operated, any source of sound at any location within the incorporated City or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured from any other property, either incorporated or unincorporated, to exceed the noise standards of paragraph (A).
- B. In the event the ambient noise level exceeds the noise standard, the ambient noise level shall become the noise standard. (Ord. 1683, 2006; Urg. Ord. 1682, 2006)

Table 3.9-4. Allowable Interior Noise Level (dBA)

Type of Land Use	15-Minute Average Noise Level (L_{eq})		Maximum Noise Level (L_{max})	
	7 a.m. to 10 p.m.	10 p.m. to 7 am	7 a.m. to 10 p.m.	10 p.m. to 7 am
Residential	45	40	65	60
Residential portions of mixed-use	45	40	70	60

Section 8.36.050 – Interior Noise Standards

- A. The interior noise standards in Table 3.9-4, unless otherwise specifically indicated, shall apply to all residential dwellings with windows in their normal seasonal configuration, where such dwelling is the receiver of intrusive noise: in the event the alleged offensive noise contains a pure tone such as a whine, screech, or hum, or contains repetitive, impulsive or impact noise such as hammering or riveting, or contains music or speech conveying informational content, each of the above noise standards shall be reduced by 5 dB.
- B. No person shall operate or cause to be operated, any source of sound at any location within the incorporated City or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured within any residential dwelling, either incorporated or unincorporated, to exceed the noise standards of paragraph (A).
- C. In the event the ambient noise level exceeds the noise standard, the ambient noise level shall become the noise standard. (Ord. 1683, 2006; Urg. Ord. 1682, 2006)

Section 8.36.070 – Prohibited Acts – General Standards

Notwithstanding any other provisions of this chapter and in addition thereto, it shall be unlawful for any person to willfully make or continue or cause to be made or continued, any loud, unnecessary and unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitivity:

- A. Loading and Unloading. Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects between the hours of

10:00 p.m. and 7:00 a.m. in such a manner as to cause a noise disturbance across a residential real property line or at any time to violate the provisions of Section 8.36.040 or 8.36.050;

- B. Powered Model Vehicles. Operating or permitting the operation of powered model vehicles:
 - a. Between the hours of 7:00 p.m. and 7:00 a.m. so as to create a noise disturbance across a residential or commercial real property line or at any time to violate the provisions of Section 8.36.040 or 8.36.050.
 - b. In such a manner as to exceed the levels set forth in Section 8.36.040, measured at a distance not less than 100 feet from any point on the path of a vehicle operating on public space or public right-of-way, if any.

Section 8.36.080 – Exemptions

The provisions of this chapter shall not apply to:

- A. Noise associated with construction, repair, remodeling, grading or demolition of any real property, provided said activities do not take place between the hours of 6:00 p.m. and 7:00 a.m. on weekdays, between the hours of 6:00 p.m. and 9:00 a.m. on Saturday, or any time on Sunday or a federal holiday.
- B. Noise from occasional outdoor events/activities, outdoor gatherings, public dances, shows, and sporting and entertainment events, provided said events are conducted pursuant to a permit or license issued by the City relative to the staging of said event.

City of Gardena General Plan

Adopted on April 16, 2006, the City of Gardena General Plan (Gardena General Plan) Noise Element provides guidance for the control of noise to protect residents, workers, and visitors from potentially adverse noise impacts. Its primary goal is to regulate long-term noise impacts to preserve acceptable noise environments for all types of land uses. The Noise Element defers regulation of temporary, point-source noises such as construction activities to the City's Municipal Code Noise Ordinance. With regard to long-term noise impacts, the Noise Element contains stated goals, objectives, policies, and implementation programs for noise control.

Goal: Incorporate noise considerations into land use planning decisions.

Policy 2.5: Require proposed projects to be reviewed for compatibility with nearby noise-sensitive land uses with the intent of reducing noise impacts.

Policy 2.7: Require new commercial/industrial operations located in proximity to existing or proposed residential areas to incorporate noise mitigation into the project design.

Noise/Land Use Compatibility

The noise criteria identified in the Gardena Noise Plan are guidelines to evaluate noise/land use compatibility. The compatibility criteria, shown on Table 3.9-5, provide the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. The Noise/Land Use Compatibility Matrix describes categories of compatibility and not specific noise standards.

Table 3.9-5. Gardena Noise/Land Use Compatibility Matrix

Land Use Category	Exterior Noise Level (CNEL in dBA)						
	< 55	55	60	65	70	75	80
Residential- single family residences, multi-family residences, senior housing, convalescent homes	A	A	B	C	C	D	D
Residential- mobile homes, mixed-use (commercial/residential)	A	A	B	C	C	D	D
Transient Lodging- motels, hotels, resorts	A	A	B	B	C	C	D
Auditoriums, Concert Halls, Amphitheaters, Meeting Halls	B	B	C	C	D	D	D
Sports Arenas, Outdoor Spectator Sports, Amusement Parks	A	A	A	B	B	D	D
Playgrounds, Neighborhood Parks	A	A	A	B	C	D	D
Golf Courses, Riding Stables, Cemeteries	A	A	A	A	B	C	C
Office and Professional Buildings	A	A	A	B	B	C	D
Commercial Retail, Banks, Restaurants, Theaters	A	A	A	A	B	B	C
Industrial, Manufacturing, Utilities, Wholesale, Service Stations	A	A	A	A	B	B	B
Agriculture	A	A	A	A	A	A	A
A	NORMALLY ACCEPTABLE—Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal construction, without any special noise insulation requirements.						
B	CONDITIONALLY ACCEPTABLE—New construction or development should be undertaken only after a detailed analysis of the noise requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.						

Table 3.9-5. Gardena Noise/Land Use Compatibility Matrix

Land Use Category	Exterior Noise Level (CNEL in dBA)						
	< 55	55	60	65	70	75	80
C	NORMALLY UNACCEPTABLE—New construction or development should generally be discouraged. If it does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.						
D	UNACCEPTABLE—New construction or development shall not be undertaken.						

Source: Noise Plan in City of Gardena 2006

3.9.3 Thresholds of Significance

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains analysis guidelines related to noise impacts. These guidelines have been used by the City to develop thresholds of significance for this analysis. A project would create a significant environmental impact if it would:

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

Based on the results of the Initial Study prepared for the Project (Appendix A), the Project is not within the vicinity of an airstrip or airport and would not expose people residing or working in the Project area to excessive noise levels. As such, the following thresholds are evaluated in this section of the Draft EIR:

- NOI-1. Would the Project generate 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?
- NOI-2. Would the Project generate excessive ground-borne vibration or ground-borne noise levels?

3.9.4 Impact Analysis

Threshold NOI-1. *Would the Project generate 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

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During construction, exterior noise levels could affect the residential neighborhoods near the construction site. However, it is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at a single point near noise-sensitive receptors.

Construction activities would include site preparation, grading, building construction, paving, and architectural coating. Such activities would require tractors and dozers during site preparation; graders, dozers, excavators, and tractors during grading; cranes, forklifts, generators, tractors, and welders during building construction; pavers, rollers, mixers, and paving equipment during paving; and air compressors during architectural coating. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than 1 minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical noise levels associated with individual pieces of construction equipment are listed in Table 3.9-6. It should be noted that the noise levels shown in Table 3.9-6 are maximum noise levels (i.e., the equipment engine at maximum speed). However, equipment used on construction sites typically operate under less-than-full-power conditions.

Table 3.9-6. Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA L _{max}) at 50 feet from Source	Typical Noise Level (dBA L _{max}) at 100 feet from Source ¹
Air Compressor	80	74
Backhoe	80	74
Compactor	82	76
Concrete Mixer	85	79
Concrete Pump	82	76
Concrete Vibrator	76	70
Crane, Mobile	83	82
Dozer	85	77
Generator	82	79
Grader	85	76
Impact Wrench	85	79
Jack Hammer	88	79

Table 3.9-6. Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA L_{\max}) at 50 feet from Source	Typical Noise Level (dBA L_{\max}) at 100 feet from Source ¹
Loader	80	82
Paver	85	74
Pneumatic Tool	85	71
Pump	77	79
Roller	85	70
Saw	76	79
Scraper	85	76
Shovel	82	78
Truck	84	74

Source: Appendix I.

Notes: dBA = A-weighted decibel; L_{\max} = maximum A-weighted sound level.

1. Calculated using the inverse square law formula for sound attenuation: $dBA_2 = dBA_1 + 20\log(d_1/d_2)$

Where: dBA_2 = estimated noise level at receptor; dBA_1 = reference noise level; d_1 = reference distance; d_2 = receptor location distance

Noise-sensitive uses closest to the Project site include residences located approximately 15 feet west and 150 feet east of the Project site. Following the methodology for quantitative construction noise assessments in the FTA's Transit Noise and Vibration Impact Assessment Manual (FTA 2018), the FHWA Roadway Construction Noise Model (RCNM) was used to predict construction noise at the nearest off-site receptors. RCNM is a computer program used to assess construction noise impacts and allows for user-defined construction equipment and user-defined noise limit criteria. Noise levels were calculated for each construction phase and are based on the equipment used, distance to the nearest property/receptor, and acoustical usage factor for equipment.

Although the GMC does not have a quantitative construction noise limit, a 10 dBA sound difference is estimated to be a doubling of the perceived loudness and is used as the construction noise threshold in this analysis. Table 3.9-7 shows estimated exterior construction noise levels at the nearest receptors without accounting for attenuation from physical barriers or topography. Construction equipment was assumed to operate at the nearest Project property line approximately 15 to 408 feet from the nearest residential uses. As indicated in Table 3.9-7, the highest anticipated construction noise level of 95.6 dBA would occur during the site preparation phase at the residential receptors to the west of the Project site and would result in ambient noise level increases that would range from 0.1 dBA to 33.8 dBA at the nearest receptors. As such, Project construction noise levels would exceed the 10 dBA incremental increase threshold. The highest noise level increases above 10 dBA would be concentrated on the western portion of the Project site where the primary construction activities (i.e., construction of the self-storage portion of the building) would occur.

Mitigation Measure (MM) NOI-1 requires the construction of a minimum 8-foot-high noise barrier along the western Project boundary to reduce construction noise levels at the residential uses directly west of the Project site. Implementation of MM NOI-1 would provide an approximate 12 dBA noise reduction at these receptors, which is a substantial decrease compared to unmitigated conditions.

However, as shown in Table 3.9-7, construction noise levels would still exceed ambient noise levels by more than 10 dBA at the nearest sensitive receptors to the west of the Project site despite implementation of MM NOI-1.

The Project would be required to comply with Section 8.36.080 of the GMC, which restricts construction to between the hours of 7:00 a.m. and 6:00 p.m. on weekdays, between 9:00 a.m. and 6:00 p.m. on Saturdays, and prohibits construction on Sundays and national holidays. It should also be noted that traffic noise along Artesia Boulevard and Normandie Avenue would partially mask construction noise emanating from the Project site. However, due to the increase in ambient noise levels, impacts associated with Project on-site construction activities would remain **significant and unavoidable** despite implementation of MM NOI-1.

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Table 3.9-7. Project Construction Noise Levels (dBA)

Construction Phase	Land Use	Direction	Ambient Noise Level ¹ (dBA L _{eq})	Without Noise Barrier				With 8-Foot Noise Barrier			
				Construction Noise Level (dBA L _{eq}) ²	Ambient + Construction (dBA L _{eq}) ³	Increase Over Ambient	Increase Exceeds 10 dBA?	Construction Noise Level ² (dBA L _{eq})	Ambient + Construction (dBA L _{eq}) ³	Increase Over Ambient	Increase Exceeds 10 dBA?
Demolition	Residential	East	69.6	76.9	77.6	8.0	No	64.9	70.9	1.3	No
	Commercial	North	71.3	67.9	72.9	1.6	No	55.9	71.4	0.1	No
	Residential	Northwest	51.8	66.8	66.9	15.1	Yes	54.8	56.6	4.8	No
	Residential	West	61.8	94.4	94.4	32.6	Yes	82.4	82.4	20.6	Yes
Site Preparation	Residential	East	69.6	78.1	78.7	9.1	No	66.1	71.2	1.6	No
	Commercial	North	71.3	69.0	73.3	2.0	No	57.0	71.5	0.2	No
	Residential	Northwest	51.8	68.0	68.1	16.3	Yes	56.0	57.4	5.6	No
	Residential	West	61.8	95.6	95.6	33.8	Yes	83.6	83.6	21.8	Yes
Grading	Residential	East	69.6	77.7	78.3	8.7	No	65.7	71.1	1.5	No
	Commercial	North	71.3	68.7	73.2	1.9	No	56.7	71.4	0.1	No
	Residential	Northwest	51.8	67.6	67.7	15.9	Yes	55.6	57.1	5.3	No
	Residential	West	61.8	95.2	95.2	33.4	Yes	83.2	83.2	21.4	Yes
Building	Residential	East	69.6	76.5	77.3	7.7	No	64.5	70.8	1.2	No
	Commercial	North	71.3	67.5	72.8	1.5	No	55.5	71.4	0.1	No
	Residential	Northwest	51.8	66.4	66.5	14.7	Yes	54.4	56.3	4.5	No
	Residential	West	61.8	94.0	94.0	32.2	Yes	82.0	82.0	20.2	Yes
Paving	Residential	East	69.6	77.0	77.7	8.1	No	65.0	70.9	1.3	No
	Commercial	North	71.3	67.9	72.9	1.6	No	55.9	71.4	0.1	No
	Residential	Northwest	51.8	66.9	67.0	15.2	Yes	54.9	56.6	4.8	No
	Residential	West	61.8	94.5	94.5	32.7	Yes	82.5	82.5	20.7	Yes
Architectural Coating	Residential	East	69.6	64.2	70.7	1.1	No	52.2	69.7	0.1	No
	Commercial	North	71.3	55.1	71.4	0.1	No	43.1	71.3	0.0	No
	Residential	Northwest	51.8	54.1	56.1	4.3	No	42.1	52.2	0.4	No
	Residential	West	61.8	81.7	81.7	19.9	Yes	69.7	70.4	8.6	No

Source: FHWA 2006. Refer to Appendix I for noise modeling results.

Notes:

- ¹ Ambient daytime noise levels obtained by Kimley-Horn and Associates on June 15, 2022; see Appendix I.
- ² Noise levels calculated using the Federal Highway Administration (2006) Roadway Construction Noise Model. Refer to Appendix I.
- ³ Combined noise levels calculated based on the logarithmic addition of decibels.

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Operations

Implementation of the proposed Project would create new sources of noise in the site vicinity. The major noise sources associated with the Project that would potentially impact existing nearby residences include stationary noise equipment (i.e., air conditioning equipment); activities associated with loading/unloading storage items; parking areas (i.e., car door slamming, car radios, engine start-up, and car pass-bys); and off-site traffic noise. Given the nature of the Project, the operational noises would not be constant and would occur infrequently. Each stationary source is discussed below in further detail. Although a temporary noise barrier is included in the construction noise analysis, there are no noise barriers assumed for the operational noise analysis.

Mechanical Equipment

Potential stationary noise sources related to long-term operation of the Project would include mechanical equipment (e.g., heating ventilation and air conditioning [HVAC] equipment), which typically generates noise levels of approximately 52 dBA at 50 feet (Berger et al. 2015). For the purposes of a conservative analysis, mechanical equipment at the Project site is assumed to be located at the edge of Project buildings closest to the nearest sensitive receptors. Based on the Project site plans, the nearest sensitive receptors (residences) would be located approximately 50 feet west and 500 feet east of on-site mechanical equipment. As indicated in Table 3.9-8, noise levels from mechanical equipment at the Project site would not exceed the City's standards at the nearest residential uses in compliance GMC Section 8.36.040, and impacts would be **less than significant**.

Storage Loading/Unloading Activities

Self-storage unit leasers would access the site via private vehicles or small single-unit truck rentals to drop off or pick up their personal items from the storage units and then exit the site. Access to the site would occur along Artesia Boulevard. Loading/unloading activities would generate noise levels up to approximately 61 dBA at a distance of 50 feet (Kariel 1991). The nearest noise-sensitive receptors (i.e., residences) to the proposed storage loading/unloading activities would be approximately 75 feet to the west of storage loading/unloading activities at the Project site. Table 3.9-8 shows that storage loading and unloading activities will not exceed the City's standards outlined in GMC Section 8.36.070. In addition, individuals would use these facilities periodically and storage activities would occur throughout the Project site, resulting in lower noise levels than these estimates. Therefore, the Project would result in a **less-than-significant** impact concerning storage loading/unloading activity noise levels.

Truck and Loading Dock Noise

During loading and unloading activities, noise would be generated by the trucks' diesel engines, exhaust systems, and brakes during low gear shifting braking activities; backing up toward the docks; dropping down the dock ramps; and maneuvering away from the docks. Truck and loading dock noise is typically 64.4 dBA L_{eq} at 50 feet (see Appendix I). The proposed warehouse building includes dock-high doors for truck loading/unloading and manufacturing/light industrial operations. The dock-high doors are approximately 360 feet from the residential property line to the west.

Based on distance attenuation, noise levels due to loading/unloading would be reduced to approximately 47.3 dBA at the live/work and multifamily residences to the west of the truck loading dock areas. Note that this noise level conservatively assumes activity would occur at the three closest loading docks simultaneously. At the closest non-residential property line (commercial uses to the north across Artesia Boulevard), truck loading dock noise levels would be approximately 46.0 dBA. As indicated in Table 3.9-8, loading/unloading noise levels would not exceed the City's noise standards at the nearest residential or commercial uses per GMC Section 8.36.070.

Furthermore, loading dock doors would also be surrounded with protective aprons, gaskets, or similar improvements that, when a trailer is docked, would serve as a noise barrier between the interior warehouse activities and the exterior loading area. This would attenuate noise emanating from interior activities. As described above, noise levels associated with trucks and loading/unloading activities would not exceed the City's standards, and impacts would be **less than significant**.

Parking Noise

The Project would provide 124 parking spaces positioned throughout the property. Nominal parking noise would occur within the on-site parking facilities. Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. The instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-bys range from 53 to 61 dBA at 50 feet (Kariel 1991) and may be an annoyance to adjacent noise-sensitive receptors. However, as shown in Table 3.9-8, parking lot noise would not exceed the City's standards at the nearest residential uses in compliance GMC Section 8.36.040, and impacts would be **less than significant**.

Combined Stationary Source Noise Levels

Section 8.36.060 (Noise Measurement Procedure) of the GMC provides procedures and criteria for the measurement of the sound level of standard and "offending" noise sources. According to GMC Section 8.36.040(c), a noise level over the established land use noise standard or existing average ambient noise level (whichever is higher) at an adjacent property line is considered a noise violation. As indicated in Table 3.9-8, the combined noise level from the Project's stationary noise sources would not exceed the City's noise standards at the nearest noise-sensitive uses. Therefore, a **less-than-significant** impact would occur in this regard.

Table 3.9-8. Stationary Source Noise Levels (dBA)

Nearest Land Use	Direction	Distance (feet) ¹	Reference Noise Level at 50 ft	Noise Level at Receiver	Daytime Ambient Noise Level ²	Daytime Exterior Threshold ³	Nighttime Ambient Noise Level ⁴	Nighttime Exterior Threshold ^{3,5}	Exceed Threshold?
Mechanical Equipment									
Residential	East	500	52 dBA ⁷	32.0	69.6	69.6	N/A	50	No
Commercial	North	150		42.5	71.3	71.3	N/A	60	No
Residential	Northwest	536		31.4	51.8	55	N/A	50	No
Residential	West	50		47.0	61.8 ¹¹	61.8	57.8	57.8	No
Storage Loading/Unloading Activities									
Residential	East	500	61 dBA ⁷	41.0	69.6	69.6	N/A	N/A	No
Commercial	North	280		46.0	71.3	71.3	N/A	N/A	No
Residential	Northwest	535		40.4	51.8	55	N/A	N/A	No
Residential	West	75		57.5	61.8 ¹¹	61.8	N/A	N/A	No
Truck and Loading Docks Activities									
Residential	East	444	64.4 dBA ⁸	42.0	69.6	69.6	N/A	N/A	No
Commercial	North	416		46.0	71.3	71.3	N/A	N/A	No
Residential	Northwest	888		39.4	51.8	55	N/A	N/A	No
Residential	West	360		47.3	61.8 ¹¹	61.8	N/A	N/A	No
Parking Area									
Residential	East	300	61 dBA ⁶	45.4	69.6	69.6	N/A	N/A	No
Commercial	North	175		50.1	71.3	71.3	N/A	N/A	No
Residential	Northwest	480		41.4	51.8	55	N/A	N/A	No
Residential	West	360		43.9	61.8 ¹¹	61.8	N/A	N/A	No
Combined Noise Level (Mechanical Equipment + Storage Loading/Unloading Activities + Truck and Loading Docks + Parking Area) ⁹									
Residential	East	N/A ¹⁰	67.3 dBA ⁹	48.1	69.6	69.6	N/A	N/A	No

Table 3.9-8. Stationary Source Noise Levels (dBA)

Nearest Land Use	Direction	Distance (feet) ¹	Reference Noise Level at 50 ft	Noise Level at Receiver	Daytime Ambient Noise Level ²	Daytime Exterior Threshold ³	Nighttime Ambient Noise Level ⁴	Nighttime Exterior Threshold ^{3,5}	Exceed Threshold?
Commercial	North	N/A ¹⁰		53.0	71.3	71.3	N/A	N/A	No
Residential	Northwest	N/A ¹⁰		45.4	51.8	55	N/A	N/A	No
Residential	West	N/A ¹⁰		58.4	61.8 ¹¹	61.8	N/A	N/A	No

Source: Appendix I.

Notes:

- ¹ Distance measured from the location of the noise source to the nearest receptor property line.
- ² Ambient noise levels obtained by Kimley-Horn and Associates on June 15-16, 2022; see Table 3.9-1.
- ³ The City's noise standards are outlined in City of Gardena MC 8.36.040. The exterior threshold used for stationary source impact analysis was the highest of the City's noise standard or the measured ambient noise level. Per City code, 8.36.040 (C), if the ambient noise level exceeds the noise standard, the ambient noise level shall become the noise standard.
- ⁴ The ambient nighttime noise level for the residential receptors to the west was derived from the long-term measurement data obtained by Kimley-Horn and Associates on June 15-16, 2022. Nighttime ambient noise was not measured at any other receptor locations; therefore, only nighttime ambient data for the residential receptors to the west is provided in this table.
- ⁵ The City's nighttime standards only apply to mechanical equipment because storage loading/unloading activities, truck and dock use activities, and use of the parking lot would cease at 10:00 p.m. in accordance with GMC Section 8.36.070. Since the Project is climate controlled, it is reasonable to assume that mechanical equipment on site would be running 24 hours a day.
- ⁶ Berger et al. 2015.
- ⁷ Kariel 1991.
- ⁸ Loading dock reference noise level measurements conducted by Kimley-Horn and Associates on December 18, 2018.
- ⁹ Calculated based on the logarithmic decibel scale and the reference noise levels for mechanical equipment, storage loading/unloading, and parking area noise levels identified above.
- ¹⁰ Since each stationary source is located at various locations throughout the site and at different distances from the receptors, a composite distance is not possible.
- ¹¹ Ambient daytime noise levels obtained by Kimley-Horn and Associates on June 15, 2022 from long-term measurement, see Appendix I for LT-1 data.

Truck Pass-Bys

Trucks will enter the Project site via the access driveway at the northwest corner and traverse south along the western property line and then east to reach the loading dock area. The nearest sensitive receptors are the live/work and multifamily residential uses directly to the west, approximately 25 feet from the centerline of the truck drive aisle. Using a reference noise level of 68 dBA L_{max} at 30 feet for a truck pass-by (Salter 2014), distance attenuation values were calculated and are provided in Table 3.9-9. Based on trip generation data provided in the 1450 Artesia Boulevard Local Transportation Assessment (Kimley-Horn and Associates, December 2022a), the proposed Project would generate approximately 75 daily truck trips, or approximately five truck trips per hour (assuming the Project would operate for a total of 15 hours from 7:00 a.m. to 10:00 p.m.). As shown in Table 3.9-9, one truck pass-by in a 15-minute period would generate exterior noise levels up to approximately 50.1 dBA Leq (15-minute), and a single-truck pass-by would result in a maximum exterior noise level of approximately 69.6 dBA L_{max} at the live/work residences and would not exceed the City's daytime noise standards in compliance GMC Section 8.36.040. Interior noise levels from truck pass-bys would also not exceed the City's interior noise standards set forth in GMC Section 8.36.050 (see Table 3.9-9). Also, the Project would operate only during the 7 a.m. to 10 p.m. hours set forth in the GMC, which allows higher decibel levels, and therefore, truck pass-by noise is solely evaluated against those noise standards.

Table 3.9-9. Truck Pass-by Noise Levels at the Closest Noise-Sensitive Receptor

Source	Exterior Noise		Interior Noise ¹	
	15-Minute Noise Level (dBA Leq)	Maximum Noise Level (dBA L _{max})	15-Minute Noise Level (dBA Leq)	Maximum Noise Level (dBA L _{max})
	7 a.m. to 10 p.m.	7 a.m. to 10 p.m.	7 a.m. to 10 p.m.	7 a.m. to 10 p.m.
Truck Pass-by ²	50.1	69.6	38.1	57.6
<i>Mixed-Use Residential Standard</i>	61.8 ³	75	45	70
<i>Exceeds Standard?</i>	No	No	No	No

Notes: dBA = A-weighted decibel; L_{max} = maximum A-weighted sound level.

- ¹ Interior noise levels calculated using a standard exterior-to-interior noise reduction of 12 dBA for windows open condition (EPA 1978).
- ² Truck pass-by noise levels calculated using the following parameters:
 - A maximum of one truck trip would occur in a 15-minute period to evaluate impacts against the City's 15-minute average (dBA Leq) standard;
 - A single truck trip/pass-by was assumed to evaluate impacts against the City's maximum (L_{max}) noise standard; and
 - A single truck pass-by would last for approximately 10 seconds.

Per GMC Section 8.36.040 (C), if the ambient noise level exceeds the noise standard, the ambient noise level shall become the noise standard. The measured daytime noise level currently exceeds the City's mixed-use residential noise standard at the live/work residences to the west; therefore, the ambient noise level is used to analyze Project impacts.

Special Events

The Project has also obtained a permit by the City of Gardena to host occasional special events including farmers markets, outdoor trade shows, and live music that may result in the gathering of large crowds, use of loudspeakers, and on-site, portable generators. The various special events to be hosted two to three times per month are anticipated to attract an average of 250 attendees in addition to the 725 estimated daily vehicle trips. These 250 attendees are estimated to generate an additional 220 vehicle trips to the Project site on special event days (Kimley-Horn and Associates 2022b).

Music

The various activities for special events could involve amplified live or recorded music. Amplified music is typically 91 dBA at 25 feet (see Appendix I) and would be 67.8 dBA at the closest receptors (live/work and multifamily residences to the west), conservatively assuming the worst-case scenario that the noise source would be at the western edge of the special events zone (approximately 360 feet from the western property line). As such, music noise levels would have the potential to exceed the City's daytime noise standard of 60 dBA for mixed-use residential uses established in GMC Section 8.36.040, thereby resulting in potentially significant impacts. Pursuant to GMC Section 8.36.080, the types of events and gatherings anticipated for the Project that would involve amplified music would be exempt from noise level limits. However, Mitigation Measure MM-NOI-2 prohibits amplified music after 10:00 p.m. and requires that amplified noise sources shall be directed away from the nearest noise-sensitive receptors as well as being tilted downward to focus sound on the ground and prevent it from traveling up towards noise-sensitive receptors. Amplification systems are also required to be distributed to minimize sound levels closest to individual sources. **Impacts would be less than significant with the implementation of MM-NOI-2.**

Crowds

Crowd noise from special events at the Project site may be audible at the nearest noise-sensitive receptors (i.e., residences directly west and to the east across Normandie Avenue) due to noise generated by groups of people. Such noise is dependent on several factors including vocal effort, impulsiveness, and the random orientation of the crowd members. Crowd noise is estimated at 60 dBA at 1 meter (3.28 feet) away for raised normal speaking (Hayne et al. 2011). This noise level would have a positive 5 dBA adjustment for the impulsiveness of the noise source, and a negative-3 dBA adjustment for the random orientation of the crowd members. Therefore, crowd noise would be approximately 62 dBA at 1 meter from the source (Hayne et al. 2011). Crowd noise thus would be approximately 21.2 dBA at the closest receptors (live/work and multifamily residences to the west), conservatively assuming the worst-case scenario that the noise source would be at the western edge of the Special Events zone (approximately 360 feet from the western property line). Special events are not expected to occur after 10:00 p.m. and thus would not exceed the City's later exterior standards for the hours of 10:00 p.m. to 7:00 a.m.. MM-NOI-2 will ensure that no events and crowds congregate after the hours of 10:00 p.m. to 7:00 a.m. Therefore, impacts from crowd noise would be **less than significant**.

Generators

Portable generators could be used for special events at the Project site to power electric equipment, speakers, etc., which typically generate noise levels similar to the mechanical equipment discussed above for the Project (approximately 52 dBA at 50 feet) (Berger et al. 2015). As indicated in Table 3.9-8, noise levels from mechanical equipment at the Project site would not exceed the City's standards at the nearest residential uses in compliance GMC Section 8.36.040. Therefore, impacts from portable generators would be **less than significant**.

Off-Site Traffic Noise

Implementation of the Project would generate increased traffic volumes along nearby roadway segments. Based on the trip generation rates in the Project's Transportation Study Analysis (Kimley-Horn and Associates 2022a), the proposed Project would generate 725 daily trips and an additional 220 daily trips during special event days for a potential maximum of 945 daily trips, which would result in noise increases on Project area roadways. A previous traffic count determined a minimum of 47,000 average daily trips take place on Artesia Boulevard in Torrance (Caltrans 2022). In general, a traffic noise increase of less than 3 dBA is barely perceptible to people, while a 5 dBA increase is readily noticeable (FHWA 2022). Generally, traffic volumes on Project area roadways would have to approximately double (i.e., a 100% increase compared to existing conditions) for the resulting traffic noise levels to increase by 3 dBA. Since 945 maximum daily trips from the Project is a fraction of the minimum average daily trips along Artesia Boulevard (2%), permanent increases in ambient noise levels are expected to be less than 1 dBA and would result in a less-than-significant impact.

Furthermore, the peak-hour trip generation for special events is anticipated to be a maximum of 220 vehicles (Kimley-Horn and Associates 2022b). Assuming peak-hour trips on Artesia Boulevard (the primary access roadway to the Project site) are 10% of the existing ADT (i.e., an estimated 4,700 existing peak-hour trips – see EIR Transportation Section 3.10), 220 peak-hour trips from special events would result in less than a 5% increase in peak-hour traffic volumes along Artesia Boulevard and would create a noise level increase of less than 1 dBA. Therefore, traffic noise increases from Project-generated peak-hour traffic during special events would be **less than significant**.

Threshold NOI-2. Would the Project generate excessive ground-borne vibration or ground-borne noise levels?

Increases in ground-borne vibration levels attributable to the proposed Project would be primarily associated with short - term construction - related activities. The FTA has published standard vibration velocities for construction equipment operations in the FTA Noise and Vibration Impact Assessment Manual. The types of construction vibration impacts include human annoyance and building damage.

Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on soil composition and underground geological layers between a vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. For example, for a building that is constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.20 in/sec peak

particle velocity (PPV) is considered safe and would not result in any vibration damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. The GMC identifies 0.01 in/sec PPV as the approximate threshold for annoyance.

The nearest sensitive receptors are the residences located approximately 15 feet to the west of the Project site. However, since construction activity would be intermittent and the use of heavy construction equipment would be spread throughout the Project site and not concentrated at the point closest to sensitive uses of off-site properties for an extended period of time, it is assumed the concentration of construction activity for the purposes of this vibration analysis would occur no closer than 25 feet from the nearest sensitive receptors. Table 3.9-10 lists vibration velocities at 25 feet for typical construction equipment. Ground-borne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Table 3.9-10. Typical Construction Equipment Ground-borne Vibration Velocities

Equipment	Peak Particle Velocity at 25 Feet (in/sec)
Large Bulldozer	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer/Tractors	0.003

Source: Appendix I.

Notes:

1. Calculated using the following formula: $PPV_{\text{equip}} = PPV_{\text{ref}} \times (25/D)^{1.5}$, where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration (2018) Transit Noise and Vibration Impact Assessment Manual; D = the distance from the equipment to the receiver.

As indicated in Table 3.9-10, vibration velocities from typical heavy construction equipment used during Project construction would range from 0.003 to 0.089 in/sec PPV at 25 feet and would exceed the GMC 0.01 in/sec threshold. Therefore, construction vibration levels at the nearest sensitive receptors (25 feet from Project construction activities) would be potentially significant and mitigation is required. MM NOI-3 requires a Vibration Management Plan that requires minimum setbacks for heavy machinery and limits the use of substantial vibration-generating equipment (e.g., pile drivers) to ensure that construction activities would not exceed the City’s vibration threshold of 0.01 in/sec PPV at off-site uses. Table 3.9-11 shows the mitigated vibration levels at the affected sensitive receptors. Therefore, impacts from construction vibration would be **less than significant with implementation of MM NOI-3**.

Table 3.9-11. Mitigated Construction Vibration Levels

Nearest Land Use	Direction	Distance (feet) ¹	Reference PPV at 25 ft ² (in/sec)	PPV at Receiver (in/sec)	GMC Vibration Threshold (in/sec)	Exceed Threshold?
Large Bulldozers						
Residential	West	105	0.089	0.01	0.01	No
Loaded Trucks						
Residential	West	95	0.076	0.01	0.01	No
Jackhammers						
Residential	West	54	0.035	0.01	0.01	No

Source: FTA 2018.

Notes:

- Distances to sensitive receptors were determined by Mitigation Measure NOI-3 for each equipment type.
- Calculated using the following formula: $PPV_{\text{equip}} = PPV_{\text{ref}} \times (25/D)^{1.5}$, where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration (2018) Transit Noise and Vibration Impact Assessment Manual; D = the distance from the equipment to the receiver.

Once operational, the Project would not be a significant source of ground-borne vibration. Ground-borne vibration surrounding the Project currently results from heavy-duty vehicular travel (e.g., refuse trucks, heavy duty trucks, delivery trucks, and transit buses) on the nearby local roadways. Operations of the proposed Project would include activities associated with a self-storage center (i.e., parking, opening and closing storage unit doors, moving objects in and out of units, etc.) that typically would not cause excessive ground-borne vibrations. Due to the rapid drop-off rate of ground-borne vibration and the short duration of the associated events, vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. According to the FTA's Transit Noise and Vibration Impact Assessment Manual, trucks rarely create vibration levels that exceed 65 VdB (equivalent to 0.007 in/sec PPV) at 50 feet when they are on roadways. Therefore, trucks operating at the Project site or along surrounding roadways would not exceed FTA or GMC thresholds for building damage or annoyance. Impacts would be **less than significant** in this regard.

3.9.5 Mitigation Measures

In order to reduce potentially significant noise and vibration impacts associated with construction and on-site gatherings, mitigation measures MM-NOI-1, MM-NOI-2, and MM-NOI-3, as outlined below, are required.

MM-NOI-1. Construction Noise. Prior to issuance of a Demolition Permit, the Applicant shall demonstrate, to the satisfaction of the City of Gardena Building Official, that the construction contracts include at least an 8-foot-high temporary noise barrier along the

western Project boundary. The temporary noise barrier shall have a sound transmission class (STC) of 25 or greater in accordance with the ASTM Test Method E90, or at least 2 pounds per square foot to ensure adequate transmission loss characteristics. To achieve this, the barrier may consist of steel tubular framing, welded joints, a layer of 18-ounce tarp, a 2-inch thick fiberglass blanket, a 1/2-inch thick weatherwood asphalt sheathing, and 7/16-inch sturdy board siding. The barrier must be free of degrading holes or gaps and shall be designed to prevent structural failure due to factors such as wind, shear, shallow soil failure, earthquakes, and erosion.

MM-NOI-2. **Special Event Noise.** All City-sponsored special events shall be subject to the following requirements:

- Special Events shall be restricted to the hours of 7:00 a.m. to 10:00 p.m.
- Amplified noise sources (e.g., speakers, bandstands) shall be directed away from the nearest noise-sensitive receptors.
- Amplification systems will be positioned so that the tilt of the systems is downwards slightly to focus sound on the ground and prevent it from traveling up towards noise-sensitive receptors. Amplification systems will also be distributed to minimize sound levels closest to individual sources.

MM-NOI-3. **Construction Vibration.** The Project Applicant will require contractor(s) to comply with a Vibration Management Plan and implement minimum allowable setbacks from nearby buildings/structures to the west for heavy machinery. For all new construction, the contractor(s) will not use pile drivers, pavement breakers, or blasting equipment. In addition, when construction is required in direct proximity to the residences immediately west of the Project site, the contractor(s) will observe the following minimum allowable setbacks for specified construction equipment:

- Small bulldozer/tractors shall not be used within 11 feet of buildings to the west;
- Jackhammers shall not be used within 54 feet of any buildings to the west;
- Loaded trucks shall not be used within 95 feet of buildings to the west; and
- Large bulldozers shall not be used within 105 feet of any buildings to the west.

3.9.6 Level of Significance After Mitigation

Threshold NOI-1: Would the Project generate 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?

With implementation of mitigation measures MM-NOI-1, MM-NOI-2, and MM-NOI-3, there would still be **significant and unavoidable construction noise** impacts because some noise-sensitive receptors to the west are so close to the Project boundary. The Project would result in a **less-than-significant impact** for operational noise with mitigation incorporated.

Threshold NOI-2: Would the Project generate excessive ground-borne vibration or ground-borne noise levels?

The Project would result in a **less-than-significant impact** from construction-related ground-borne noise and vibration **with the implementation of MM NOI-3**. The Project would result in a **less-than-significant impact** from operational ground-borne noise and vibration without mitigation.

3.9.7 Cumulative Effects

Noise in Excess of Standards

Implementation of the Project as well as unrelated development projects within its vicinity would all be subject to applicable noise standards (descriptions of the standards applicable within the City of Gardena are described throughout this noise section). On this basis, and because noise impacts of the Project with respect to relevant standards would be less than significant (except for construction-related noise and vibration impacts at sensitive receptors close to the Project boundaries), the Project would not contribute to cumulative exceedances of noise standards, and its incremental effect would be a less-than-significant impact.

Temporary/Periodic Increases in Ambient Noise Levels

The Project would result in temporary noise increases during construction activities, as discussed under Section 3.9.4, Impacts Analysis, above. The construction period of the Project has the potential to overlap with the construction of other development projects in the City. Due to the decrease in noise levels with distance and the presence of physical barriers (i.e., intervening buildings and topography), noise due to construction of other projects would not meaningfully combine with future development under the proposed Project to produce a cumulative noise effect during construction. By way of illustration, if there are two concurrent construction projects of comparable sound emission intensity, and the activity nearest to the studied noise-sensitive receptor is compliant with the City's applicable noise threshold, the other activity could be no closer than three times the distance of the receptor to the nearest activity and not make a cumulatively measurable contribution to the total and still City-compliant noise exposure level. If two concurrent projects were close to a receptor, the cumulative noise would be one of the following:

- The louder (in dBA) of the two concurrent activities
- A logarithmic sum of the two activity noise levels that, per acoustic principles, cannot be more than 3 dBA greater than the louder of the two individual noise-producing activities

In sum, cumulative construction noise is likely to be dominated by the closest or loudest activity to the receptor, and the combination will be no more than a barely perceptible difference (i.e., up to a 3 dBA change). Based on the cumulative project list included in Table 3-1, there are no construction projects that would potentially contribute construction noise that would, in combination with the Project, result in cumulative impacts. Thus, cumulative impacts associated with temporary increases in ambient noise levels would be considered less than significant.

Vibration

Construction-related vibration from future development under the Project was addressed under Threshold NOI-2 in Section 3.9.4 above. Other foreseeable projects within the vicinity of the Project site would not be close enough to create a combined excessive generation of ground-borne vibration; therefore, cumulative impacts associated with excessive ground-borne vibration would be less than significant.

Permanent Increase in Ambient Noise Levels

Off-Site Traffic

Future development from implementation of the Project along with other unrelated projects would generate off-site traffic noise. When calculating future traffic impacts, the traffic study included traffic attributed to both the Project and unrelated projects. Thus, future traffic noise prediction results with and without the Project already account for the cumulative impacts from unrelated projects contributing to traffic increases. Since the noise impacts are generated directly from the traffic analysis results, the traffic with and without the Project predicted increases in traffic noise levels described herein already reflect cumulative impacts. As described herein, the noise level increases associated with both of these scenarios would not exceed applicable standards. As such, anticipated increases would be below the significance thresholds; hence, the incremental effect of the Project on off-site traffic noise is not cumulatively considerable. Cumulative off-site traffic noise impacts would be less than significant.

Stationary Sources

Noise from operation of stationary mechanical equipment added to the outdoor ambient sound environment as a result of Project implementation would include permanent on-site noise sources (e.g., rooftop HVAC equipment) as addressed under Section 3.9.4, under Threshold NOI-1. A cumulative impact could occur if noise produced from such sources due to implementation of the Project were to combine with noise produced from the operation of other unrelated projects in the vicinity to create a cumulatively significant permanent increase in ambient noise levels. However, noise emission from HVAC equipment attenuates with distance and can be occluded by structures and terrain. Additionally, the operation of the Project, along with the operation of other unrelated projects, would be subject to applicable requirements from the City's noise ordinance, which limits the exterior noise levels at residences. Hence, for these two reasons, cumulative impacts to outdoor ambient noise levels resulting from Project stationary sources would be less than significant.

3.9.8 References

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SOURCE: County of Los Angeles; City of Gardena Specific Plan; Open Street Map; USGS NHD; KimleyHorn; Bing Maps

FIGURE 3.9-1
Noise Measurement Locations
 1450 Artesia Specific Plan Draft EIR

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3.10 Transportation

This section identifies associated regulatory requirements; describes the existing traffic conditions within the proposed 1450 Artesia Specific Plan Project (Project); evaluates potential adverse impacts related to conflicts with an applicable program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities; conflicts or inconsistencies with California Environmental Quality Act (CEQA) Guidelines Section 15064.3(b); increase in hazards due to a geometric design feature or incompatible uses and inadequate emergency access; lists any applicable Project Design Features (PDFs); and identifies mitigation measures related to implementation of the proposed Project. The transportation analysis shown in this section presents and uses the vehicle miles traveled (VMT) metric per CEQA requirements.

The 1450 Artesia Specific Plan Vehicle Miles Traveled (VMT) Analysis, prepared by Kimley Horn & Associates, December 5, 2023 was used in the preparation of this section of the Draft EIR. This report is included in Appendix J1 of this EIR. For informational purposes, an operational traffic analysis was also conducted for the Project and is summarized within Section 3.8, Land Use and Planning. This report is included as Appendix J2 to this EIR. An update to the trip generation analysis for the industrial uses of the project is included in Appendix J3.

As discussed in detail in Chapter 2, Project Description, of this EIR, the Project buildout (a total of 268,000 SF) includes the following components:

- Self-storage use (three levels over ground floor warehouse and leasing office totaling 186,000 GSF with 1,480 storage units),
- Industrial warehouse¹ use (one level totaling 72,000 GSF plus 10 loading docks),
- Office/retail use (a mezzanine totaling 10,000 GSF).

The Project would include 124 automobile parking stalls, which would require 25 electric vehicle (EV) capable parking spaces and 6 EV service contract parking spaces (charging stations).

3.10.1 Existing Conditions

This section provides a summary of the existing circulation network, bicycle and pedestrian facilities, truck routes and transit service.

Roadway Facilities

Regional access to the Project site is provided by Interstate (I) 405 located approximately 1.6 miles south of the Project site, State Route (SR) 91 located approximately 0.9 miles east of the Project site, and I-110 also located approximately 0.9 miles east of the Project site. I-105 is located approximately 8 miles north of the Project site.

¹ “Warehouse” includes distribution uses as set forth in the Project Description.

Local access to the Project site is provided by the following arterial and commuter roadways:

Artesia Boulevard is an east-west Arterial with three to four lanes in each direction within local City of Gardena jurisdiction. Artesia Boulevard transitions into SR-91 (Gardena Freeway) east of Vermont Avenue under Caltrans jurisdiction. Artesia Boulevard contains a raised median and the posted speed limit is 45 miles per hour (mph). There are left-turn pockets at all intersections. On-street parking is prohibited on both sides of Artesia Boulevard.

Normandie Avenue is a north-south Major Collector with two lanes in each direction that traverses the City of Gardena. Left-turn lanes are provided at major intersections. The posted speed limit is 35 mph. On-street parking is prohibited on both sides of the street. It is a designated truck route.

Western Avenue is a north-south Arterial with two lanes in each direction that traverses the City of Gardena. Left-turn lanes are provided at major intersections. The posted speed limit is 40 mph. On-street parking is allowed on both sides of the street. It is a designated truck route.

Figure 3.10-1 illustrates the City's roadway network.

Pedestrian and Bike Facilities

Existing sidewalks are provided along the Artesia Boulevard Project frontage and within a continuous and complete pedestrian network in the surrounding areas.

Figure 3.10-2 illustrates the City's proposed bike network consistent with the City of Gardena Circulation Plan Figure CI-4 and South Bay Bicycle Master Plan Figure 4-2, Existing Bicycle Facilities illustrates the locations of existing bikeways within the City. A Class III bicycle route exists along Normandie Avenue east of the Project site (i.e., between 170th Street and 182nd Street). There are no other existing or proposed bicycle facilities anear the Project site.

Transit Facilities

Public transportation in the City consists of local and regional fixed-route bus service, which provides viable alternatives to the use of private automobiles.

Transit service near the Specific Plan area is provided by the three services: LA Metro, GTrans, and Torrance Transit. Bus routes serving the Project area are described below.

LA Metro Route 344 operates between the Harbor Gateway Transit Center and Rancho Palos Verdes, traveling through the City of Gardena along Artesia Boulevard in the Project vicinity. Route 344 operates on weekdays from approximately 5:00 a.m. to 9:30 p.m. with 30-minute headways. On weekends and holidays, Route 344 operates from approximately 6:00 a.m. to 9:30 p.m. with approximately 50- to 60-minute headways.²

Torrance Transit Line 13 operates between Redondo Beach and Artesia Stations, traveling along Artesia Boulevard in the Project vicinity. Line 2 operates on weekdays from approximately 5:10 a.m.

² LA Metro Line 344 https://www.metro.net/wp-content/uploads/2023/06/344_TT_06-25-23.pdf (Accessed September 2023)

to 10:00 p.m. with 45-minute headways. On weekends, Line 13 operates from approximately 5:13 a.m. to 10:00 p.m. with 55- to 60-minute headways.³

The nearest bus stops within 0.25 miles of the Project site are the LA Metro Route 344 and Torrance Transit Line 13, on the northeast and southwest corners of the intersection of Artesia Boulevard at Normandie Avenue, respectively.

3.10.2 Relevant Plans, Policies, and Ordinances

Federal

American Disabilities Act

The ADA of 1990 prohibits discrimination toward people with disabilities and guarantees that they have equal opportunities as the rest of society to become employed, purchase goods and services, and participate in government programs and services. The ADA includes requirements pertaining to transportation infrastructure. The Department of Justice's regulations for Titles II and III of the ADA, known as the 2010 ADA Standards for Accessible Designs, set minimum requirements for newly designed and constructed or altered state and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities. These standards apply to accessible walking routes, curb ramps, and other facilities.

State

Senate Bill 743

On September 27, 2013, Governor Brown signed SB 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under the CEQA process for several categories of development projects including the development of infill projects in transit priority areas and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. SB 743 adds Chapter 2.7, Modernization of Transportation Analysis for Transit Oriented Infill Projects, to the CEQA Statute (California Public Resources Code Section 21099). Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. In addition, SB 743 mandates that alternative metric(s) for determining impacts relative to transportation shall be developed to replace the use of LOS in CEQA documents.

In the past, environmental review of transportation impacts focused on the delay that vehicles experience at intersections and on roadway segments, which is often measured using LOS. Mitigation for impacts on vehicular delay often involves increasing capacity such as widening a roadway or the size of an intersection, which in turn encourages more vehicular travel and greater pollutant emissions. Additionally, improvements to increase vehicular capacity can often discourage alternative forms of transportation such as biking and walking. SB 743 directed the OPR to develop

³ Torrance Transit Line 13 | Line 13 | City of Torrance (torranceca.gov) (Accessed September 2023)

an alternative metric(s) for analyzing transportation impacts in CEQA document. The alternative shall promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of multimodal transportation system, and providing clean, efficient access to destinations. Under SB 743, it was anticipated that the focus of transportation analysis will shift from vehicle delay to VMT within transit-priority areas (i.e., areas well served by transit).

Pursuant to SB 743, OPR released the draft revised CEQA Guidelines in November 2017, recommending the use of VMT for analyzing transportation impacts. Additionally, OPR released Updates to Technical Advisory on Evaluating Transportation Impacts in CEQA, to provide guidance on VMT analysis. In this Technical Advisory, OPR provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their particular jurisdictions. While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance ... recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence" (CEQA Guidelines Section 15064.7[c]).

In December 2018, the CEQA Guidelines were updated to add new Section 15064.3, Determining the Significance of Transportation Impacts, that describes specific considerations for evaluating a project's transportation impacts using the VMT methodology. This new methodology is required to be used for projects beginning on July 1, 2020.

CEQA Guidelines Section 15064.3(b) is divided into four subdivisions as follows:

- (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile 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. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- (2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
- (3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
- (4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled

and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

The Project is a land use development; therefore, 15064.3(b)(1) would apply and transportation impacts have been assessed using the VMT metric.

Sustainable Communities Strategies: 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 emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, the California Air Resources Board (CARB) sets regional targets for greenhouse gas emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the state's metropolitan planning organizations (MPOs). CARB will periodically review and update the targets, as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its Regional Transportation Plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its greenhouse gas emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional greenhouse gas targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy to meet the targets. The alternative planning strategy is not a part of the RTP.

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the alternative planning strategy. Developers can get relief from certain CEQA requirements if their new residential and mixed-use Projects are consistent with a region's SCS (or alternative planning strategy) that meets the targets (see California Public Resources Code Sections 21155, 21155.1, 21155.2, 21159.28.).

Caltrans

Caltrans Transportation Impact Study Guide, May 20, 2020, has replaced the 2002 Guide for the Preparation of Traffic Impact Studies. Per the 2020 Transportation Impact Study Guide, Caltrans' primary review focus is VMT, replacing LOS as the metric used in CEQA transportation analyses (Caltrans 2020). Caltrans recommends use of OPR's recommended thresholds and guidance on methods of VMT assessment found in OPR's Technical Advisory (OPR 2018) for land use projects. In addition to VMT, the 2020 Transportation Impact Study Guide states that it may request a targeted operational and safety analysis to address a specific geometric or operational issue related to the state highway system and connections with the state highway system.

Regional

Southern California Association of Governments

SCAG develops the RTP, which presents the transportation vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura Counties. SB 375 was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. Under the law, SCAG is tasked with developing an SCS, an element of the RTP that provides a plan for meeting emissions reduction targets set forth by the California Air Resources Board.

The RTP/SCS identified priorities for transportation planning within the Southern California region, sets goals and policies, and identifies performance measures for transportation improvements to ensure that future Projects are consistent with other planning goals for the area (SCAG 2020). The Federal Transportation Improvement Plan (FTIP), also prepared by SCAG based on the RTP, lists all of multimodal transportation projects proposed over a 6-year period. To qualify for CEQA streamlining benefits under SB 375, a project must be consistent with the RTP/SCS. On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy), which replaced the RTP/SCS 2016.

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 whose collaboration can improve the quality of life for Southern Californians (SCAG 2020). Although not yet adopted, a draft Connect SoCal 2024 is currently in process, which builds upon the existing adopted Connect SoCal (2020–2045) and outlines a vision for a resilient and equitable future, with policies and strategies for achieving the region's shared goals through 2050.

South Bay Bicycle Master Plan

The intent of the South Bay Bicycle Master Plan (Master Plan) is to guide the development and maintenance of a comprehensive bicycle network and set of programs and policies throughout the cities of El Segundo, Gardena, Hermosa Beach, Lawndale, Manhattan Beach, Redondo Beach, and Torrance for the next 20 years. The Master Plan has a unique focus on cross-city consistency and connectivity that is often lacking in singular city bike plans. Upon plan adoption, each participating city would be eligible for grant funding sources.

Figure 3.10-2 depicts Gardena's existing and proposed bike lanes per Master Plan Figure 4-3, Proposed Bicycle Facilities in Gardena. A Class III bicycle route exists along Normandie Avenue east of the Project site (i.e., between 170th Street and 182nd Street). This is the same facility identified by the City's Circulation Plan; see discussion above. There are no other bicycle facilities are proposed near the Project site.

Local

City of Gardena General Plan

The City of Gardena’s General Plan’s Community Development Element provides a Circulation Plan (Gardena General Plan 2006, Updated 2020). The following goals and policies related to circulation would apply to the Project:

CI Goal 1: Promote a safe and efficient circulation system that benefits residents and businesses and integrates with the greater Los Angeles/South Bay transportation system.

- **Policy CI 1.1:** Prioritize long-term sustainability for the City of Gardena, in alignment with regional and state goals, by promoting infill development, reduced reliance on single occupancy vehicle trips, and improved multi-modal transportation networks, with the goal of reducing air pollution and greenhouse gas emissions, thereby improving the health and quality of life for residents.

CI Goal 2: Promote a safe and efficient local street system that is attractive and meets the needs of the community.

CI Goal 3: Develop Complete Streets to promote alternative modes of transportation that are safe and efficient for commuters, and available to persons of all income levels and disabilities.

- **Policy CI 3.1:** Work with Gardena Municipal Bus Lines and MTA to increase the use of public transit, establish or modify routes, and improve connectivity to regional services.
- **Policy CI 3.3:** Maintain and expand sidewalk installation and repair programs, particularly in areas where sidewalks link residential neighborhoods to local schools, parks, and shopping areas.
- **Policy CI 3.4:** Maintain a citywide bicycle route and maintenance plan that promotes efficient and safe bikeways integrated with the MTA’s regional bicycle system.

SB 743 Implementation Transportation Analysis Updates

In response to SB 743, and selection of VMT as the metric for transportation analysis, the City of Gardena adopted new transportation impact thresholds to adhere to CEQA requirements. Resolution No. 6471 was adopted by the City Council on July 14, 2020, which included the revised CEQA policies and procedures for transportation impacts related to VMT. Additionally, the City adopted SB 743 Implementation Transportation Analysis Updates (City of Gardena 2020) to provide guidance on conducting transportation studies in the City. The VMT and Local Transportation Assessment (LTA) studies prepared for the Project are included as Appendix J1 and J2, respectively.

3.10.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to transportation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to transportation would occur if the Project would:

1. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
2. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
4. Result in inadequate emergency access?

Based on the results of the Initial Study prepared for the Project (Appendix A), the Project would result in less-than-significant impacts associated with adequate emergency access. As such, the following thresholds are evaluated in this section of the Draft EIR:

TRA-1. Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

TRA-2. Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

TRA-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)?

The City has adopted its own VMT analysis guidelines and thresholds in its SB 743 Implementation Transportation Analysis Updates, June 2020. The City's VMT thresholds consider the VMT performance of residential, employment-based and regional-serving components of a project separately, using the efficiency metrics of home-based VMT per capita, work VMT per employee and total VMT per service-population, respectively. The City's VMT thresholds of significance that would apply to the Project are summarized below:

- A significant project impact would occur if the Project generates VMT⁴ (per capita, per employee, or per service population) that exceeds 15% below the regional average (i.e., higher than regional VMT or 0%-14% below regional VMT)
For regional retail projects, a significant impact would occur if the Project results in a net increase in total VMT.
- A significant cumulative impact will occur if the Project threshold is exceeded or if the Project is determined to be inconsistent with the SCAG SCS.

⁴ City of Gardena June 2020. Table 6. VMT refers to daily Home-Based VMT per capita for residential projects, Home-Based Work VMT per employee for office, industrial, and hotel projects, and Total VMT per service population for all other project types.

3.10.4 Impact Analysis

Threshold TRA-1. Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Refer to Table 3.8-1 within Section 3.8 of this EIR, which evaluates the Project’s consistency with the 2020–2045 RTP/SCS goals. The analysis finds that the Project is consistent with the goals of the RTP/SCS. Additionally, as shown in the analysis for Threshold TRA-2, the Project is located within a High-Quality Transit Area, which would support use of transit and other active transportation modes in improving mobility and accessibility for people. Refer to Table 3.8-2 within Section 3.8 of this EIR, which evaluates the Project’s consistency with the Gardena General Plan. The analysis finds that the Project is consistent with the applicable goal and policies of the Community Development Element Circulation Plan. The Project would not conflict or impede implementation of any program, plan, ordinance or policy addressing the circulation system, including transit, bicycle and pedestrian facilities. Therefore, the impact would be **less than significant**.

Threshold TRA-2. Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3(b) focuses on newly adopted criteria (VMT) adopted pursuant to SB 743 for determining the significance of transportation impacts. As discussed above in Section 3.10.2, Relevant Plans, Policies, and Ordinances, pursuant to SB 743, the focus of transportation analysis changes from vehicle delay to VMT. The related updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. As stated in CEQA Guidelines Section 15064.3(c), the provisions of Section 15064.3 applied statewide on July 1, 2020.

The following VMT analysis is prepared by Kimley Horn & Associates, dated December 2023 and is included as Appendix J1 of this EIR.

VMT Analysis Methodology

Based on the land use information provided, for the purposes of VMT analysis and the determination of transportation related significant impacts, the following land uses were analyzed:

- Industrial
- Office/retail
- Self-Storage
- Special Events Venue

The Project’s VMT analysis was conducted in accordance with the City’s adopted VMT standards and thresholds (VMT Guidelines). The steps in this VMT analysis were as follows:

- Conduct a screening analysis to identify proposed land uses that could be screened out of a detailed VMT analysis, either due to project type, being in a low VMT area or in a high-quality transit area.
- Determine VMT impacts of land uses that are not screened out through the screening criteria.

- Develop mitigation measures that could be implemented if a project would exceed the significance threshold for VMT impacts.

VMT Screening

The City VMT Guidelines provides details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed level VMT analysis. Screening thresholds are broken into the following three steps.

Project Type Screening

Projects that generate less than 110 daily trips, local-serving retail projects less than 50,000 square feet, and affordable housing projects may be screened from conducting a VMT analysis.

The AM and PM peak hour daily trips were estimated for the Project using the trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. The ITE Land Use Code, trip generation rates, and estimated trips that would be generated by the Project are presented in Table 3.10-1 for Opening Year (2025) Project Conditions when the site would be fully operational.

Table 3.10-1. Project Trip Generation

ITE Code	Land Use	Size	Units	Daily Trips	AM Peak			PM Peak		
					In	Out	Total	In	Out	Total
Trip Generation Rates										
110	General Light Industrial	—	KSF	4.870	0.651	0.089	0.74	0.091	0.559	0.65
151	Mini-Warehouse	—	Storage Units (100s)	17.960	0.617	0.593	1.21	0.840	0.840	1.68
710	General Office Building	—	KSF	10.840	1.338	0.182	1.52	0.245	1.195	1.44
Trip Generation Estimates										
110	General Light Industrial	72.00	KSF	351	47	6	53	7	40	47
151	Mini-Warehouse	14.80	Storage Units (100s)	266	9	9	18	12	12	24
710	General Office Building	10.00	KSF	108	13	2	15	2	12	14
Total Proposed Project Trips				725	69	17	86	21	64	85
Existing Land Use Trips				147	3	0	3	9	8	17
Net Proposed Project Trips				578	66	17	83	12	56	68

* **Source:** Appendices J2 and J3.

Note: Appendix J2 includes trip generation as shown in the table. Appendix J3 includes trip generation for Warehousing use instead of General Light Industrial use for the industrial component of the proposed Project, which results in a lower trip generation. The operational analysis in Appendix J2 is based on the higher trip generation and is therefore considered conservative.

As shown in Table 3.10-1, the proposed Project is forecast to generate approximately 725 average daily trips, including 86 AM peak hour trips and 85 PM peak hour trips. When the trips generated by the existing land uses (to be removed) are subtracted from the proposed Project trip generation estimates, the Project would generate 578 net average daily trips, including 83 AM peak hour trips and 68 PM peak hour trips. Additionally, as shown in Appendix J3, using a warehouse trip rate for the proposed industrial uses, the proposed Project is forecast to generate approximately 497 average daily trips, including 45 AM peak hour trips and 51 PM peak hour trips, which results in 350 net average daily trips, including 42 AM peak hour trips and 34 PM peak hour trips.

The Project's industrial and self-storage land use components (as shown in Appendix J2 and J3) are estimated to generate more than 110 daily vehicle trips; thus, the industrial and self-storage uses are not screened out initially based on Project Type screening. The Project's office component is estimated to generate less than 110 daily vehicle trips; hence it will be screened out. Alternatively, this component could be developed as retail use. As mentioned above, local-serving retail use less than 50,000 square feet would screen out of conducting a detailed VMT analysis.

The Project's special event component is proposed on an approximately 36,000-square-foot portion of the Project site that would host several medium-sized events, which mainly falls within the retail category of land uses such as farmer's market, food truck, food giveaways, and car shows. Therefore, the Project's special event component is screened out based on the local serving use screening under project type screening.

Transit Proximity Screening

As described in the City VMT Guidelines, projects located within a High-Quality Transit Area (HQTA) would be screened from a detailed VMT analysis if the Project does not have certain characteristics. This screening criteria cannot be applied if the Project:

- Has a Floor Area Ratio (FAR) of less than 0.75 (for office and industrial projects)
- Includes more parking for use by residents, customers, or employees than required by the City (unless additional parking is being provided for design feasibility, such as completing the floor of a subterranean or structured parking facility, or if additional parking is located within the project site to serve adjacent uses).
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the City).
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Figure 3.10-3 illustrates the High-Quality Transit Areas per the City's VMT Guidelines. The Project site is located in a frequent transit area (within a 0.5-mile radius of an existing or planned major transit stop, or an existing stop along a high-quality transit corridor, which has fixed route bus service with

service intervals no longer than 15 minutes during peak commute hours). In addition, this Project would meet the other criteria necessary to screen out due to transit proximity.

- Industrial uses will have FARs of at least 0.75.
- The City has indicated that supplying parking in excess of minimum requirements would be prohibited.
- The Project is consistent with the SCAG RTP/SCS because it does not conflict with any of the goals and policies of Connect SoCal, as described under Threshold LU-1 and in Table 3.8-1 in Section 3.8.
- Project would not replace residential units.

Based on the City's Guidelines, the Transit Proximity Screening is applicable to office, retail, hotel, industrial and residential projects. The guidelines do not specifically address the screening criteria for self-storage land uses. Additionally, the primary mode of transportation for self-storage units is expected to be automobiles, thus the proximity to transit is not applicable to this land use. Therefore, only the Project's industrial use can be screened out under the transit proximity screening criteria.

Low VMT Area Screening

Projects that are assessed using home-based work VMT per employee (such as industrial) in a low-VMT generating area may be screened from a VMT analysis. According to Figure 1 in the City VMT Guidelines, the Project site would not screen out under the low VMT area screening criteria.

Screening Analysis Results

Based on the VMT screening, the Project's special events components would screen out of a VMT analysis based on project type screening criteria and would result in a less-than-significant VMT impact. The industrial use of the Project would screen out of a VMT analysis based on transit proximity screening criteria and would result in a less-than-significant VMT impact. The office component would screen out as it is projected to generate less than 110 daily trips and if it is retail instead of office it will screen out as being locally serving and less than 50,000 square feet. The self-storage components of the Project would not screen out initially based on the three screening criteria and would require a VMT analysis. Therefore, a VMT impact analysis was conducted for the self-storage use.

VMT Impact Analysis

The primary source of VMT for self-storage units is customers; therefore, the travel characteristics of self-storage units are similar to that of local-serving retail uses. Since the total gross area of the proposed self-storage is more than 50,000 square feet and cannot be screened out of VMT analysis, a separate VMT analysis was conducted considering the net change in VMT as a threshold. According to the City's guidelines, the following VMT impact thresholds are applicable to self-storage uses:

- **Project Threshold:** For regional retail, a significant impact would occur if the project results in a net increase in total VMT.
- **Cumulative Threshold:** A significant impact will occur if the project threshold is exceeded or if the project is determined to be inconsistent with the SCAG SCS.

Self-Storage use VMT Impact Analysis

Similar to retail stores, typical self-storage units such as the Project most often serve pre-existing needs (i.e., the self-storage does not generate new trips because it meets existing demand) because their customers are using the facility not because of the features offered by the self-storage, but because of the area the self-storage is located in. Usually, self-storage offers similar features and pricing in the same area. Thus, it is assumed that someone will travel to a newly constructed typical self-storage because of its proximity to the area attraction, rather than the proposed self-storage fulfilling an unmet need. Typical self-storage most often can be presumed to reduce trip lengths when a new self-storage is introduced within a cluster of existing self-storages located near a local neighborhood. Thus, the impact to the transportation system would be negligible or reduced by the introduction of a new self-storage use to an area where people are already traveling and planning on storing goods. Self-storage units do not attract any new trips other than need of storage, which is fulfilled by local storage units.

While a specific market study for the proposed self-storage use was not conducted as part of the traffic analysis, a map showing the proximity of other similar self-storage facilities is provided as Exhibit 2 of Appendix J1. A 0.5-mile buffer was placed around the eight existing self-storage facilities in the area and the Project to illustrate the lack of overlapping service area between the Project and the existing self-storage uses. As shown in Exhibit 2 of Appendix J1, the Project would reduce trip lengths by adding self-storage opportunities into the local area, reducing proximity to self-storage services for users. Therefore, in accordance with the City's VMT guidelines, it is assumed that the Project will result in a VMT reduction and support the goals of SB 743.

Impact Determination

Based on the results of this analysis, the following conclusions are made:

- The proposed industrial land use would screen out of a VMT analysis based on the City's transit proximity screening criteria and would result in a **less-than-significant VMT impact**.
- The proposed office/retail land use would screen out of a VMT analysis based on daily trip generation or local-serving retail use and would result in a **less-than-significant VMT impact**.
- The proposed special event land uses are customer-based land uses that can be categorized as local-serving retail uses. Therefore, the special event land uses can be screened out based on the City's project type screening as well as transit proximity screening criteria and would result in a **less-than-significant VMT impact**.
- The proposed self-storage use is customer-based land use that would result in net decrease in regional VMT. Therefore, the self-storage use would result in a **less-than-significant VMT impact**.

Threshold TRA-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)?

The south leg of the unsignalized intersection of Gateway Plaza and Artesia Boulevard would provide access to the Project. A Traffic Signal Warrant Analysis was conducted in the Project's traffic analysis by Kimley-Horn and Associates (Draft 2022) for the unsignalized intersection of Gateway Plaza and Artesia Boulevard. The intersection was found to warrant a traffic signal control under Existing

conditions without the Project. The Project would not significantly increase traffic volumes at this intersection; therefore, per City's recommendation, a traffic signal was not recommended. Vehicular access to the Project site would be via right-in-right-out only driveway along Artesia Boulevard. This intersection would continue to be unsignalized and the Project site driveway would be a right-in-right-out driveway.

Passenger vehicles would be able to make U-turns at Normandie Avenue and Western Avenue where this movement is allowed, the trucks accessing the site would use a reasonable path along the grid roadway network near the Project such that no U-turns would be required. The Project would involve construction of a new buildings (by removing all of the existing uses such as U haul) and use the internal roadways for access to individual building and on-site circulation. Local vehicular access to the Project site would be provided via one 35-foot driveway from Artesia Boulevard. A separate 35-foot exit driveway travel lane will be adjacent to the entrance divided by a 20-foot landscape divide. The Project driveway will only service the Project.

During construction, no lane closures, sidewalk closures, or changes in vehicular and pedestrian circulation are anticipated. Therefore, the Project would not increase hazards due to a geometric design feature or incompatible use and impact would be **less than significant**.

3.10.5 Mitigation Measures

Impacts would be less than significant. As such, no mitigation is required.

3.10.6 Level of Significance After Mitigation

Impacts would be less than significant. As such, no mitigation is required.

3.10.7 Cumulative Effects

Per City's guidelines, a less-than-significant impact under Existing/Baseline conditions would also result in a less-than-significant cumulative impact as long as the Project is also consistent with the SCAG RTP/SCS. As mentioned above, the Project is considered to be consistent with SCAG RTP/SCS since the proposed number jobs are less than the total future jobs assumed for the Project zone. Additionally, the Project's consistency with 2020 Connect SoCal RTP/SCS has been included in Section 3.8. Therefore, the Project would not result in any cumulative effects.

3.10.8 References

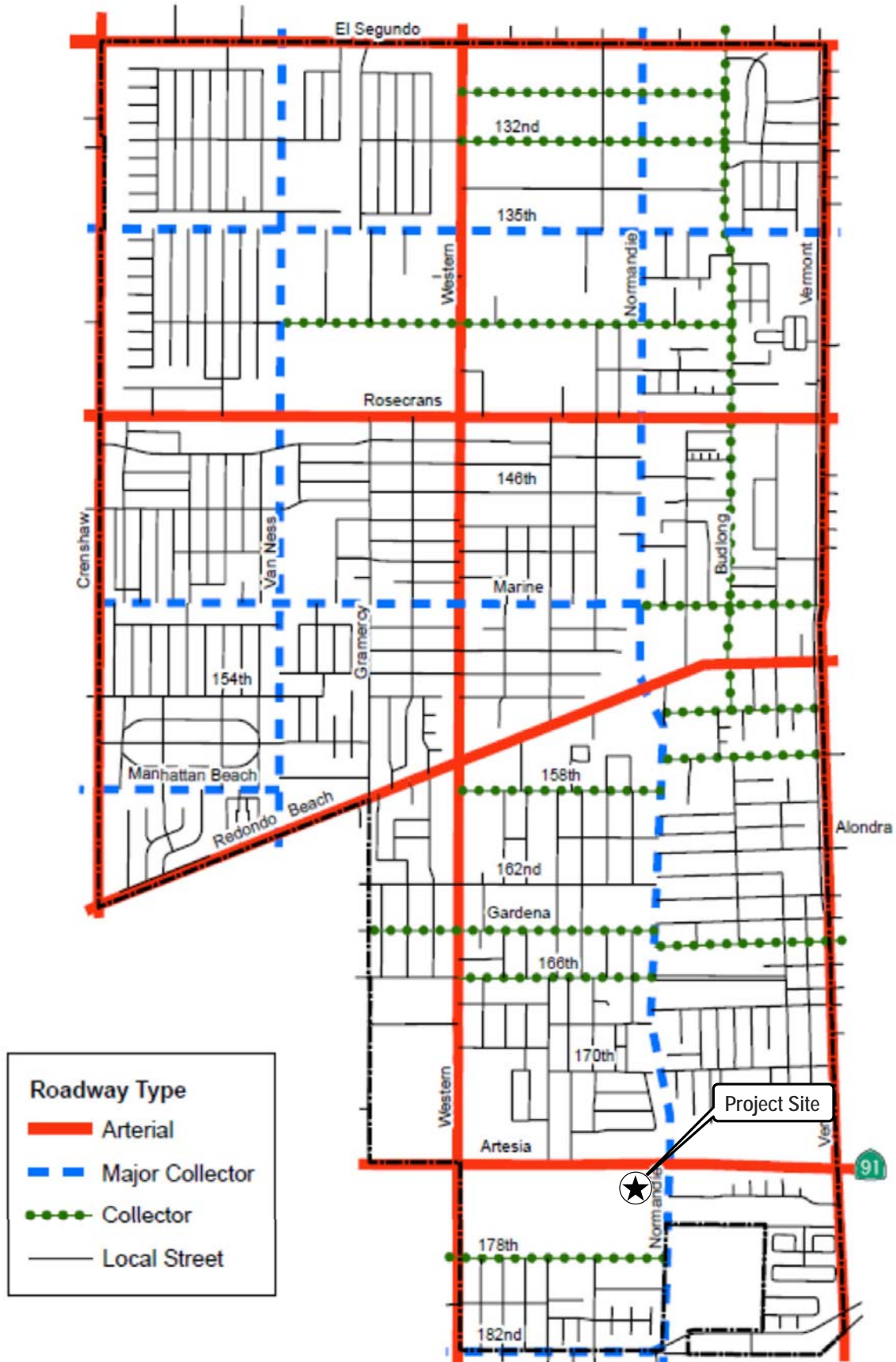
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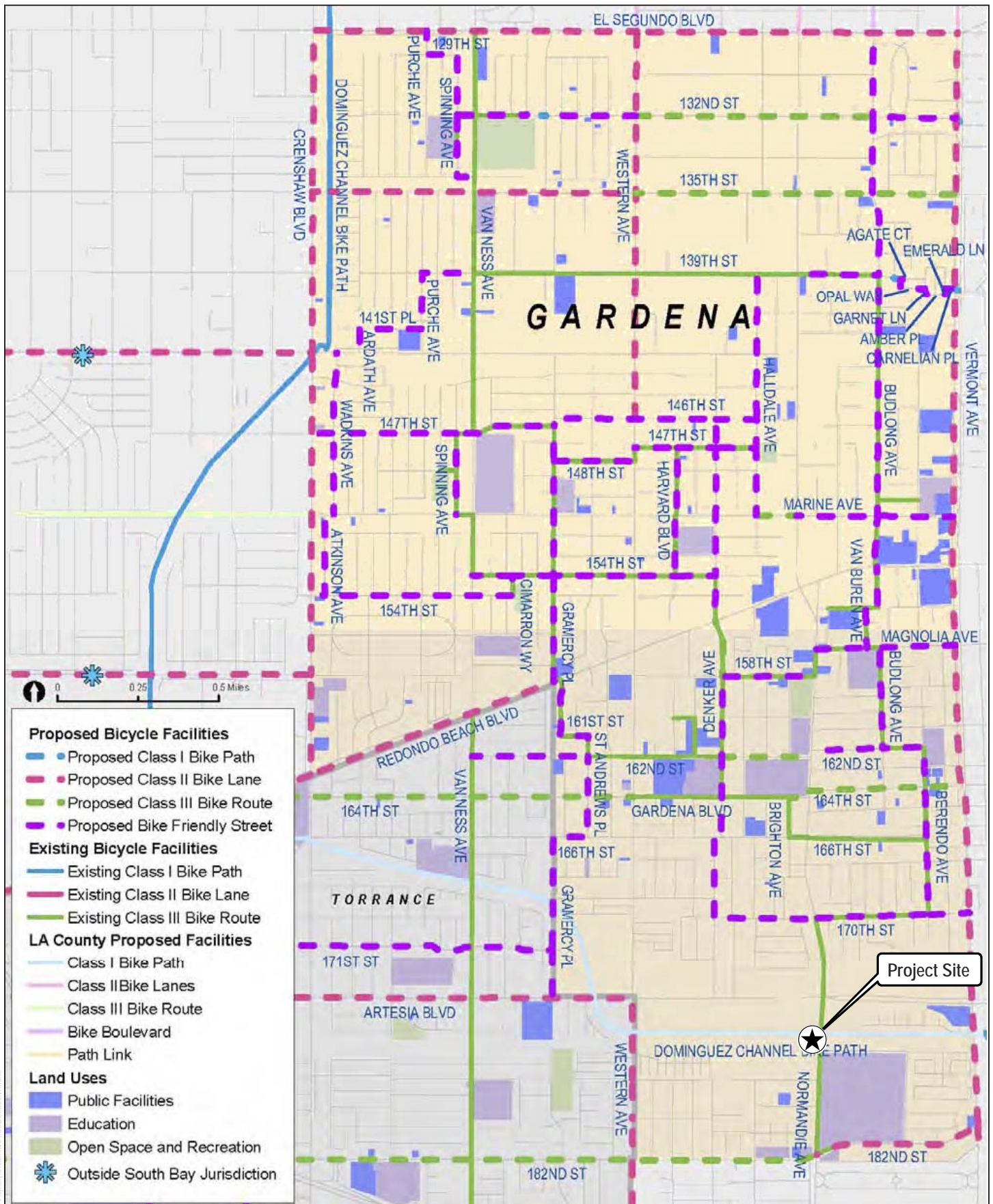
SOURCE: Gardena General Plan 2006, Circulation Plan Updated 2020

FIGURE 3.10-1

Roadway Network

1450 Artesia Specific Plan Draft EIR

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SOURCE: South Bay Bicycle Master Plan - Draft

FIGURE 3.10-2

Bike Facilities

1450 Artesia Specific Plan Draft EIR

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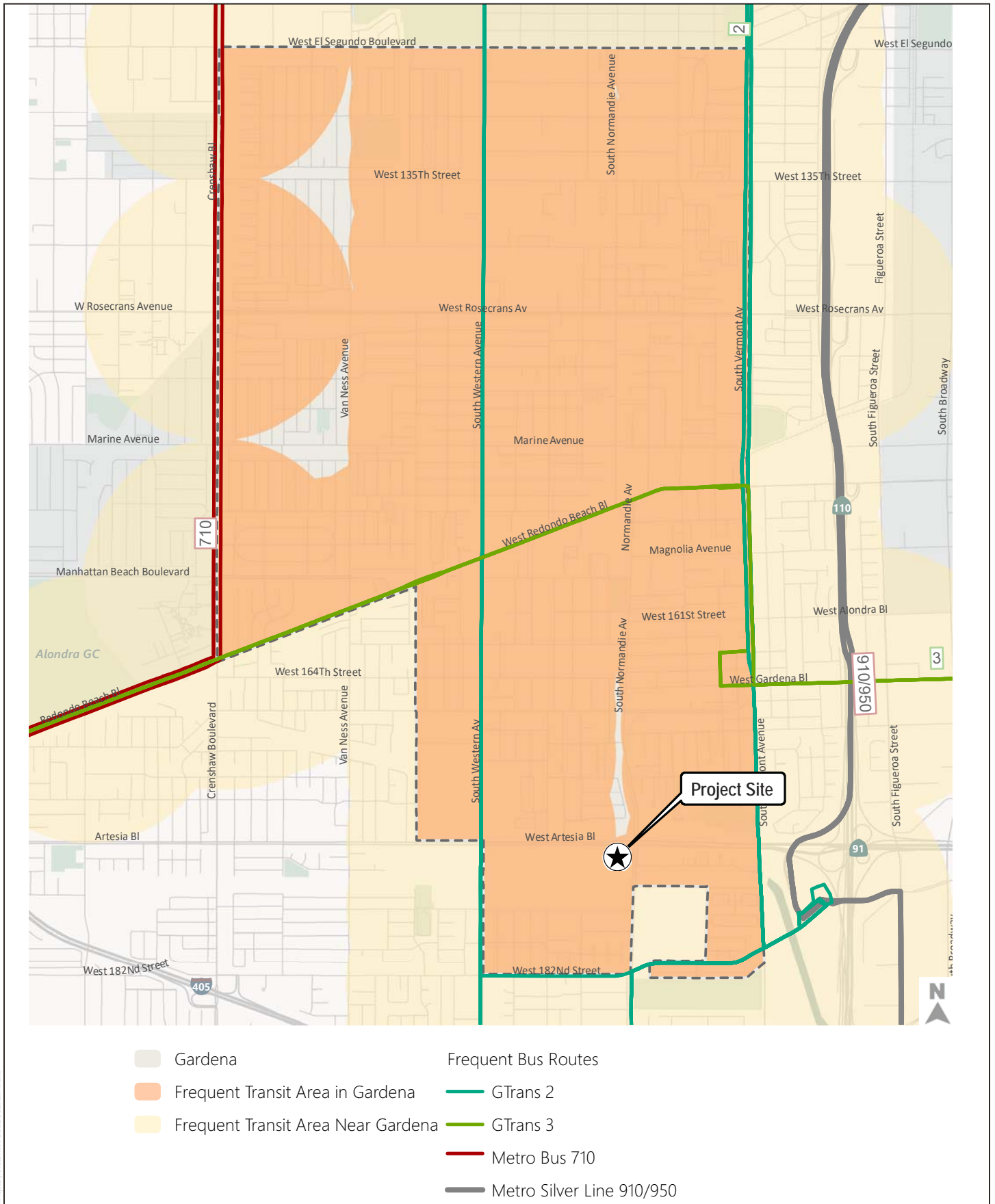


FIGURE 3.10-3

High-Quality Transit Areas
1450 Artesia Specific Plan Draft EIR

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3.11 Tribal Cultural Resources

This section describes the existing Tribal Cultural Resource (TCR) conditions of the 1450 Artesia Specific Plan Project (Project or proposed Project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Project.

The following analysis is based, in part, on the following source:

- Cultural Resources Assessment Report for the 1450 Artesia Specific Plan Project, prepared by BCR Consulting LLC in September 2023 (Appendix C)

In addition to the source above, the evaluation of potential impacts to TCRs is based on the findings resulting from tribal consultation conducted by the City of Gardena (City), as the lead agency.

3.11.1 Existing Conditions

Background research conducted to inform these analyses include the results of the California Historical Resources Information System (CHRIS) and Native American Heritage Commission (NAHC) Sacred Lands File (SLF) records searches, other background research, and the results of formal tribal consultation completed by the lead agency, the City, pursuant to California Assembly Bill (AB) 52 and Senate Bill (SB) 18, all of which are briefly provided in this section. For a discussion of the prehistoric setting and ethnohistoric background please see Appendix C of this EIR.

3.11.1.1 Background Research

CHRIS Records Search

As previously discussed in Section 3.2, Cultural Resources, of this Draft EIR, the CHRIS records search results revealed that 12 previous cultural resources studies have been conducted within the records search area. None of the previous studies have addressed the Project site. Additionally, the CHRIS records search results revealed that four cultural resources have been previously recorded within 0.5 miles of the Project site of which one is a prehistoric site and three are historic built environment resources. However, no prehistoric sites or resources documented to or potentially be of Native American origin have been previously recorded within or adjacent to the Project site. A complete records search bibliography is provided in Appendix A of Appendix C of this EIR.

Native American Coordination

Sacred Lands File Search

A search of the NAHC's SLF database was completed on May 18, 2022 with negative results (see Appendix C of Appendix C). It should be noted that SLF maintained by the NAHC represents a curation of "sacred lands" or TCRs provided by tribal entities and Native American representatives. For various reasons, tribal entities and Native American representatives do not always report sacred lands or TCRs to the NAHC. As such, the NAHC's SLF is not a comprehensive list, and searches of

the SLF must be considered in concert with other research and not used as a sole source of information regarding the presence of TCRs or cultural resources.

3.11.1.2 Survey Methods and Results

An intensive-level cultural resources field survey of the Project site was conducted on June 21, September 9, and September 19, 2022. Only 3.5 acres (53.8% of the Project site) was accessible during the survey. The eastern portion of the Project site once served as a petroleum dump site making the area inaccessible. No prehistoric archaeological resources were identified within accessible portions of the Project as a result of the surveys performed.

AB 52 and SB 18 Consultation

The Project is subject to compliance with AB 52 (PRC 21074) and SB 18 (Government Code Section 65352), which requires consideration of impacts to TCRs and requires local governments to invite California Native American tribal representatives to participate in consultation about proposed General Plan and Specific Plan adoptions or amendments, respectively, as part of the CEQA process, and that the lead agency notify California Native American tribal representatives that have requested notification who are traditionally or culturally affiliated with the geographic area of the Project site. All NAHC-listed California Native American tribal representatives that have requested Project notification pursuant to AB 52, and all California Native American tribal representatives who were identified by the NAHC as being traditionally or culturally affiliated with the geographic area of the Project pursuant to SB 18, were sent letters by the City on June 3, 2022 via USPS certified mailing and email. The notification letters contained a Project description, outline of AB 52 and SB 18 timing, an invitation to consult, a Project location map, and contact information for the appropriate lead agency representative. To date, government-to-government consultation initiated by the City has not resulted in the identification, through the presentation of substantial evidence, of a TCR within or near the Project site. Table 3.11-1 summarizes the results of the AB 52 and SB 18 process for the proposed Project. The confidential AB 52 and SB 18 record of all communication between the City and involved tribes is on file with the City and available for review by eligible individuals.

Table 3.11-1. Assembly Bill 52 and Senate Bill 18 Tribal Outreach Results with Native American Heritage Commission-Listed Native American Contacts

Native American Tribal Representatives	Response Received
Andrew Salas, Chairman Gabrieleno Band of Mission Indians – Kizh Nation	<p>June 7, 2022 Chairman Salas responded via email with an attached letter acknowledging receipt of the notification letters and requested to consult on the Project if ground disturbance is involved.</p> <p>July 28, 2022 Consultation is conducted between the City and tribal representatives, Chairman Salas and Matt Teutimex, via phone call. The tribe provided the City with documents and information regarding the potential for the discovery of TCRs. Following</p>

Table 3.11-1. Assembly Bill 52 and Senate Bill 18 Tribal Outreach Results with Native American Heritage Commission-Listed Native American Contacts

Native American Tribal Representatives	Response Received
	<p>the consultation meeting, the City provided the tribe with recommended and potential mitigation measures via email.</p> <p>July 29, 2022 Chairman Salas responded via email and provided the tribe's recommended mitigation measures.</p> <p>August 3, 2022 The City emailed Chairman Salas revised mitigation measures.</p> <p>August 11, 2022 The City sent a follow-up email to Chairman Salas and Mr. Teutimex regarding the revised mitigation measures sent to the tribe on August 3, 2023.</p> <p>August 19, 2022 Chairman Salas responded via email with an attached letter dated August 18, 2022, and provided additional documents, information, and mitigation measures for the potential discovery of TCRs. The City responded the same day acknowledging receipt of all files and relayed that the City is reviewing proposed mitigation measures provided by the tribe.</p> <p>April 18, 2023 The City emailed Chairman Salas with the final mitigation measures that the City has agreed upon.</p> <p>April 18, 2023 The City responded to the tribe via email. The City's response includes a summary of the City's determination on whether the Project would cause a substantial adverse change in the significance of a TCR. After review and consideration of the information provided by the tribe, the City determined that although no substantial evidence of a TCR pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, exists within the Project site, the City agreed to incorporate</p>

Table 3.11-1. Assembly Bill 52 and Senate Bill 18 Tribal Outreach Results with Native American Heritage Commission-Listed Native American Contacts

Native American Tribal Representatives	Response Received
	<p>mitigation measures for the Project in accordance with Public Resources Code Section 21080.3.2(c)(2) and considered consultation concluded.</p> <p>No additional responses have been received since the last record of communication documented.</p>
Sam Dunlap Gabrieleno-Tongva Tribe	No response received as a result of the City's AB 52 and SB 18 notification letters.
Anthony Morales, Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians	No response received as a result of the City's SB 18 notification letter.
Sandonne Goad, Chairperson Gabrielino/Tongva Nation	No response received as a result of the City's SB 18 notification letter.
Christina Conley, Tribal Consultant and Administrator Gabrielino Tongva Indians of California Tribal Council	No response received as a result of the City's SB 18 notification letter.
Robert Dorame, Chairperson Gabrielino Tongva Indians of California Tribal Council	No response received as a result of the City's SB 18 notification letter.
Charles Alvarez Gabrielino-Tongva Tribe	No response received as a result of the City's SB 18 notification letter.
Lovina Redner, Tribal Chair Santa Rose Band of Cahuilla Indians	No response received as a result of the City's SB 18 notification letter.
Isaiah Vivanco, Chairperson Soboba Band of Luiseno Indians	No response received as a result of the City's SB 18 notification letter.
Joseph Ontiveros, Cultural Resource Department Soboba Band of Luiseno Indians	No response received as a result of the City's SB 18 notification letter.

3.11.2 Relevant Plans, Policies, and Ordinances

State

California State Assembly Bill 52

AB 52 of 2014 amended Public Resources Code Section 5097.94 and added Public Resources Code Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52

established that TCRs must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. Public Resources Code Section 21074 describes a TCR as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American tribe. A TCR is either:

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

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

Section 1 (a)(9) of AB 52 establishes that “a substantial adverse change to a tribal cultural resource has a significant effect on the environment.” Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the Public Resources Code, which states that parties may propose mitigation measures “capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource.” Further, if a California Native American tribe requests consultation regarding Project alternatives, mitigation measures, or significant effects to TCRs, the consultation shall include those topics (Public Resources Code Section 21080.3.2[a]). Finally, the environmental document, for which the tribal consultation is focused, and the mitigation monitoring and reporting program (where applicable), developed in consideration of information provided by tribes during the formal consultation process, shall include any mitigation measures that are adopted (Public Resources Code Section 21082.3[a]).

Senate Bill 18

The Local and Tribal Intergovernmental Consultation process, commonly known as Senate Bill (SB) 18 was signed into law September of 2004 and took effect March 1, 2005. SB 18 refers to PRC Section 5097.9 and 5097.995, which defines cultural places as:

- Native American sanctified cemetery place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9).
- Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (PRC Section 5097.993).

SB 18 established responsibilities for local governments to contact, provide notice to, refer plans to, and consult with California Native American tribes that have been identified by the NAHC and if that

tribe requests consultation after local government outreach as stipulated in Government Code Section 65352.3. The purpose of this consultation process is to protect the identity of the cultural place and to develop appropriate and dignified treatment of the cultural place in any subsequent project. The consultation is required whenever a general plan, specific plan, or open space designation is proposed for adoption or to be amended. Once local governments have sent notification, tribes are responsible for requesting consultation. Pursuant to Government Code Section 65352.3(a)(2), each tribe has 90 days from the date on which they receive notification to respond and request consultation.

In addition to the requirements stipulated previously, SB 18 amended Government Code Section 65560 to “allow the protection of cultural places in open space element of the general plan” and amended Civil Code Section 815.3 to add “California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.”

California Health and Safety Code Section 7050.5

California law protects human remains, Native American burials, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County Coroner has examined the remains and determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of 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 Section 5097.98 of the PRC (PRC Section 7050.5[b]). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (PRC Section 7050.5[c]). The NAHC will notify the “most likely descendant” (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the MLD by NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Local

City of Gardena Municipal Code

Section 18.42.210. of the Gardena Municipal Code contains the following language regarding Native American or TCRs (adopted February 2023).

D. Cultural Resources

1. If Native American or TCRs are found on the site, the applicant shall enter into a cultural resources treatment agreement with a local Native American tribe traditionally and culturally affiliated with Gardena that is acknowledged by the Native American Heritage Commission, which shall address the following:

- a. Treatment and disposition of TCRs in consultation with the City and a qualified archaeologist;
 - b. Designation, responsibilities, and participation of professional tribal monitors during initial ground disturbance, including grading, excavation and [other] ground disturbing activities;
 - c. Project grading and development scheduling;
 - d. Terms of compensation for the tribal monitors;
 - e. Treatment and final disposition of any cultural resources and sacred sites discovered on site;
 - f. Tribal monitor's authority to stop and redirect grading in order to evaluate the significance of any potential TCRs discovered on the property, and to make recommendations as to treatment; and
 - g. The applicant's agreement to relinquish ownership of all TCRs, including all archaeological artifacts that are found on the project area, to the tribe for proper treatment and disposition; and the applicant's agreement that all tribal sacred sites are to be avoided and preserved.
2. Human Remains
- a. In compliance with state law, if human remains are unearthed, the project developer, pursuant to state health and safety code section 7050.5, will contact the county coroner and ensure no further disturbance occurs until the county coroner has made the necessary findings as to origin and disposition pursuant to public resources code section 5097.98.
 - b. If the remains are determined to be of Native American descent, the Native American Heritage Commission (NAHC) must be notified within 24 hours.

3.11.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to TCRs are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to TCRs would occur if the Project would: cause a substantial adverse change in the significance of a TCR, 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:

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

Based on the results of the Initial Study prepared for the Project (Appendix A), the following thresholds are evaluated in this section of the Draft EIR:

TCR-1. 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 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)?

TCR-2. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

3.11.4 Impact Analysis

Threshold TCR-1. 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 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)?

As previously discussed in Section 3.2(b), no known archaeological resources of Native American origin or TCRs listed or eligible for listing in the CRHR or a local register were identified within the Project site as a result of the SCCIC CHRIS or NAHC SLF records search, the pedestrian survey, nor as a result of information provided by consulting tribes. Therefore, the Project would not adversely affect TCRs that are listed or eligible for listing in the state or local register. Impacts would be **less than significant**.

Threshold TCR-2. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

The Project is subject to compliance with AB 52 (PRC 21074), which requires consideration of impacts to TCRs as part of the CEQA process and requires lead agencies to provide notification of proposed projects to California Native American tribal representatives that have requested such notifications. As a result of the City's AB 52 notification efforts, one tribal organization responded

requesting to engage in formal consultation on the Project: the Gabrieleño Band of Mission Indians–Kizh Nation.

Following a consultation call between the City and the Gabrieleño Band of Mission Indians–Kizh Nation on July 28, 2022, the tribe provided follow-up e-mails on July 28, 2022, July 29, 2022, and August 19, 2022, that included a number of attached documents including proposed mitigation measures and information presented in support of the tribe’s statements provided to the City. At the request of the tribe, specific information related to TCRs will be maintained as confidential and is on file with the City.

TCRs constitute a separate resource category under CEQA. Tribes, through the government-to-government consultation process, are provided the opportunity to identify TCRs that may be affected by a project and to interpret the significance of such resources. Having reviewed and considered all information provided through this process, the ultimate responsibility to determine the appropriate management approach is the lead agency for compliance with CEQA.

No information provided regarding the presence of a specific known TCR met the definition of substantial evidence in accordance with CEQA. Additionally, no archaeological resources of a Native American origin were identified as a result of the CHRIS or NAHC SLF records searches, and pedestrian survey and the City determined that no substantial evidence has been presented that would demonstrate a significant known TCR (pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1) exists within the Project site. However, the City, in an abundance of caution, has decided that additional management strategies will be implemented. Although the City has established an ordinance (Section 18.42.210 of the Gardena Municipal Code) to address the inadvertent discovery of TCRs, as outlined in Section 3.11.2, the Project Applicant has agreed to comply with the mitigation measures requested by the Tribe as set forth in the mitigation measures below. As such, in addition to the implementation of previously identified Mitigation Measure (MM) CUL-1, MM-CUL-2, and MM-CUL-3, the City has accepted the mitigation measures developed between the City and the tribe. These mitigation measures are outlined in **MM-TCR-1** through **MM-TCR-4**. With implementation of **MM-CUL-1**, **MM-CUL-2**, **MM CUL-3**, **MM-TCR-1**, **MM-TCR-2**, **MM-TCR-3**, and **MM-TCR-4**, significant impacts to potential TCRs would be reduced to **less than significant with mitigation incorporated**.

3.11.5 Mitigation Measures

MM-TCR-1 Native American Monitoring.

- A. Prior to commencement of ground-disturbing activities, the Project Applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any “ground-disturbing activity” for the subject Project at all Project locations (i.e., both on-site and any off-site locations that are included in the Project Description/definition and/or required in connection with the Project, such as public improvement work). “Ground-disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

- B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity or the issuance of any permit necessary to commence a ground-disturbing activity.
- C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the tribe. Monitoring logs will identify and describe any discovered Tribal Cultural Resources (TCRs), including, but not limited to, Native American cultural and historical artifacts, remains, and places of significance, as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitoring logs will be provided to the Project Applicant/lead agency upon written request to the tribe.
- D. On-site tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the monitor from a designated point of contact for the Project Applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the Project site or in connection with the Project are complete; or (2) a determination and written notification by the monitor to the Project Applicant/lead agency that no future planned construction activity and/or development/construction phase at the Project site possesses the potential to impact TCRs.

MM-TCR-2 Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/ Non-Ceremonial).

Management strategies stipulated in MM-CUL-1 through MM-CUL-3 shall be implemented in the event that Project activities encounter cultural resources. In addition, the following TCR-specific measures shall be implemented. Upon discovery of any TCRs or archaeological resources, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the monitor and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983).

- A. If the resources are Native American in origin, the Kizh will recover and retain all discovered TCRs in the form and/or manner the tribe deems appropriate, in the tribe's sole discretion, and for any purpose the tribe deems appropriate, including for educational, cultural and/or historic purposes.
- B. If the archaeologist determines that the resource meets the criteria as a "historical resource" or "unique archaeological resource" under CEQA, time allotment and funding sufficient to allow for the implementation of avoidance measures or appropriate mitigation shall be made available. The treatment plan shall be in accordance with CEQA Guidelines § 15064.5(f) for historical resources and Public Resources Code § 21083.2(b) for unique archaeological resources. If not left in place, any historic or archaeological material that is not Native American in origin shall be curated at a public, nonprofit institution with

a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum at the University of California Los Angeles, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society for educational purposes.

MM-TCR-3 **Unanticipated Discovery of Human Remains and Associated Funerary Objects.**

- A. Native American human remains are defined in California Public Resources Code (PRC) Section 5097.98(d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC Section 5097.98, are also to be treated according to this statute.
- B. If human remains and/or grave goods are discovered or recognized on the Project site, then all construction activities shall immediately cease within 200 feet of the discovery and PRC Section 5097.9 and California Health and Safety Code Section 7050.5 shall be followed. This includes among other required measures, the immediate contact of the County Coroner, the principal archaeologist retained for the Project and if the remains are potentially Native American in origin, the Gabrieleno Band of Mission Indians-Kizh Nation.
- C. Human remains and grave/burial goods found with such remains shall be treated alike per PRC Sections 5097.98(d)(1) and (2).
- D. Construction activities may resume in other parts of the Project site at a minimum of 200 feet away from discovered human remains and/or burial goods. This determination will be made by the construction monitor in consultation with the principal archaeologist and if the remains are potentially Native American in origin, the Gabrieleno Band of Mission Indians-Kizh Nation. No further constriction shall occur until the construction monitor and/or principal archaeologist has given expressed consent of that determination (along with any other mitigation measures the monitor and/or archaeologist deems necessary). (CEQA Guidelines Section 15064.5[f]).
- E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

MM-TCR-4 **Unanticipated Discovery of Human Remains and Associated Funerary Objects.** This mitigation measure shall only apply if the Gabrieleno Band of Mission Indians-Kizh Nation is designated as the Most Likely Descendant (“MLD”) by the NAHC.

- A. The Koo-nas-gna Burial Policy shall be implemented. To the tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, tribal traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.
- B. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.

- C. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.
- D. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The tribe will make every effort to recommend diverting the Project and keeping the remains in situ and protected. If the Project cannot be diverted, it may be determined that burials will be removed.
- E. In the event preservation in place is not possible despite good faith efforts by the Project Applicant/developer and/or landowner, before ground-disturbing activities may resume on the Project site, the landowner shall arrange a designated site location within the footprint of the Project for the respectful reburial of the human remains and/or ceremonial objects.
- F. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within 6 months of recovery. The site of reburial/repatriation shall be on the Project site but at a location agreed upon between the tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered
- G. The tribe will work closely with the Project's qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery related forms of documentation shall be approved in advance by the tribe. If any data recovery is performed, once complete, a final report shall be submitted to the tribe and the NAHC. The tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

3.11.6 Level of Significance After Mitigation

Threshold TCR-1. With implementation of MM-CUL-1, MM-CUL-2, MM CUL-3, MM-TCR-1, MM-TCR-2, MM-TCR-3, and MM-TCR-4, the Project's potential impacts to TCRs would be reduced to **less than significant**.

3.11.7 Cumulative Effects

Potential cumulative impacts on TCRs consider whether impacts of the proposed Project together with related projects identified within the vicinity of the Project area, when taken as a whole, substantially diminish the number of TCRs, within the same or similar context or property type. The development of related projects have the potential to cumulatively affect known and unknown TCRs. These resources are unique and nonrenewable resources, and are vulnerable to destruction by demolition or alteration, earthmoving equipment, looting by the public, and natural causes such as weathering and erosion. Projects that demolish or alter certain TCRs have the potential to erode a general cultural landscape to which the resources belong. Cumulative projects would be required to assess impacts to TCRs. However, impacts to TCRs, if any exist, tend to be site-specific and are reliant, in part, on the information provided through the government-to-government consultation process completed between the CEQA lead agency and California Native American groups that are traditionally and culturally affiliated with the Project area that have provided formal written request for notification of projects under the agency's jurisdiction and are therefore generally mitigated on a project-by-project basis. As discussed throughout this section, there are no known TCRs within the Project site that would warrant discretionary designation of a resource as a TCR. As such, the Project, as proposed, would not directly or indirectly contribute to an increase in a cumulative impact to known TCRs. The City of Gardena's Municipal Code ensures any unknown TCRs uncovered during Project implementation would be properly identified, evaluated, and treated as outlined in the City's ordinance for Native American or TCRs. Thus, the Project, in combination with the past, present, and reasonably foreseeable future projects in the Project vicinity, would result in less-than-significant cumulative impacts to TCRs, and no further mitigation measures are required. Therefore, the Project's contribution to cumulative impacts would not be cumulatively considerable. As such, cumulative impacts on TCRs would be **less than significant**.

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3.12 Utilities and Service Systems

This section describes the existing utilities conditions of the Project site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, cumulative impacts, and identifies mitigation measures related to implementation of the proposed 1450 Artesia Specific Plan Project (Project or proposed Project).

The analysis of the Project impacts related to utilities and service systems is supported by and based on information provided in the following reports:

- Preliminary Utility Investigation Memorandum, 1450 Artesia Specific Plan Project, City of Gardena California, prepared by Kimley-Horn and Associates, December 2022 (Appendix L1)
- Will Serve Letter for Gardena Industrial, Los Angeles County Sanitation Districts, December 14, 2021 (Appendix L2)
- Information on Fire Flow Availability for Building Permit, 1450 W. Artesia Blvd, Gardena California, dated June 16, 2022 (Appendix L3)
- Preliminary Hydrology and Low Impact Development (LID) Report, 1450 Artesia Boulevard, Gardena California, prepared by Kimley-Horn and Associates, August 3, 2022 (Appendix H)

Other sources consulted are listed in Section 3.12.8, References.

3.12.1 Existing Conditions

This section describes the existing utility and service system conditions in the Project area and also identifies the resources that could be affected by the Project. The Project is located within the jurisdictional boundaries of the City of Gardena (City). Currently, the Project is partially developed on the western side of the site with three warehouses and a variety of trailer-type storage structures that house several small businesses, including a U-Haul rental agency, a metal fabricating shop, a sandblasting and painting company and an auto body repair shop.

Water

Water Supply

Water service is provided to the City of Gardena by the Golden State Water Company (GSWC), Southwest District. Water supplies for GSWC are derived from two principal sources: local groundwater and purchased imported water. Local groundwater is a blend of water pumped from two adjudicated groundwater basins, the West Coast and Central Coast Subbasins. Imported water is sourced from the Colorado River Aqueduct and State Water Project (imported and distributed by Metropolitan Water District of Southern California). GSWC owns 13 active groundwater wells which pump from the West Coast and Central Subbasins of the Coastal Plain of Los Angeles Groundwater Basin (GSWC 2021). GSWC has a total Allowed Pumping Allocation (APA) of 16,439 for all seven service areas subject to the Central Basin Adjudication. The West Coast Basin adjudication limit for groundwater extraction across the entire basin is 64,468 acre-feet per year of which GSWC maintains legal right to 7,502 acre-feet per year as its APA (GSWC 2021).

Historically, GSWC has been able to reliably serve customers' water supply needs from year to year. However, interrupted or significantly reduced water supply, such as during a drought or as a result of an earthquake, could threaten this reliability. In addition to the direct supply sources from the two groundwater basins and purchased water, GSWC has some flexibility in the management of groundwater so as to move APA in accordance with the rules governing the adjudicated supplies (GSWC 2021). All of these supplies are available in normal, single dry, and five consecutive dry years. In addition, GSWC maintains a water shortage contingency plan, which addresses long-term drought scenarios, as well as catastrophic supply interruptions that could occur suddenly.

Regional imported water supplies are conjunctively managed by the Central and West Basin Municipal Water Districts, and the Metropolitan Water District of Southern California. GSWC coordinates its urban water management planning with each of these entities. During an actual or threatened temporary shortage of imported water to the West Basin Municipal Water District, the Water Replenishment District of Southern California is authorized by the West Coast Basin Judgment to enter into agreements with water purveyors in the basin, which allow the over-extraction of groundwater. This authorized over-extraction can last for 4 months and may be used to produce a maximum of 10,000 acre-feet of water. According to the 2020 UWMP, however, GSWC projects that it will be able to serve 100% of projected demands in normal, single-dry and multiple-dry year scenarios until 2045 (GSWC 2021).

Existing Water Use

The Project site is currently partially developed with numerous light industrial and office building (commercial) land uses. According to the utilities report prepared for the proposed Project, an estimated current water demand for the site was made based on wastewater generation factors from Los Angeles County Sanitation Districts (LACSD) (Appendix L1). The total existing demand for the Project site was conservatively estimated at 604 gallons per day (gpd) (Appendix L1).

Water Infrastructure

Water service for the Project site area is currently provided by an existing public GSWC 12-inch and 4-inch water lines that both located in Artesia Boulevard (Appendix L1). The 12-inch line runs east to South Normandie Avenue where it then heads south. There is also an abandoned 31-inch water line located within the Los Angeles County Flood Control District (LACFCD) easement that runs along South Normandie Avenue (Appendix L1).

Fire hydrants are located on Artesia Boulevard outside of the U-Haul rental facility (approximately 615 feet west of South Normandie Avenue [Appendix L3]) and one at the corner of Artesia Boulevard and South Normandie Avenue.

Wastewater

Regional wastewater service at the Project site is provided by LACSD. Flows from the Project site drain to the Joint Water Pollution Control Plant Sanitary Sewer System (JWPCP) service area in Carson. The JWPCP currently treats an average of 260 million gallons per day (mgd) of wastewater and has a total permitted capacity of 400 mgd (Appendix L1). LACSD's 2019 Annual Report notes that a pilot project to provide up to 500,000 gpd of recycled water for indirect potable reuse was

implemented at the JWPCP, with plans for full implementation in the future. These trunk sewers lead to the JWPCP, which has an existing treatment capacity of 400 mgd (Appendix L1).

An existing 8-inch sewer line is located 24 feet west of the South Normandie Avenue centerline at a depth of approximately 10 feet (Appendix L1). Another 21-inch sewer main line is located on Artesia Boulevard at the centerline of the road. This trunk sewer line has an average grade of 0.41% and is also at a depth of approximately 10 feet. Both sewer lines are owned and maintained by the LACSD. The site currently connects to the 21-inch sewer main in Artesia Boulevard via a lateral connection.

Estimated existing wastewater generation for the Project site, based on LACSD wastewater generation factors for Commercial Shops and Stores was used to calculate total existing daily wastewater flows. As a conservative measure, the generation factor was then reduced by 50% for the calculation of existing wastewater flows (Appendix L1). As a result, the existing wastewater flows from the Project was estimated at 1,510 gpd.

Stormwater Drainage

The Project site and surrounding area are characterized as urban, developed commercial and residential area with limited pervious surfaces. The Project site is currently improved with numerous light industrial and office building (commercial) land uses as well as some former sump areas that are considered impervious for a total impervious surface area of 74% (Appendix H). Stormwater runoff currently flows generally toward the north and east with localized areas on the west and east sides of the site that ultimately discharge to the Dominguez Channel, south of the site. Within Artesia Boulevard there are various catch basins that drain to the Dominguez Channel.

Solid Waste

The collection, transport, and disposal of solid waste and recyclables from commercial land uses in the City is provided by Waste Resources of Gardena. Solid waste collected by Waste Resources is transported to the American Waste Transfer Station, which is operated by Republic Services of California, LLC (1449 West Rosecrans Avenue) or the Waste Resources Recovery Station, which is operated by Waste Resources Recovery. Commercial land uses are the largest producer of disposable waste in the City, generating approximately 35,194 tons of waste and 9,502 tons of recyclable materials annually.

Solid waste that is transferred from the American Waste Transfer Station is sent to any of the following landfills (Republic Services 2020):

- Sunshine Canyon
- Falcon
- Brea Olinda
- Calabasas
- Chiquita Canyon
- Southeast Resource Recovery Facility
- El Sobrante
- Lancaster
- Bowerman
- CVT/Anaheim
- Simi Valley

The majority of solid waste that is transferred from the Waste Resources Recovery Station is disposed of at the Chiquita Canyon Sanitary Landfill located in Castaic (CalRecycle 2023a). Other landfills include El Sobrante Landfill, Antelope Valley, and the Sunshine Canyon City/County Landfill. The Chiquita Canyon facility's maximum permitted capacity is 110,366,000 cubic yards and has a remaining capacity of 60,408,000 cubic yards (CalRecycle 2023b). It is anticipated that Chiquita Canyon Sanitary Landfill would continue to receive a majority of the solid waste from the City until at least the remaining capacity is reached which is estimated to be in January of 2047.

Electric Power

Electricity service is provided to the Gardena area by Southern California Edison, Compton Service Center. Three major substations are located in the vicinity of the Project site, including: La Fresa to the west, Bridge to the northwest, and Moneta substation to the north (SCE 2023). The Project site is part of the overhead Blake circuit line (16 kilovolt) that is served by the La Fresa substation (SCE 2023).

Natural Gas

Natural gas is supplied to the City by Southern California Gas Company. As a public utility, Southern California Gas Company is under the jurisdiction of federal and state regulatory agencies. A medium and high-pressure distribution pipeline system and a high-pressure transmission pipeline system that is nearest to the Project site is located to the south of the site along West 190th Street (SoCalGas 2023).

Telecommunications Facilities

The existing telecommunications services in the vicinity of the Project site are supplied by various utilities providers such as cable/digital TV/Dish/satellite providers including AT&T Internet, DirecTV, Dish Network, Charter Spectrum, Verizon Los Angeles and Viasat (City of Gardena 2023). In addition, cellular service providers in the area include Verizon, AT&T, and T-Mobile.

3.12.2 Relevant Plans, Policies, and Ordinances

Federal

National Pollutant Discharge Elimination System Permit Program

The National Pollution Discharge Elimination System (NPDES) permit program was established in the Clean Water Act to regulate municipal and industrial discharges to surface waters of the United States. Discharge from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (CFR, Title 40, Section 268, Subpart D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs that include federal landfill criteria. The federal regulations address the location, operation, design, and closure of landfills, as well as groundwater monitoring requirements.

State

California Code of Regulations, Titles 14 and 27

Title 14 (Natural Resources, Division 7) and Title 27 (Environmental Protection, Division 2 [Solid Waste]) of the California Code of Regulations govern the handling and disposal of solid waste and operation of landfills, transfer stations, and recycling facilities.

Assembly Bills 939 and 341: Solid Waste Reduction

The California Integrated Waste Management (CIWM) Act of 1989 (Assembly Bill [AB] 939) was enacted as a result of a national crisis in landfill capacity, as well as a broad acceptance of the desired approach to solid waste management of reducing, reusing, and recycling. AB 939 mandated local jurisdictions to meet waste diversion goals of 25% by 1995, 50% by 2000, and established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. AB 939 requires cities and counties to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element to demonstrate how the jurisdiction will meet the diversion goals. Other elements included encouraging resource conservation and considering the effects of waste management operations. The diversion goals and program requirements are implemented through a disposal-based reporting system by local jurisdictions under CIWM Board regulatory oversight. Since the adoption of AB 939, landfill capacity is no longer considered a statewide crisis. AB 939 has achieved substantial progress in waste diversion, program implementation, solid waste planning, and protection of public health, safety, and the environment from landfills operations and solid waste facilities.

In 2011, AB 341 was passed, making a legislative declaration that it is the policy goal of the state that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020. AB 341 requires that local agencies adopt strategies that will enable 75% diversion of all solid waste by 2020. This bill requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. In addition, multifamily apartments with five or more units are also required to form a recycling program.

Senate Bill 1374: Construction and Demolition Waste Reduction

Senate Bill (SB) 1374 requires that annual reports submitted by local jurisdictions to CIWM Board include a summary of the progress made in the diversion of construction and demolition waste materials. In addition, SB 1374 requires the CIWM Board to adopt a model ordinance suitable for adoption by any local agency that required 50% to 75% diversion of construction and demolition waste materials from landfills. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CIWM Board's model by default.

Assembly Bill 1327: California Solid Waste Reuse and Recycling Access Act of 1991

AB 1327, which was established in 1991, required CalRecycle to develop a model ordinance for the use of recyclable materials in development projects. Local agencies were then required to adopt the model ordinance, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects.

Assembly Bill 1826: Mandatory Commercial Organics Recycling

In October 2014, Governor Brown signed AB 1826 Chesbro (Chapter 727, Statutes of 2014), requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste generated per week. “Organic waste” is defined as food waste, green waste, landscape, and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. This law phases in the mandatory recycling of commercial organics over time. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to recycle organic waste.

Senate Bill X7-7

SB X7-7, which became effective on February 3, 2010, is the water conservation component to the Delta legislative package (SB 1, Delta Governance/Delta Plan). The bill implements water use reduction goals established in 2008 to achieve a 20% statewide reduction in urban per capita water use by December 31, 2020. The bill requires each urban retail water supplier to develop urban water use targets to help meet the 20% goal by 2020 and an interim 10% goal by 2015. The bill establishes methods for urban retail water suppliers to determine targets to help achieve water reduction targets. The retail water supplier must select one of the four compliance options. The retail agency may choose to comply with SB X7-7 as an individual or as a region in collaboration with other water suppliers. Under the regional compliance option, the retail water supplier must report the water use target for its individual service area.

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley)—collectively known as the Sustainable Groundwater Management Act (SGMA). This Act requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the CDWR provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies to manage basins sustainably and requires those Groundwater Sustainability Agencies to adopt Groundwater Sustainability Plans for crucial groundwater basins in California. Adjudicated basins are considered to be low priority basins.

Urban Water Management Plans

Pursuant to the California Urban Water Management Act (California Water Code Sections 10610–10656), urban water purveyors are required to prepare and update an Urban Water Management Plan (UWMP) every 5 years. UWMPs are prepared by California’s urban water suppliers to support long-term resource planning and ensure adequate water supplies. Every urban water supplier that either delivers more than 3,000 AFY of water annually or serves more than 3,000 connections are required to assess the reliability of its water sources over a 20-year period under normal-year, dry-year, and multiple-dry-year scenarios in a UWMP. UWMPs must be updated and submitted to the CDWR every 5 years for review and approval. The proposed Project site is within the area addressed by GSWC, Southwest Region, whose current UWMP is the 2020 UWMP released in June 2021 (GSWC 2021).

Senate Bill 610 and Senate Bill 221: Water Supply Assessments

SB 610 and SB 221, amended into state law effective January 1, 2002, improve the linkage between certain land-use decisions made by cities and counties and water supply availability. The statutes require detailed information regarding water availability and reliability with respect to certain developments to be included in the administrative record, to serve as the evidentiary basis for an approval action by the City or County on such projects. Under Water Code Section 10912 [a], projects subject to the California Environmental Quality Act (CEQA) that would require a water supply assessment include the following:

1. Residential development of more than 500 dwelling units
2. Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space
3. Commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space
4. Hotel, motel or both, having more than 500 rooms
5. Industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land or having more than 650,000 square feet of floor area
6. Mixed-use projects that include one or more of the projects specified
7. A project that would demand an amount of water equivalent to or greater than the amount required by a 500 dwelling unit project

A fundamental source document for compliance with SB 610 is the UWMP, which can be used by the water supplier to meet the standard for SB 610. SB 221 applies to the Subdivision Map Act, conditioning a tentative map on the applicant to verify that the public water supplier has sufficient water available to serve the proposed development.

Executive Order B-29-15

In response to California’s previous drought, Executive Order B-29-15 set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the Executive Order extended through February 28, 2016, although many of the directives became permanent water-efficiency standards and requirements. The Executive Order includes specific

directives that set strict limits on water usage in the state. In response to Executive Order B-29-15, the CDWR modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Sanitary Sewer General Waste Discharge Requirements

On May 2, 2006, the State Water Resources Control Board adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than 1 mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system in order to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System Management Plan. The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the State Water Resources Control Board using an online reporting system.

California Code of Regulations Title 24, Part 11

In 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code, Part 11 of Title 24, is commonly referred to as CALGreen and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all new construction of residential and non-residential buildings. CALGreen standards are updated periodically. The latest version became effective on January 1, 2023.

Mandatory CALGreen standards pertaining to water, wastewater, and solid waste include the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings
- Mandatory reduction in outdoor water use through compliance with a local water-efficient landscaping ordinance or the CDWR's Model Water Efficient Landscape Ordinance
- Diversion of 65% of construction and demolition waste from landfills

Local

Water Quality Control Plans (Basin Plans)

The Porter-Cologne Act, Section 13000, directs each Regional Water Quality Control Board to develop a water quality control plan (Basin Plan) for all areas within its region. The Basin Plan is the basis for each Regional Water Quality Control Board's regulatory program. The Project site is located within the purview of the Los Angeles Regional Water Quality Control Board (Region 4), and the proposed Project must comply with applicable elements of the Basin Plan for Region 4. The Basin Plan gives direction on the beneficial uses of state waters, describes the water quality that must be maintained, and provides programs necessary to achieve the standards established in the Basin Plan.

Integrated Regional Water Management Plans

UWMPs serve as building blocks for Integrated Regional Water Management Plans (IRWMPs). IRWMPs define a clear vision and strategy for the sustainable management of water resources within a specific region delineated by one or more watersheds. IRWMPs generally contain an assessment of current and future water demand, water supply, water quality, and environmental needs. These plans address the challenges for delivering a stable and clean supply of water for the public, addressing stormwater and urban runoff water quality, providing flood protection, meeting water infrastructure needs, maximizing the use of reclaimed water, enhancing water conservation, and promoting environmental stewardship.

During the planning process, all stakeholders, including water distributors and purveyors, regional waterworks and sanitation districts, local public works departments, environmental organizations, nonprofits, and other vested interests work together to develop common goals, objectives, and strategies. Since water-related issues are addressed on a regional, watershed basis, these plans are instrumental in building consensus among the various stakeholders in the development and prioritization of an action plan that is complementary and leverages inter-jurisdictional cooperation, resources, and available funding. The Project site is within the Greater Los Angeles County IRWMP area. The IRWMP for this area was last updated in 2014.

Countywide Integrated Waste Management Plan

In compliance with AB 939, the County of Los Angeles has implemented an Integrated Waste Management Plan that contains the County's and the Cities' solid waste reduction planning documents plus the Integrated Waste Management Summary Plan and Countywide Siting Element. The Los Angeles County Department of Public Works is responsible for preparing and administering the Integrated Waste Summary Plan and the Countywide Siting Element. The existing element, approved by CalRecycle on June 24, 1998, identifies how the County and cities would meet their long-term disposal capacity needs to safely handle solid waste that cannot be reduced, recycled, or composted.

The Los Angeles County Department of Public Works also prepares an annual report to summarize the changes that have taken place since the approval of the existing Countywide Integrated Waste Management Plan and the existing Countywide Siting Element. The annual reports include assessments of the County's disposal capacity needs, provide detailed updates on the remaining permitted in-County disposal capacity, and include the County's strategy for maintaining adequate disposal capacity through 2027.

General Plan

The City of Gardena General Plan was adopted in 2006 and includes goals and policies within the required elements including the Conservation Plan. The following is a list of goals and policies applicable to the proposed Project relating to Utilities:

Conservation Plan

CN Goal 3. Reduce the amount of solid waste produced in Gardena.

Policy CN 3.1. Comply with the requirements set forth in the City's Source Reduction and Recycling Element.

Policy CN 3.2. Maximize public awareness of all source reduction and recycling programs.

Policy CN 3.3. Encourage participation in local and County waste disposal programs for such household hazardous waste items as automotive products, paints, chemicals, tires, and batteries.

3.12.3 Thresholds of Significance

The significance criteria used to evaluate the Project impacts related to utilities and service systems are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to utilities and service systems would occur if the Project would:

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?
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?
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?
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?
5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Based on the results of the Initial Study prepared for the project (Appendix A), the following thresholds are evaluated in this section of the Draft EIR:

UTL-1. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

UTL-2. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

UTL-3. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

UTL-4. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

UTL-5. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

3.12.4 Impact Analysis

Threshold UTL-1. Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water Facilities

The proposed Project would involve the construction of water distribution infrastructure (e.g., pipes, valves, meters) to provide domestic water, firewater, and irrigation water to serve the new buildings and facilities within the Project site. The on-site facilities would be connected to off-site water lines in the adjacent rights-of-way. Installation of new water infrastructure would be limited to on-site water distribution, and minor off-site work associated with connections to the public main. No upgrades to public water mains are anticipated (Appendix L1). Prior to ground disturbance, Project contractors would coordinate with GSWC to identify the locations and depth of all existing water lines. Further, GSWC and the City of Gardena would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. The on-site facilities and installation/construction of tie-ins are considered part of the proposed Project. All construction work within the City public right-of-way would be subject to City municipal code requirements. Other than the lateral connections from the Project site to existing water mains, the proposed Project is not expected to require or result in construction or expansion of off-site infrastructure.

In addition, and consistent with Section 3.7, Hydrology and Water Quality, standard best management practices, installed as part of an NPDES-mandated stormwater pollution prevention plan, would reduce potential water quality impacts associated with the referenced water facility connections to less-than-significant levels. As such, the proposed Project would not result in the expansion or construction, expansion, or relocation of off-site water infrastructure, and it is unlikely that there would be any significant environmental effects related to the construction of water infrastructure within the Project site. As a result, impacts would be **less than significant**.

Wastewater Facilities

The Project will require construction of new wastewater infrastructure within the Project site to serve the proposed Project. Construction impacts within the Project site associated with wastewater infrastructure would primarily be confined to trenching for miscellaneous utility lines and connections to existing public infrastructure. Installation of wastewater infrastructure would be limited to on-site wastewater distribution, and minor off-site work associated with connections to the public main. No upgrades to the public main are anticipated (Appendix L1). Any work that may affect services to the existing sewer lines would be coordinated with the City of Gardena.

The Project site is served by an existing sewer main present in Artesia Boulevard. The existing 21-inch diameter sewer line ultimately drains to the JWPCP (Appendix L1). LACSD has provided a will-serve letter for the Project site, which indicates that their pipeline contains enough capacity to accommodate the proposed sewer connection and flows from the Project (Appendix L2). It is not anticipated that any sewer lines will need to be upsized as a result of the Project. There would not be any significant environmental effects related to the construction of water infrastructure within the Project site. As a result, impacts would be **less than significant**.

Stormwater Drainage Facilities

The Project site and surrounding area is characterized as an urban, developed commercial and residential area with limited pervious surfaces. The existing sump areas on the Project site are going to be covered in impervious surfaces as part of the requirements of the final remediation of the site to avoid contact of runoff with underlying contamination. As discussed in Section 3.7, stormwater infiltration would not be utilized as a low impact development feature as a part of the proposed Project; however, a large on-site cistern would be constructed for storage of the required volume of stormwater which would then be used for on-site irrigation.

The construction of all the proposed drainage improvements including the on-site cistern have been included in the analysis of all other sections of this document as part of construction and there are no other significant impacts that would occur. As a result, the Project would not result in the expansion of any existing off-site facilities or in the construction or relocation of new off-site facilities and upon compliance with the applicable regulatory requirements, impacts associated with the construction of any new stormwater drainage facilities would be **less than significant**.

Electrical Power, Natural Gas, and Telecommunication Facilities

Connection upgrades may be required with respect to electric power, natural gas, and telecommunication facilities (i.e., cable/internet services), based on the change in land use. These utilities would be part of a dry utility package that would be installed on site and in the adjacent public roadways to provide service to the Project. Upgrades would be confined to the connections to the Project site and not any off-site centralized facilities. The existing infrastructure is located directly adjacent to the Project site within the public streets. Connection to these existing utilities would require limited construction, which would be temporary and limited to trenching, to the depth of the underground lines. Project construction would occur in accordance with all applicable regulatory requirements. As a result, impacts associated with upgrades of electric, natural gas, and telecommunication lateral connections to the Project site would be **less than significant**.

Threshold UTL-2. Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Water supply in the City is provided by GSWC, Southwest Service Area, which sources its water supply from a combination of groundwater (a blend of groundwater from the West Coast and Central Coast Basins) and imported surface water from the Colorado River Aqueduct and State Water Project. The two groundwater basins are adjudicated and managed in accordance with the court approved judgement. The Judgement limits the pumping that each entity may extract from the basin, referred to as the "Allowed Pumping Allocation." According to the Utilities Assessment prepared for the

proposed Project, the Project is expected to increase water demands by 21 acre-feet per year compared to existing conditions (Appendix L1). This represents only 0.08% of the total projected water demand for the GSWC Southwest Service area in 2025 (GSWC 2021). The 2020 GSWC UWMP has planned for growth within the area over the next 25 years. GSWC has made an allowance for future demand estimates based on historical growth rates in the service area. Based on these projections, GSWC has adequately made allowance for water supply-demand increases for both domestic and commercial water supply, including groundwater, over the next 25 years. According to 2020 UWMP for the Southwest Service Area, GSWC can adequately supply projected water demands during normal, single dry year, and multiple dry year scenarios out to 2045 (GSWC 2021). While the proposed Project was not specifically included as part of the UWMP, the demand projections for the service area do account for growth over the planning horizon and the proposed Project's demand is within the anticipated growth for their service area and the 2020 UWMP demand projections.

Furthermore, as long-term water supply is a significant concern in California, GSWC can increase supply to meet future demands increasing production of groundwater based off safe yield allocation and utilization of water in storage, increasing imported water purchases, if available and there is sufficient storage capacity, and by purchasing additional recycled water, if available. Collectively, these additional options would enable water supply to meet or exceed water demand for GSWC for now and into the future. As a result, the Project would result in **less-than-significant impacts** related to the water supply.

Threshold UTL-3. Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

The wastewater generated by the proposed Project would be treated at the Joint Water Pollution Control Plant (JWPCP) in Carson. The JWPCP has a capacity to treat up to 400 mgd and is currently processing an average flow of 249.8 mgd (Appendix L2). The expected increase in average wastewater flow from the Project is 17,786 gpd, after all structures on the Project site are demolished (Appendix L2). This increase in wastewater generation represents approximately 0.012% of the remaining capacity of the JWPCP facility. As such, the increase in wastewater generation attributable to the Project would be accommodated within the existing available treatment capacity of the receiving facility and would represent a minimal to negligible percentage of the facility's remaining capacity. Therefore, the Project would not require the construction of additional wastewater treatment infrastructure and the potential impacts would be **less than significant**.

Threshold UTL-4. Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction

Construction of the proposed Project would result in the generation of demolition debris and solid waste including scrap lumber, concrete, residual wastes, packing materials, plastics, and soils. Any hazardous wastes that are generated during demolition and construction activities would be managed and disposed of in compliance with all applicable federal, state, and local laws. Per CALGreen requirements, 65% of construction and demolition waste must be diverted from landfills.

As such, at least 65% of all construction and demolition debris from the site would be diverted. The City also has construction and demolition debris diversion requirements (Section 8.20.060.C) to meet state standards; however, the CALGreen standards require an equivalent level of diversion (65% diversion). The remaining 35% of construction and demolition material that is not required to be recycled would either be disposed of or voluntarily recycled at a solid waste facility with available capacity. As described above, the Chiquita Canyon Landfill, the primary landfill receiving solid waste from the area, has a remaining capacity of 60,408,000 cubic yards and is expected to remain open until January 2047 (CalRecycle 2023b).

For the reasons previously stated, Project demolition and construction would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals (e.g., CALGreen standards). Impacts would be **less than significant**.

Operation

Once operational, the proposed Project would produce solid waste on a regular basis, in association with operation and maintenance activities. Anticipated solid waste generation attributable to the Project is estimated based on rates established by CalRecycle as shown in Table 3.12-1, Anticipated Solid Waste Generation (CalRecycle 2023c).¹ The solid waste generation rates assume compliance with AB 341.

Table 3.12-1. Anticipated Solid Waste Generation

Land Use	Solid Waste Generation (rate)	Solid Waste Generation (tons per year)
Self-storage (10,000 SF)	1.42 pounds/100 SF/day ¹	18
Industrial Warehouse (86,000 SF)	1.42 pounds/100 SF/day	223
Office (10,000 SF)	6 pounds/1,000 SF/day	11
Total		252

Source: CalRecycle 2023c.

Note:

¹ The best applicable fit for self-storage facilities is a manufacturing/warehouse land use which might be conservatively high.

As described in Section 3.12.1, Existing Conditions, the solid waste in the City is primarily hauled to the Chiquita Canyon Landfill. The Chiquita Canyon facility has a remaining capacity of 60,408,000 cubic yards (CalRecycle 2023b). It is anticipated that Chiquita Canyon Sanitary Landfill would continue to receive a majority of the solid waste from the City until at least the remaining capacity is reached which is estimated to be in January of 2047. The estimated annual solid waste generation

¹ An alternate rate that could be used would be based on the number of employees, which for the Project is estimated at a total of 40. Using the warehouse rate of 13.82 pounds/employee/day results in approximately 100 tons annually (CalRecycle 2023c). To be conservative, the rates shown in Table 3.12-1 are used, which are based on square footage.

attributed to the Project would be 252 tons which translates to approximately 933 cubic yards (based on a generalized conversion of 3.704 cubic yards per ton). The net solid waste that is anticipated to be produced by the proposed Project would equate to approximately 0.0015% of the available capacity of the Chiquita Canyon Landfill through its estimated closure date.

Once the Chiquita Canyon Landfill reaches capacity, additional landfills and strategies would be identified so that disposal needs continue to be met. Further, according to the latest annual report for the Countywide Integrated Waste Management Plan, there are landfills used by the County with up to 109 years of remaining life. For example, the Prima Deshecha Sanitary Landfill in Orange County is expected to remain open for another 83 years, the Mesquite Regional Landfill in Imperial County is expected to remain open for another 109 years, and the Simi Valley Landfill in Ventura County is expected to remain open for another 109 years (Los Angeles County Public Works 2020). As such, in the event of closure of the El Sobrante and Lancaster landfills, other landfills in the region would be able to accommodate solid waste from the proposed Project, and regional planning efforts would ensure continued landfill capacity into the foreseeable future.

For the reasons described above, Project operations would not 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. Impacts would be **less than significant**.

Threshold UTL-5. Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

As described above, solid waste from commercial uses in the City are brought to either the American Waste Transfer Station or the Waste Resources Recovery Station. From there, the waste is primarily taken to the Chiquita Canyon Landfill. These facilities are regulated under federal, state, and local laws. Additionally, the City is required to comply with the solid waste reduction and diversion requirements set forth in AB 939, AB 341, AB 1327, and AB 1826 (Section 3.12.2, Relevant Plans, Policies, and Ordinances). Per AB 341, businesses that generate 4 cubic yards or more of commercial solid waste per week are required to arrange for organic waste recycling services.

In addition, as previously described, waste diversion and reduction during Project construction and operations would be completed in accordance with CALGreen standards and City diversion standards. As a result, the proposed Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Impacts are considered **less than significant**.

3.12.5 Mitigation Measures

Impacts would be less than significant, and no mitigation measure are required.

3.12.6 Level of Significance After Mitigation

Impacts would be less than significant, and no mitigation measure are required.

3.12.7 Cumulative Effects

Water

The proposed Project would increase water demand on the Project site relative to existing conditions and require lateral connections to existing infrastructure. As analyzed in Section 3.12.4, Impact Analysis, it was determined that existing infrastructure would not have constraints for providing the water flow required for the proposed Project. Improvements would be limited to the Project site and the immediately adjacent street frontages, where connections would be established to existing infrastructure. As such, existing water conveyance infrastructure would be sufficient to serve Project and each cumulative project would be required to obtain will-serve letters, thereby ensuring that sufficient capacity would be available. Therefore, the Project would not combine with cumulative projects to become cumulatively considerable.

Water supply for the area is provided by GSWC, Southwest Service Area, which sources its water supply from a combination of groundwater (a blend of groundwater from the West Coast and Central Coast Basins) and imported surface water from the Colorado River Aqueduct and State Water Project. As analyzed in Section 3.12.4, the proposed Project is expected to increase water demands by 21 acre-feet per year compared to existing conditions represent just 0.08% of the total projected water demand for the GSWC Southwest Service area in 2025 (GSWC 2021). The 2020 GSWC UWMP has planned for growth within the area over the next 25 years. GSWC has made an allowance for future demand estimates based on historical growth rates in the service area and projected growth for the service area which would likely include the cumulative projects as they fit into regional growth planning. Based on these growth projections, GSWC has demonstrated adequate water supplies that can meet demands for its service area during normal, single dry year, and multiple dry year scenarios out to 2045 (GSWC 2021). Related cumulative projects within the service area that are consistent with growth projections are also expected to be accommodated within the projected water supplies. Any projects that exceed growth projections may require additional analyses and/or further verification that sufficient water supplies exist. For these reasons, it is expected that there would be sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. As such, the Proposed Project would not create or contribute to a cumulatively significant impact involving water supply or infrastructure. Cumulative impacts would be **less than significant**.

Wastewater

Based on the analysis presented for the proposed Project in Section 3.12.4, the sewer system serving the Project site would be adequate for supporting the Project's anticipated wastewater flows. Improvements would be limited to the Project site and the immediately adjacent street frontages, where connections would be established to existing infrastructure. The existing sewer system would have adequate capacity to serve the proposed Project, and no other new or upgraded sewer lines would be necessary as a result of the Project (aside from the establishment of connections). This analysis indicates that sufficient capacity remains in the sewer systems served by the Project and each individual cumulative Project would be required to obtain will-serve letters demonstrating adequate capacity or include system upgrades as part of project plans. As such, the proposed Project

would not create or contribute to a cumulatively significant impact involving the capacity of wastewater conveyance infrastructure.

As analyzed in Section 3.12.4, wastewater from the Project would be treated at JWPCP. The Project's increase in wastewater generation represents approximately 0.012% of the remaining capacity of the facility. As such, the increase in wastewater generation attributable to the Project would be easily accommodated within the existing treatment capacity and would represent a minimal to negligible percentage of the facility's remaining capacity. Further, wastewater treatment facilities are planned based on regional growth projections. So long as projects fall within these projections, existing wastewater treatment facilities have been planned to accommodate commensurate increases in wastewater generation across the region. Because the Project and related projects fall within regional growth projections, cumulative impacts related to exceedances of wastewater treatment requirements would be **less than significant**.

Stormwater

As described in Section 3.12.4, the proposed Project would include drainage control improvements and due to limitations for any on-site infiltration largely due to required protection of the former sump areas and underlying contamination would require constructing a cistern on site to detain stormwater runoff. Just as would be true of the cumulative projects, through compliance with stormwater regulations, stormwater flows would be limited to the extent practicable. Due to compliance with modern stormwater regulations, cumulative projects often result in either no new net increase or a reduction in stormwater flows relative to existing conditions. Therefore, development of the overall cumulative scenario is generally expected to reduce stormwater flows, thereby decreasing demands on stormwater drainage infrastructure. As such, the proposed Project is not expected to create or contribute to an areawide increase in such flows that could lead to the need for new infrastructure. As such, the proposed Project would not create or contribute to a cumulatively significant effect involving stormwater drainage facilities. Cumulative impacts would therefore be considered **less than significant**.

Electricity

SCE provides electricity to the City. As such, the proposed Project and most related projects are located within the SCE service area. In general, most cumulative projects would be required to obtain a will-serve letter prior to approval. As analyzed in 3.12.4, the increase in electricity demand at the Project site would be negligible relative to the existing electricity use in SCE's service area. The Project would also comply with and implement a variety of energy-efficiency measures, which would further reduce operational electricity consumption. While development of the cumulative scenario would incrementally increase electricity demand in the Project vicinity, electrical service providers such as SCE engage in detailed planning processes that include projections for future demands and associated improvements, when necessary. Any such improvements to the electrical system would be subject to separate CEQA review.

Furthermore, some of the related projects are redevelopment projects and would involve replacement of older structures with more efficient buildings. As such, as the cumulative scenario becomes developed over time, buildings in the area would generally increase in energy efficiency, thereby contributing to per-capita reductions in electricity use. For these reasons, the proposed

Project would not create or contribute to a cumulatively considerable effect involving electrical infrastructure. Cumulative impacts would be **less than significant**.

Natural Gas

SoCalGas provides natural gas service to the City. As such, the proposed Project and most related projects are located within the SoCalGas service area. In general, cumulative projects would be required to obtain a will-serve letter prior to project approval. The proposed Project would also comply with and implement a variety of energy-efficiency measures consistent with current building code requirements, which could reduce natural gas consumption. While development of the cumulative scenario could incrementally increase natural gas demand in the Project vicinity, natural gas service providers such as SoCalGas engage in detailed planning processes that include projections for future demands and associated improvements, when necessary. Any such improvements to the natural gas storage and distribution system would be subject to separate CEQA review.

Furthermore, some of the related projects are redevelopment projects and would involve replacement of older structures with more efficient buildings. As such, development of the cumulative scenario as a whole could incrementally increase per-capita energy efficiency over time. For these reasons, the proposed Project is not expected to create or contribute to a cumulatively significant effect related to natural gas infrastructure. As such, cumulative impacts are considered **less than significant**.

Telecommunications

The proposed Project and larger-scale related projects would require localized upgrades to telecommunication facilities, based on the change in land use (i.e., higher density and increase in on-site technology). Upgrades would be completed by the telecommunication providers in the area or by developers in coordination with the providers. Because the Project area is urbanized, it is already served by several telecommunication services. As such, improvements are expected to be limited to development sites and/or their immediate street frontages. As with other utilities, larger system improvements would be planned separately and would be subject to separate CEQA review. For these reasons, the proposed Project is not expected to create or contribute to a cumulatively significant effect related to telecommunications infrastructure. As such, cumulative impacts are considered **less than significant**.

Solid Waste

Construction and operation of the proposed Project and related projects would generally represent an increase in intensity of uses on the respective project sites, which would be associated with increased generation of solid waste. Solid waste services within the City are provided by Waste Resources of Gardena. As described in Section 3.12.4, the proposed Project's solid waste generation would equate to a minor increase in solid waste production and would have a negligible effect on infrastructure. Related projects would typically result in similar minor to negligible increases. When added together, such increases would become incrementally greater. However, compliance with modern solid waste regulations requires diversion of 75% of solid waste from landfills. As such, only a fraction of the solid waste produced by the cumulative projects would ultimately be disposed in landfills. The proposed Project and related projects would be required to comply with all applicable local and state regulations related to solid waste. Furthermore, as described in Section 3.12.4,

ongoing regional planning processes are in place to ensure adequate landfill capacity into the future, based on projections for population, employment, and taxable sales. As such, the proposed Project and related projects that fall within growth projections for the region are expected to be accommodated in the region's plans for adequate landfill capacity. For these reasons, the proposed Project would not create or contribute to a cumulatively significant impact involving solid waste. Cumulative impacts related to solid waste are determined to be **less than significant**.

3.12.8 References

- CalRecycle, 2023a. Jurisdictional Disposal by Facility, Disposal during 2019 for Gardena, accessed August 22, 2023, <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>.
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4 Other CEQA Considerations

4.1 Introduction

This chapter of the Environmental Impact Report (EIR) for the 1450 Artesia Specific Plan (Project or proposed Project) has been prepared in furtherance of the content requirements set forth in the California Environmental Quality Act (CEQA) Guidelines Section 15126.2. As such, this chapter discusses the following:

- Effects Found Not to be Significant (Section 4.2)
- Significant and Unavoidable Environmental Impacts (Section 4.3)
- Significant Irreversible Changes (Section 4.4)
- Growth-Inducing Impacts (Section 4.5)

4.2 Effects Found Not to Be Significant

Section 15128 of the CEQA Guidelines requires that an EIR briefly describe potential environmental effects that were determined not to be significant and therefore were not discussed in detail in the EIR. The environmental issues discussed in the following sections were found not to be significant through completion of the June 2023 Initial Study for the proposed Project. The reasons for these less-than-significant impact or no impact determinations are discussed herein.

4.2.1 Aesthetics

Scenic Vistas

As discussed in the Initial Study, included in Appendix A of this EIR, there are no officially designated or eligible state scenic highways within the vicinity of the Project. The nearest state scenic highways are two eligible highways, Route 19 in Long Beach and Route 187 in coastal Santa Monica, which are more than 10 miles southeast and 12 miles northwest of the Project site, respectively (Caltrans 2018). Neither highway is visible from the Project site. As such, the Project would have no impact on scenic resources within a state scenic highway.

Scenic Resources

As discussed in the Initial Study, included in Appendix A of this EIR, there are no state scenic highways that occur within the vicinity of the Project site. The nearest Officially Designated State Highway is the portion of State Route 2 along the San Gabriel Mountains, located over 20 miles northwest of the Project site in Los Angeles County (Caltrans 2018). Based on this distance and intervening natural topography and human-made development, the Project site is not located within the viewshed of this officially designated state scenic highway. Therefore, no impacts associated with state scenic highways would occur.

Visual Character

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site is located within an urbanized area and is surrounded on all sides by existing urban development. The Project includes adoption of the 1450 Artesia Specific Plan, which would include development standards such as building materials, maximum building height and intensity, architectural requirements, lighting standards and landscaping requirements, which the proposed development would adhere to and which would ensure that impacts to the visual character of the area are less than significant.

Substantial Light or Glare

As discussed in the Initial Study, included in Appendix A of this EIR, the Project would include development of the Project site with industrial (warehouse)/distribution, office/retail and self-storage uses, which would introduce new lighting from sources within the building as well as parking and exterior security lighting. The use of reflective building materials in the construction of the building would add a new source of glare. However, the Project would be designed and constructed in accordance with the City's municipal code and development standards. Additionally, the Project includes adoption of the 1450 Artesia Specific Plan, which would include site-specific development standards such as building material and lighting standards. Adherence to those standards would ensure that impacts relating to light and glare would be less than significant.

Cumulative Impacts

As discussed above, the Project would not impact scenic vistas or scenic resources and would not significantly impact the visual character of the area or introduce substantial light or glare. Additionally, the Project is consistent with applicable regulations, plans, and policies regarding scenic quality. All future development within the City would be required to conform to the regulations set forth by the City. The Project would not combine with other projects to result in significant cumulative impacts associated with aesthetics. Conformance to these regulations would ensure that scenic quality is appropriately protected and preserved, and therefore, implementation of the proposed Project would result in no cumulative impact on aesthetics.

4.2.2 Agriculture and Forestry Resources

Conversion of Farmland

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site is located in an urbanized area and is identified as Urban and Built-Up Land (California Department of Conservation 2022). The closest identified farmland is a strip of Unique Farmland that runs along the opposite side of the Dominguez Channel between South Vermont Avenue and South Normandie Avenue (less than 0.1 miles southeast of the Project site). Another strip of Unique Farmland is located on the opposite side of the Dominguez Channel approximately 0.4 miles southwest of the Project site (California Department of Conservation 2022). However, the farmland is separated from the proposed Project site by the Dominguez Channel and will not be impacted by the Project. As such, the Project would have no impact related to the conversion of Farmland to non-agricultural uses.

Agricultural Zoning and Williamson Act Contracts

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site is urbanized. The site is zoned does not contain agricultural uses or Williamson Act contracts. As such, the Project would have no impact related to zoning for agricultural uses.

Conversion of Forest Lands

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site is in an urbanized area and is zoned for industrial and commercial uses under the 1450 Artesia Specific Plan, which does not contain forest or timberland uses. As such, the Project would have no impact on zoning for forest land or timberland.

Loss of Forest Lands

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site does not contain any forest land nor is any forest land located within the vicinity of the site. As such, the Project would have no impact related to the loss or conversion of forest land to non-forest uses.

Other Changes in the Existing Environment Resulting in Conversion of Farmland or Forest Land

As discussed in the Initial Study, included in Appendix A of this EIR, the Project would include development of commercial, self-storage and industrial/warehouse uses in a highly urbanized area where such uses are consistent with the surrounding area. As such, the Project would have no impact on farmland or forest land.

Cumulative Impacts

As the Project site and surrounding area do not include nor are adjacent to farmland or forest resources and are zoned for urban uses, the Project would not combine with other projects to result in significant impacts associated agriculture and forestry resources. The Project would have no cumulative impact on agricultural and forestry resources.

4.2.3 Air Quality

Other Emissions (Odors)

As discussed in the Initial Study, included in Appendix A of this EIR, the occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress among the public, and generate citizen complaints.

During Project construction, exhaust from equipment may produce discernible odors typical of most construction sites. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. However, such odors would disperse rapidly from the Project site and would generally occur at magnitudes that

would not affect substantial numbers of people. Land uses and industrial operations associated with operational odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). Operation of the proposed Project would not entail any of these potentially odor-causing land uses. Furthermore, during construction and operation of the proposed Project, the Applicant, construction contractor, and Project operators would be required to comply with SCAQMD Rules 401, 402, and 403. Rule 401 prohibits discharge of air contaminants that are dark in shade or that obscure an observer's view for more than 3 minutes over the course of an hour. Rule 402 prohibits discharge of air contaminants that cause injury, detriment, nuisance, or annoyance to a considerable number of people or to the public, or that endanger the comfort, repose, health, or safety of people or the public, or that cause or have a natural tendency to cause injury or damage to business or property. Rule 403 requires implementation of dust control measures during activities capable of generating fugitive dust. Due to the nature of Project construction and operation, and upon compliance with applicable SCAQMD rules, the Project would not create any new sources of odor during construction or operation. Impacts would be less than significant.

4.2.4 Biological Resources

Special-Status Species

As discussed in the Initial Study, included in Appendix A of this EIR, relevant databases that contain information on candidate, sensitive, and/or special-status species include the California Department of Fish and Wildlife California Natural Diversity Database (CNDDDB) (CDFW 2022), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2022), and the U.S. Fish and Wildlife Services (USFWS) Information for Planning and Consultation (IPaC) Database (USFWS 2022a). The results of these queries included 49 special-status plant species and 47 special-status wildlife species have recorded occurrences in the U.S. Geologic Survey's Inglewood, California 7.5-minute topographic quadrangle, which contains the Project site, and surrounding quadrangles, as well as species from IPaC. Appendix A of the Initial Study (included within Appendix A of this EIR) includes the results of the queries of the CNDDDB, CNPS Inventory, and IPaC.

The Project site does not have the potential to contain any special-status plant or wildlife species since suitable habitat is not present on site or adjacent to the Project site. The buildings on site and in the vicinity are maintained and would provide little to no value to roosting bats; however, it is expected that bats would forage in the area. No critical habitat has been designated that contains the Project site or adjacent areas (USFWS 2022a). Therefore, impacts to special-status species would not occur.

Sensitive Natural Communities

As discussed in the Initial Study, included in Appendix A of this EIR, three sensitive habitats have been recorded in the CNDDDB within the queried area (CDFW 2022). However, the Project site is developed with paved surfaces, buildings, and landscaped areas, with no native or naturalized vegetation communities present. No riparian or wetland features are present to support riparian habitat (USFWS 2022b). The Dominguez Channel is a concrete channel with no vegetation present. Therefore, there would be no impact to riparian habitat or sensitive natural communities.

Wetlands

As discussed in the Initial Study, included in Appendix A of this EIR, no wetlands or other jurisdiction waters are within the Project site (USFWS 2022b). Water from rainfall flows across the impervious surfaces found on the Project site and enters the municipal stormwater system. Potential indirect impacts during construction to the water in Dominguez Channel would be avoided by erosion-control measures that would be implemented as part of the Storm Water Pollution Prevention Plan (SWPPP) for the Project. Prior to the start of construction activities, the Contractor is required to file a Permit Registration Document (PRD) with the State Water Resources Control Board (SWRCB) in order to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2009-009-DWQ, NPDES No. CAS000002) or the latest approved general permit. This permit is required for earthwork that results in the disturbance of 1 acre or more of total land area. The required SWPPP will mandate the implementation of best management practices (BMPs) to reduce or eliminate construction-related pollutants in the runoff, including sediment. Therefore, temporary indirect impacts would be less than significant through compliance with regulations.

Wildlife Movement and Corridors

As discussed in the Initial Study, included in Appendix A of this EIR, there are no drainages or ponds on the Project site that may serve as habitat for fish species. The Project site is developed and surrounded by developed areas, and it does not reside within any designated wildlife corridors and/or habitat linkages identified in the South Coast Missing Linkages analysis project (South Coast Wildlands 2008) or California Essential Habitat Connectivity project (Spencer et al. 2010), so the Project would not affect the movement of any native resident or land-based wildlife species, nor would it affect established native resident or migratory wildlife corridors.

Ornamental vegetation located on the Project site could provide suitable nesting habitat for some urban-adapted bird species. All development activities are subject to the requirement to protect nesting birds, in compliance with the Migratory Bird Treaty Act and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, which prohibits the accidental or "incidental" taking or killing of migratory birds. The Project would be required to comply with the Migratory Bird Treaty Act and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code by preventing the disturbance of nesting birds during Project construction activities. This would generally involve clearing the Project site of all vegetation outside the nesting season (from September 1 through January 31) or if construction would commence within the nesting season (which generally runs from February 1 through August 31 and as early as February 1 for raptors), conducting a pre-construction nesting bird survey to determine the presence of nesting birds or active nests at the Project site. Any active nests and nesting birds must be protected from disturbance by construction activities through buffers between nest sites and construction activities. The buffer areas may be removed only after the birds have fledged. Impacts would be less than significant.

Policies Protecting Biological Resources

As discussed in the Initial Study, included in Appendix A of this EIR, any development activities conducted pursuant to the Specific Plan would be required to comply with all applicable requirements set forth by the City, including the City's street tree regulations. Impacts would be less than significant.

Habitat Conservation Plans

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site is located in a highly urbanized area, and there is no adopted Habitat Conservation Plan or Natural Community Conservation Plan for the site or the surrounding area (CDFW 2019). No conflict with a Habitat Conservation Plan or Natural Community Conservation Plan would occur with the Project. Therefore, impacts associated with biological resources would not occur.

4.2.5 Geology and Soils

Landslides

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site is not located within an area identified as being susceptible to earthquake-induced landslides on maps prepared by the state (CGS 2022). There are no known landslides near the Project site. The property is generally flat and is surrounded on all sides by generally flat and developed land. As such, landslides are unlikely to occur on the Project site and the Project is not expected to increase or exacerbate the potential for landslides to occur. As such, the Project would not expose people or structures to adverse risks associated with landslides.

Soil Erosion

As discussed in the Initial Study, included in Appendix A of this EIR, in an urbanized setting, substantial erosion or loss of topsoil typically occurs when ground disturbance causes soils to be exposed, and the soils are washed away during a storm or wind event. Surface structures, such as paved roads and buildings, decrease the potential for erosion. Once covered, soil is no longer exposed to wind or water erosion.

The Project would cause ground disturbance during construction activities, which can lead to erosion, particularly during a rain event or wind event. However, the construction contractor would be required to comply with the Construction General Permit. The Construction General Permit requires preparation and compliance with a SWPPP, which must include erosion control measures such as covering exposed soil stockpiles and working slopes, lining the perimeter of the construction site with sediment barriers, and protecting storm drain inlets. Preparation and implementation of the required SWPPP would reduce construction-related erosion to the extent practicable. During operation, the Project site would be covered with buildings, hardscape, and landscaping, which would preclude erosion during operation. Impacts would be less than significant.

Septic Tanks

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site is served by the existing municipal sewer system. The City has established utility services, and no septic systems are either proposed or required to serve the Project. Therefore, no impacts would occur.

4.2.6 Hazards and Hazardous Materials

Airports

As discussed in the Initial Study, included in Appendix A of this EIR, the nearest public airports to the Project site are the Compton/Woodley Airport and the Hawthorne Municipal Airport, located approximately 3.1 miles northeast and 3.7 miles northwest of the Project site, respectively. The Los Angeles International Airport is also located approximately 6.5 miles northwest of the Project site. According to the Los Angeles County Airport Land Use Commission, the Project site is located outside of the airport land use plan (Los Angeles County Airport Land Use Commission 2014). As such, the Project site is not within 2 miles of a public airport, and the Project site is not located within an airport land use plan. Therefore, the Project would not create an airplane safety hazard for people residing or working in the Project area. No impact would occur.

Emergency Response Plans

As discussed in the Initial Study, included in Appendix A of this EIR, the City has developed an Emergency Operations Plan (EOP) to facilitate emergency management. The EOP addresses the planned response to extraordinary emergency situations associated with natural disasters, technological incidents and national security emergencies. It establishes emergency organizations, assigns tasks, specifies policies and procedures and is designed to include the City in the California Standardized Emergency Management System (SEMS) (City of Gardena 2006a). The City's police department also administers the Gardena Community Emergency Response Training (CERT) program, which trains residents to assist safety personnel and City staff in the event of a major disaster (Gardena Police Department 2022).

The construction and operation of the Project is not anticipated to interfere with emergency preparedness initiatives or with responses to an emergency. Furthermore, the Project's design and operations would be required to adhere to applicable aspects of the EOP. As such, the Project would not obstruct or interfere with implementation of the City's EOP. Rather, the plans would proceed in a similar manner with or without the Project.

The City's disaster route map identifies Artesia Boulevard as a disaster route (LADPW 2008). However, the Project does not include improvements to Artesia Boulevard and any construction impacts to Artesia Boulevard from Project construction would be temporary in nature and would be controlled via standard construction best management practices, which include construction traffic control measures. As such, Project construction is not expected to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

During operations, the Project would increase the number of people present on the Project site relative to existing conditions. The Project would therefore result in an incremental increase in the number of people who would need to evacuate and/or receive emergency services, particularly during business hours. However, the employment growth associated with the Project would fall well within projections for the City, is not substantial, and has been accounted for in local and regional planning efforts. During City-sponsored special events, people would be located on the Project site; however, all activities would occur outside. As such, the additional employees associated with the

Project would not substantially alter the proceedings of the City's emergency response plan or evacuation plan.

Furthermore, the Project would not introduce any physical obstructions or impairments to emergency response or evacuation. The Los Angeles County Fire Department would review the Project plans to ensure adequate emergency access in and around the site as part of the building plan check process. The plans would be adjusted in the event that the fire department identifies any deficiencies in access that could preclude emergency evacuation or emergency response. In the event of a disaster during Project construction or operation, the City's emergency plans would proceed in a similar fashion with or without the Project. Impacts would be less than significant.

Wildland Fires

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site is not within a Very High Fire Hazard Severity Zone (VHFHSZ). At its closest point, the nearest VHFHSZ is located approximately 6 miles southwest of the Project site within the cities of Palos Verdes Estates and Rolling Hills Estates (CAL FIRE 2022a). As such, the Project site is not within a VHFHSZ and is separated from the VHFHSZ by freeways, major roadways and miles of urban and suburban development. In the unlikely event of a fire emergency at the Project site due to wildland fires, the Los Angeles County Fire Department (specifically Fire Station No. 158, located 0.8 miles north of the Project site), would provide fire protection services. Due to the urbanized nature of the area and the provision of nearby firefighting protection services, implementation of the Project is not anticipated to expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Impacts would be less than significant.

4.2.7 Hydrology and Water Quality

Surface Water Quality

As discussed in the Initial Study, included in Appendix A of this EIR, short-term construction activities for the Project would have some potential to affect the quality of stormwater discharged from the Project site. Land disturbance activities could result in erosion and sedimentation (particularly during a rain event). Because on-site soils have the potential to be contaminated, soils that are carried off site during a storm could introduce pollutants to the runoff. Spills or leaks of petroleum products used by construction equipment could also affect the quality of stormwater. Such discharges would have the potential to violate water quality standards or waste discharge requirements, resulting in a potentially significant impact. However, the construction contractor would be required to comply with a number of regulatory requirements that would minimize the potential for water pollutants to exit the construction disturbance areas. One such requirement is the Construction General Permit, which requires preparation and compliance with a SWPPP. The SWPPP must include erosion control measures such as covering exposed soil stockpiles and working slopes, lining the perimeter of the construction site with sediment barriers, and protecting storm drain inlets. Additionally, the construction contractor would be required to implement a Soil Management Plan that has been reviewed and approved by the California Department of Toxic Substances Control (DTSC). This plan would include measures that would prevent soils from leaving the Project site as part of stormwater runoff. In addition to implementation of the SWPPP and the Soil Management Plan, standard site

management practices and typical equipment maintenance would generally preclude leaks and spills of a magnitude that would adversely affect stormwater runoff. As such, potential water contaminants would be confined to the construction disturbance areas to the extent practicable, thereby minimizing potential adverse effects to surface water quality.

The majority of the Project site is currently paved or covered with a geosynthetic material. However, after construction, the Project site would be covered with buildings, hardscape, and landscape, and the percentage of the Project site that is impervious would increase. Increased imperviousness has the potential to increase stormwater runoff volumes. The majority of the Project site is currently vacant and fenced off from access. Stormwater runoff from urban development also has the potential to carry pollutants associated with the development, such as trash, spilled or leaked chemicals (e.g., cleaning products) and gasoline leaks from vehicles. As such, development of the Project site has the potential to increase runoff volumes and/or runoff pollutants, such that water quality standards could be violated, resulting in a potentially significant impact. The City is a co-permittee under the “Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges within the County of Los Angeles” issued by the Los Angeles Regional Water Quality Control Board, which also serves as the Federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) Permit and the Waste Discharge Requirements (WDRs) under the California Municipal NPDES Permit. As a new development, design and operation of the Project would be subject to the requirements of the City’s Storm Water Management and Discharge Control Ordinance, including Low Impact Development (LID) structural and nonstructural Best Management Practices (BMPs) and source control BMPs. Impacts would be less than significant.

Erosion and Siltation

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site does not contain any streams or rivers. As such, no streams or rivers would be altered by the Project. However, ground disturbance during construction would have the potential to result in erosion or siltation on or off site, as exposed soils could enter stormwater runoff, resulting in erosion and/or siltation in the Dominguez Channel, or could be eroded in a wind event. However, construction activities would be required to comply with a SWPPP and a Soil Management Plan. Implementation of these required plans would protect exposed soils from erosion during construction. During operations, the amount of impervious surfaces and urban land uses on the Project site would increase. As such, the rate and volume of urban stormwater runoff, which is directed to the Dominguez Channel, could increase from the site. However, the design and operation of the Project would be required to adhere to LID standards, ensuring that the volume and rate of stormwater runoff from the Project site would be minimized to the extent feasible. As such, the Project would not have the potential to result in substantial erosion or siltation on or off site. Impacts would be less than significant.

Surface Runoff

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site does not contain any streams or rivers. As such, no streams or rivers would be altered by the Project. Project construction would be required to comply with a SWPPP. Implementation of the SWPPP would control runoff from the site during construction and would minimize the potential for flooding to occur on or off site. During operations, the amount of impervious surfaces on the Project site would increase. As such, the rate and volume of urban stormwater runoff could increase from the Project site, which

could lead to flooding on or off site. However, the design and operation of the Project would be required to adhere to LID standards, ensuring that the rate and volume of runoff from the Project site would be minimized to the extent feasible. Implementation of LID features would reduce the potential for the Project to cause flooding. Through compliance with the stormwater management requirements described above, the Project would not result in substantial flooding on or off site. Impacts would be less than significant.

Flood Flows

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site does not contain any streams or rivers having the potential to be altered by the Project. The Project site is located within a highly urban area and is located outside of the 100-year and 500-year flood hazard zones (DWR 2022). As such, the Project would not impede or redirect flood flows. Therefore, no impacts associated with impeding or redirecting flood flows would occur.

4.2.8 Land Use and Planning

Community Division

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site is bound by an existing, major roadway (Artesia Boulevard) to the north, a rail line and major roadway (Normandie Avenue) to the east and the Dominguez Channel to the south. A large portion of the Project site is vacant and fenced off from access. The Project site contains one residential property along the southern side, adjacent to the Dominguez Channel, which is currently accessible only by an unnamed alleyway running along the western edge of the Project site. Under existing conditions, this residence is highly isolated due to its location. The Project would not further isolate this residence should it remain after construction of the Project. As such, this property does not represent physical connections within an established community. Furthermore, the Project does not include features such as a new highway, new aboveground infrastructure, or an easement through an established neighborhood, which are features that may result in physical divisions within a community. For these reasons, the Project's impacts would be less than significant.

4.2.9 Mineral Resources

Known Mineral Resources of Value

As discussed in the Initial Study, included in Appendix A of this EIR, the Division of Mines and Geology (renamed the California Geological Survey in 2006) has mapped the Project site as Mineral Resources Zone 1 for aggregate resources. Mineral Resource Zone 1 is a designation given to areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence (California Department of Conservation 2024). The State Division of Mines and Geology has not designated any land within the City as state classified mineral resource deposit areas and no areas are designated for mineral extraction in the City's General Plan (City of Gardena 2006b).

According to the California Geologic Energy Management Division (CalGEM), there are no oil, gas, geothermal, or other known wells located on the Project site and the Project site is not within a known oil or gas field. The nearest well is an idle well approximately 0.1 miles southeast of the Project site across the Dominguez Channel (CalGEM 2022). As such, development of the Project would not interfere with any existing or previous oil drilling activities within the Project site. Furthermore, the Project site is located adjacent to residential and commercial uses. Due to these surrounding land uses, future development of oil drilling at the Project site is not expected to be practicable. As such, the Project site does not currently support mineral extraction activities, nor would it be expected to support such activities in the future. As such, no impact would occur.

Locally Important Mineral Resources

As discussed in the Initial Study, included in Appendix A of this EIR, there are no areas designated for mineral extraction in the City's General Plan (City of Gardena 2006b). As such, the City has not delineated a specific mineral resource recovery site on the Project site, and the Project would not result in the loss of availability of a locally important mineral resource recovery site. No impact would occur.

4.2.10 Noise

Airport Noise

As discussed in the Initial Study, included in Appendix A of this EIR, the nearest public airports to the Project site are the Compton/Woodley Airport and the Hawthorne Municipal Airport, located approximately 3.1 miles northeast and 3.7 miles northwest of the Project site, respectively. The Los Angeles International Airport is also located approximately 6.5 miles northwest of the Project site. According to the Los Angeles County Airport Land Use Commission, the Project site is located outside of the airport land use plan (Los Angeles County Airport Land Use Commission 2014). As such, the Project site is not located within 2 miles of a public airport or within an airport land use plan. Additionally, the Project site is not located within the vicinity of a private airstrip. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels related to aircraft use. No impact would occur.

4.2.11 Population and Housing

Unplanned Population Growth

As discussed in the Initial Study, included in Appendix A of this EIR, the Project would not involve development of residences and would not, therefore, have the potential to result in direct population growth by expanding the residential population of the City. Additionally, the Project would not develop new infrastructure, such as the extension of roads or utility services, that could encourage or facilitate population growth. Rather, the Project would involve developing a single structure and associated parking for industrial/distribution, office/retail and self-storage uses. As such, the Project would lead to an increase in employment opportunities within the City. Based on the square footage of different uses that would be developed, the Project site is expected to support approximately 40 employees.

The Demographics and Growth Forecast technical report in SCAG's 2020–2045 RTP/SCS shows population, housing, and employment growth projections for the City. According to this report, the City had 29,300 jobs in 2016 and is expected to accommodate 32,100 jobs by 2045 (SCAG 2020), an increase of approximately 2,800 jobs. The Project is expected to be operational around October 2025. Assuming that the City keeps pace with SCAG's growth projections and that growth is evenly divided across the planning horizon (approximately 96.5 jobs per year), the City is expected to experience an increase of approximately 193 jobs between 2023 and the time of Project buildout (2025). The employment provided by the Project upon Project buildout would fall within these projections. Assuming that the Project would accommodate new businesses in the City (as opposed to businesses that relocate from elsewhere in the City), the Project is expected to create approximately 40 new jobs in the City. This growth equates to approximately 1.4% of the total employment growth that is projected to occur between 2020 and 2045 and approximately 21% of the growth that is expected to occur between 2023 and the Project's anticipated buildout year (2025). As such, employment growth associated with the Project would fall within the previous and current growth projections for the City. This indicates that the Project would not outpace regional infrastructure, since the SCAG RTP/SCS is used for local and regional planning purposes.

Project construction would also temporarily increase employment in the City. However, given the relatively common nature of the proposed construction activities, the demand for construction employment would likely be met within the existing and future labor market in the City and in the surrounding metropolitan area. If construction workers live outside of the City, these workers would likely commute during the temporary construction period.

Because the Project would be located in a developed area within Los Angeles County that has close access to major freeways, it is anticipated that jobs created by the Project would be filled by existing City residents or by residents of neighboring cities. In the event that some of the new employees relocate to the City upon obtaining a job at the Project site, this would result in minor to negligible population growth. Even in the unlikely event that all new employees moved to the City along with an average-sized household, the resulting residential population growth would fall well within population growth projections for the City. The average household size in the City is 2.9 people per household (SCAG 2020). As such, one household each for 40 employees would equate to a total population growth of 116 people. According to SCAG's 2020–2045 RTP/SCS, the City had a population of 60,600 people in 2016 and will grow to 65,700 in 2045, an increase of 5,100 people (SCAG 2020). As such, in the unlikely event that all Project employees and their households relocated to the City, the resulting population growth of 116 people would fall well within population growth projections for the City.

In conclusion, the Project would result in employment growth within the City. However, this employment growth would fall within job growth projections for the City and would not be expected to lead to substantial population growth. For these reasons, impacts would be less than significant.

Displacement of Substantial Numbers of People or Housing

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site currently contains one residential property. The Initial Study states that no households would be displaced because at the time that the Initial Study was completed, the one occupied residence was to remain upon adoption of the Specific Plan as a legal non-conforming use. The residential property has since been

identified for demolition and included as part of the Project. As such, the Project would displace one household. However, this would not constitute a substantial displacement.

The City recently adopted its 6th Cycle Housing Element, which has been approved by the California Department of Housing and Community Development. Additionally, the City has undertaken a Land Use Update and Rezoning Program, which increased new housing development opportunities within the City in accordance with the Housing Element and will address the City's housing needs as identified by SCAG's Regional Housing Needs Assessment (RHNA). For these reasons, impacts would be less than significant.

4.2.12 Public Services

Fire Protection

As discussed in the Initial Study, included in Appendix A of this EIR, fire protection, rescue services, and emergency medical (paramedic) services in the City are provided by the Los Angeles County Fire Department (LACoFD). The closest fire station to the Project site is Fire Station No. 158, located 0.8 miles north of the Project site. The Project would not include housing that would result in a direct increase in the City's population to be served by LACoFD. However, the Project would result in the net increase of approximately 255,936 square feet of commercial space on a largely vacant site. As such, Project implementation would increase the building area and use of the Project site when compared to existing conditions, thereby increasing the demand for LACoFD services.

The proposed commercial uses would be expected to generate a range of fire service calls similar to what occurs under existing conditions in the vicinity of the Project site. The Project would not include any unique hazardous uses, such as industrial facilities, that use or generate large quantities of hazardous and/or toxic materials that could pose an extreme risk of serious accident or fire at the Project site. The types of fires that could potentially occur within the Project site would be adequately suppressed with the fire equipment found at the fire stations nearest the Project site. Additionally, the Project would be required to comply with the California Fire Code, Universal Building Code, and LACoFD standards, including specific construction specifications, access design, location of fire hydrants, and other design requirements. Compliance with applicable regulatory requirements, including LACoFD's fire/life safety plan review and demonstrating that adequate fire flow exists, per approval by the Public Works Department, would ensure that adequate fire prevention features would be incorporated into the Project that would reduce the demand on LACoFD facilities and equipment resulting from Project construction and operation.

Therefore, the Project would not require the addition of a new fire station or new fire protection services, the construction and/or expansion of which could result in environmental impacts. Operation of the Project would not result in substantial adverse physical impacts associated with the provision of new or expanded fire services in order to maintain acceptable fire protection services at the Project site. Impacts would be less than significant.

Police Protection

As discussed in the Initial Study, included in Appendix A of this EIR, police protection services in the City are provided by the Gardena Police Department (GPD). Protection services include emergency

and non-emergency police response, route police patrols, investigative services, traffic enforcement, traffic investigation, and parking code enforcement. The police station is located at 1718 West 162nd Street, approximately 0.75 miles north of the Project site.

The Project would not include housing that would result in a direct increase in the City's population to be served by GPD. However, a portion of the Project site is currently undeveloped and periodically occupied by non-confirming and/or illegal uses that result in a notable amount of calls for GPD services. Since 2016, there have been 20 code enforcement cases opened, with several listed violations, for the Project site, including a hazardous conditions case that ended in red tagging the building. While the Project would result in an intensified use of the Project site, the Project would incorporate security features to reduce the demand for police protection services. These features would include sufficient lighting throughout the Project site to ensure safety and visibility with illuminated entryways, walkways and closed-circuit television monitoring.

Overall, the intended uses of the Project site upon buildout (i.e., self-storage, commercial/office and warehouse uses, outdoor periodic City-sponsored events) are uses that would not generate high demand for or notably increase service calls for police protection. Therefore, the Project would not require the addition of a new police station or new police protection services, the construction and/or expansion of which could result in environmental impacts. Impacts would be less than significant.

Schools

As discussed in the Initial Study, included in Appendix A of this EIR, the City is served by the Los Angeles Unified School District (LAUSD). The need for new school facilities is typically associated with a population increase that generates an increase in enrollment large enough to cause schools to be constructed or existing schools to be expanded. The Project does not include a residential component and is not expected to substantially increase the residential population of the City. Nonetheless, as required by Senate Bill 50, the Project Applicant would be required to pay development fees for schools to LAUSD prior to the issuance of a building permit. Pursuant to Government Code Section 65995, the payment of school development fees is considered mitigation for any potential school service-related impacts. As such, the Project is not expected to cause increases in demand for school facilities such that new or expanded facilities would be needed. Impacts would be less than significant.

Parks

As discussed in the Initial Study, included in Appendix A of this EIR, physical deterioration of park facilities is usually caused by overuse due to a lack of additional/alternative facilities to accommodate population growth. The Project would not include the construction of any infrastructure or housing that would directly or indirectly induce significant population growth. While employees at the Project site could use nearby parks, including Arthur Lee Johnson Memorial Park and Gardena Willows Wetland Preserve, located approximately 0.25 miles northeast of the Project site, they would be expected to primarily use parks near to their place of residence. As such, development of the Project is not expected to result in increased demands to park facilities such that new or expanded facilities would be required. Impacts would be less than significant.

Other Public Facilities

As discussed in the Initial Study, included in Appendix A of this EIR, other public facilities and services provided within the City include library services and City administrative services. Library services are provided at the Mayme Dear Library, which is approximately 0.75 miles north of the Project site. Increased use of library services is generally associated with an increase in residents. While the employees of the Project could use the local library services, employees are generally expected to primarily use libraries near their place of residence. City administrative services are provided at Gardena City Hall, which is also located approximately 0.75 miles north of the Project site. Similar to library services, employees are expected to use City administrative services near their place of residence. As such, development of the Project is not expected to result in increased demands to other public facilities (such as library services or City administrative services) such that new or expanded facilities would be required. Impacts would be less than significant.

4.2.13 Recreation

Park Deterioration

As discussed in the Initial Study, included in Appendix A of this EIR, physical deterioration of park facilities is usually caused by overuse due to a lack of additional/alternative facilities to accommodate population growth. The Project would not include the construction of any infrastructure or housing that would directly or indirectly induce significant population growth in the surrounding area. While employees at the Project site could use nearby parks and recreational areas, including Arthur Lee Johnson Memorial Park and Gardena Willows Wetland Preserve, located approximately 0.25 miles northeast of the Project site, they would be expected to primarily use parks near to their place of residence. As such, development of the Project would not result in substantial deterioration of existing parks or recreational facilities, and impacts would be less than significant.

Recreational Facilities

As discussed in the Initial Study, included in Appendix A of this EIR, the Project does not include recreational facilities and would not induce population growth that could increase demand for recreational facilities such that recreational facilities would need to be constructed or expanded. The Project would have no impact related to construction or expansion of recreational facilities.

4.2.14 Transportation

Emergency Access

As discussed in the Initial Study, included in Appendix A of this EIR, the City has developed an EOP to facilitate emergency management. The EOP addresses the planned response to extraordinary emergency situations associated with natural disasters, technological incidents and national security emergencies. It establishes emergency organizations, assigns tasks, specifies policies and procedures and is designed to include the City in the California Standardized Emergency Management System (SEMS) (City of Garden 2006a). The City's police department also administers

the CERT program, which trains residents to assist safety personnel and City staff in the event of a major disaster (Gardena Police Department 2022).

The construction and operation of the Project is not anticipated to interfere with emergency preparedness initiatives or with responses to an emergency. Furthermore, the Project's design and operations would be required to adhere to applicable aspects of the EOP. As such, the Project would not obstruct or interfere with implementation of the City's EOP. Rather, the plans would proceed in a similar manner with or without the Project.

The City's disaster route map identifies Artesia Boulevard as a disaster route (LADPW 2008). However, the Project does not include improvements to Artesia Boulevard and any construction impacts to Artesia Boulevard from Project construction would be temporary in nature and would be controlled via standard construction best management practices, which include construction traffic control measures. As such, Project construction is not expected to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

During operations, the Project would increase the number of people present on the Project site relative to existing conditions. The Project would therefore result in an incremental increase in the number of people who would need to evacuate and/or receive emergency services, particularly during business hours. However, the employment growth associated with the Project would fall well within projections for the City, is not substantial, and has been accounted for in local and regional planning efforts. As such, the additional employees associated with the Project would not substantially alter the proceedings of the City's emergency response plan or evacuation plan.

Furthermore, the Project would not introduce any physical obstructions or impairments to emergency response or evacuation. The Los Angeles County Fire Department would review the Project plans to ensure adequate emergency access in and around the Project site as part of the building plan check process. The plans would be adjusted in the event that the fire department identifies any deficiencies in access that could preclude emergency evacuation or emergency response. In the event of a disaster during Project construction or operation, the City's emergency plans would proceed in a similar fashion with or without the Project. Impacts would be less than significant.

4.2.15 Wildfire

As discussed in the Initial Study, included in Appendix A of this EIR, the Project site is not located within a state responsibility area and there are no state responsibility areas in the vicinity of the Project site. The nearest state responsibility areas are located approximately 20 miles northeast of the Project site, in the Puente Hills (CAL FIRE 2022b). The Project site is also not within a VHFHSZ. At its closest point, the nearest VHFHSZ is located approximately 6 miles southwest of the Project site within the cities of Palos Verdes Estates and Rolling Hills Estates (CAL FIRE 2022a). Therefore, no impact would occur.

4.3 Significant and Unavoidable Environmental Impacts

Pursuant to CEQA Guidelines Section 15126.2(b), an EIR must address any significant environmental impacts, including those that can be mitigated but not reduced to less-than-significant levels, as a

result of implementation of a project. As described in detail throughout Chapter 3, Environmental Analysis, of this Draft EIR, for the most part the Project would not result in impacts to the environment that cannot be reduced to below a level of significance after the consideration of Project design features, compliance with applicable federal, state and local regulations, and the application of the feasible mitigation measures identified in this Draft EIR. However, as discussed in Section 3.9, Noise, even with implementation of mitigation measures, construction noise impacts would remain significant and unavoidable.

4.4 Significant Irreversible Changes

The CEQA Guidelines require that an EIR address any significant irreversible changes that would be caused by implementation of a project. According to CEQA Guidelines Section 15126.2(c), such a change would involve one or more of the scenarios discussed in Sections 4.4.1 through 4.4.4.

4.4.1 Change in Land Use That Commits Future Generations to Similar Uses

The Project site is currently developed with several small businesses housed in warehouses or trailers, along with one residential unit. The undeveloped eastern portion of the Project site is an area known as the Gardena Sumps, which is contaminated with oil sludge. The City recently amended the Land Use and Zoning for hundreds of properties in the City in compliance with adoption of the 6th Cycle Housing Element. The Project site has retained its Specific Plan land use designation, and the zoning has been changed to 1450 Artesia Specific Plan. Implementation of the Project would commit the Project site to a mixed-use development with a total building area of 268,000 square feet, including self-storage, warehouse and office/retail uses under the 1450 Artesia Specific Plan. However, because the Project is a redevelopment project within a fully developed and urbanized portion of the City, it would not commit future generations to new urban land uses. The replacement of underutilized buildings and surface parking following remediation of site contamination (not part of the proposed Project) would result in changes to the current land uses in a manner that is consistent with the City's General Plan goals and policies (see Section 3.8, Land Use and Planning).

4.4.2 Significant Irreversible Environmental Effects

The Project site is developed with several small businesses housed in warehouses or trailers, along with one residential unit. Implementation of the Project would commit the Project site to a 268,000-square-foot mixed use Project. The land use proposed by the Project is compatible with the existing land uses that are located west, north, and east of the Project site and along Artesia Boulevard. The Project would not result in unavoidable physical impacts to the environment. Accordingly, the Project and its environmental effects would not compel or commit surrounding properties to land uses other than those that are existing today or those that are planned by the City of Gardena General Plan. For this reason, the Project would not result in significant, irreversible effects to nearby, off-site properties.

4.4.3 Irreversible Damage from Environmental Accidents

As discussed in detail in Section 3.6, Hazards and Hazardous Materials, of this EIR, prior to development of the Project, the eastern portion of the Project site (known as the Gardena Sumps) will be remediated by the Atlantic Richfield Company (ARC) through a Remedial Action Plan (RAP) under the direction of the DTSC. The RAP includes installing an engineered cap, soil vapor probes, and associated infrastructure before the Applicant commences construction of the proposed Project. The Project Applicant will undertake measures to protect this remedy and avoid any unreasonable risk of harm to human health and the environment, such as installing soil vapor barrier and ventilation systems beneath the structure to protect building occupants against indoor soil vapor intrusion; recording a land use covenant on the site to prohibit sensitive uses thereon, such as residential uses, but which would permit the Project's commercial and industrial uses; complying with all institutional controls that DTSC may require; and undertaking long-term monitoring and maintenance of the soil vapor barrier and ventilation systems for the Project's building. The Project structure would only overlap with the remediated Haack Rework area. The portion of the Project site that overlaps the Haack and Cooper sumps areas would be paved and utilized as a parking lot, which would be located atop ARC's engineered cap as part of the DTSC-approved RAP. While there is still a chance that an accident related to the area covered under the RAP could occur, implementation of the RAP and protection of the remedy throughout operation of the Project would minimize the potential and severity of such accidents and prevent any irreversible damage to the environment.

Aside from the contamination within the Gardena Sumps area, potential environmental accidents of concern include those events that would adversely affect the environment or the public due to the type or quantity of materials released and the receptors exposed to that release. Demolition and construction activities associated with the Project would involve some risk of environmental accidents. However, these activities would be conducted in accordance with all applicable federal, state, and local regulations, and would follow professional industry standards for safety. Once operational, use, transport, and storage of any materials that could cause environmental accidents would comply with applicable federal, state, and local regulations, ensuring that any hazardous materials used on site would be safely and appropriately handled to preclude any irreversible damage to the environment that could result if hazardous materials were released from the Project site.

4.4.4 Large Commitment of Nonrenewable Resources

Commitment of nonrenewable resources includes issues related to increased energy consumption, loss of agricultural lands, and lost access to mining reserves. There would be an irretrievable commitment of labor, capital, and materials used during construction and operation of the Project. Nonrenewable resources committed would primarily be in the form of fossil fuels such as fuel, oil, natural gas, and gasoline used by equipment associated with construction of the Project. Consumption of other non-renewable or slowly renewable resources would also occur. These resources would include lumber and other forest products, sand and gravel, asphalt, and metals such as steel, copper, and lead.

To ensure that energy implications are considered in Project decisions, CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (California Public Resources

Code Section 21100[b](3)). Energy conservation implies that a project's cost effectiveness be reviewed not only in dollars but also in terms of energy requirements. For many projects, cost effectiveness may be determined more by energy efficiency than by initial dollar costs. A lead agency may consider the extent to which an energy source serving the project has already undergone environmental review that adequately analyzed and mitigated the effects of energy production.

Consistent with both California Public Resources Code Section 21100(b)(3) and a ruling set forth by the court in *California Clean Energy Committee v. City of Woodland*, potentially significant energy implications of a project must be considered in an EIR to the extent relevant and applicable to the project. Accordingly, based on the energy consumption thresholds set forth in Appendix F and Appendix G of the CEQA Guidelines, the Project's estimated energy demands (both short-term construction and long-term operational demands) were evaluated (see Section 3.3, Energy, of this EIR). The overall purpose of the energy analysis was to evaluate whether the Project would result in the wasteful, inefficient, or unnecessary consumption of energy.

As further assessed in the energy analysis, for new development such as that proposed by the Project, compliance with California Title 24 energy efficiency requirements is considered demonstrable evidence of efficient use of energy. The Project would provide for and promote energy efficiencies beyond those required under other applicable federal and state standards and regulations, and in so doing would meet or exceed all Title 24 standards.

4.5 Growth-Inducing Impacts

Section 15126.2(d) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed project, as follows:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Growth-inducing impacts can occur when implementation of a development project imposes new burdens on a community by directly inducing population growth or by leading to the construction of additional development in the project area. Also included in this category are projects that would remove physical obstacles to population growth, such as the construction of a new roadway into an undeveloped area or a wastewater treatment plant with excess capacity to serve additional new development. Construction of these types of infrastructure projects cannot be considered isolated from the immediate development that they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth, are those that may provide a catalyst

for future unrelated development in the area (such as a new residential community that requires additional commercial uses to support residents). The growth-inducing potential of a project can also be considered significant if it fosters growth in excess of what is assumed in local master plans and land use plans or in projections made by regional planning agencies.

The proposed Project would require a temporary construction workforce and a permanent operational workforce, both of which could potentially induce population growth in the Project area. The number of construction workers needed during any given period would largely depend on the specific stage of construction. These short-term positions are anticipated to be filled primarily by construction workers who reside in the Project site's vicinity; therefore, construction of the Project would not generate a permanent increase in population within the Project area.

During normal operations, there would be approximately 40 employees. According to the SCAG Demographics & Growth Forecast (an appendix to the 2020–2045 RTP/SCS), employment in the City is anticipated to be expected to accommodate 32,100 jobs by 2045 (SCAG 2020), an increase of approximately 2,800 jobs. It is anticipated that the Project's temporary and permanent employment requirements could be met by the local existing labor force without people needing to relocate into the Project region and the Project would therefore not stimulate population growth or a population concentration above what is assumed in local and regional land use plans. Even assuming all employees would not be local, a Project-related increase of approximately 40 employees would be minimal in comparison to the increase anticipated in the SCAG Demographics & Growth Forecast.

Growth-inducing impacts can also occur when implementation of a project includes infrastructure improvements that would remove physical obstacles to population growth. Projects that physically remove obstacles to growth, or projects that indirectly induce growth, are those that may provide a catalyst for future unrelated development in the area. The Project is currently served by existing infrastructure, including water, wastewater, stormwater drainage, gas, electric, and telecommunication lines. As part of the Project, some of these lines would be extended or upsized within the Project site; however, these activities would be undertaken solely for purposes of supporting the Project. Further, as discussed in Section 3.12, Utilities and Service Systems, given the lack of population growth that would result from the Project and the fact that the Project site and surrounding area are already served by existing facilities, the Project would not tax existing community service facilities or require construction of substantial new facilities.

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5 Alternatives

5.1 Alternatives to the Proposed Project

In accordance with California Environmental Quality Act (CEQA) Section 15126.6, this chapter of the Draft Environmental Impact Report (EIR) contains a comparative evaluation of the 1450 Artesia Specific Plan Project (Project) with alternatives to the Project, including a No Project Alternative. Consistent with CEQA Guidelines Section 15126.6, this chapter focuses on alternatives to the proposed Project that are capable of avoiding or substantially reducing any significant adverse impacts associated with the Project, even if the alternatives may impede attainment of Project objectives or prove less cost efficient. In addition, implementation of a Project alternative may potentially result in new impacts that would not have resulted from the Project.

The CEQA Guidelines (14 CCR Section 15000 et seq.) require that the analysis of alternatives provide sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with a proposed project. Specifically, CEQA Guidelines Section 15126.6(a) outlines the scope of alternatives to a proposed project that must be evaluated:

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Under case law and CEQA Guidelines Section 15126.6(f), the discussion of alternatives is subject to a rule of reason and need not be exhaustive. CEQA Guidelines Section 15126.6(d) states that “if an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternatives shall be discussed, but in less detail than the significant effects of the project as proposed.” Determining factors that may be used to eliminate alternatives from detailed consideration in an EIR are (a) failure to meet most of the basic project objectives, (b) infeasibility, or (c) inability to avoid significant environmental impacts. CEQA Guidelines Section 15364 defines “feasibility” as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.”

An EIR need not consider a project alternative whose effects cannot be reasonably ascertained, whose implementation is remote and speculative, or whose execution does not substantially lessen or avoid the significant effects of a proposed project.

As discussed throughout Chapter 3, Environmental Analysis, of this Draft EIR, the proposed Project would result in significant and unavoidable impacts related to construction noise. For all other environmental issue areas, the Project would result in either less-than-significant impacts or no impact.

5.2 Alternatives Considered But Rejected

An EIR is required to identify any alternatives that were considered by the lead agency but were rejected as infeasible. Among the factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in an EIR are failure to meet most of the basic objectives of the project, infeasibility, or inability to avoid significant environmental impacts.

With respect to the feasibility of potential alternatives to a proposed project, CEQA Guidelines Section 15126.6(t)(l) states the following:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries ... and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

In determining an appropriate range of project alternatives to be evaluated in this Draft EIR, several possible alternatives were initially considered and then rejected. Project alternatives were rejected because they could not accomplish the basic objectives of the Project, they would not have resulted in a reduction of significant adverse environmental impacts, or they were considered infeasible to construct or operate.

The Project involves the requested approval of the 1450 Artesia Specific Plan as well as construction and operation of a mixed-use development with a total building area of 268,000 SF and an approximate height of 75 feet. The development would include a self-storage use (three levels totaling 186,000 GSF with 1,480 storage units over the bottom floor warehouse/distribution use and leasing office), an industrial warehouse/distribution use (one level totaling 72,000 GSF with 10 loading docks), an office/retail use (a mezzanine totaling 10,000 GSF), and associated surface parking. A description of each alternative and the rationale for rejection is provided below.

5.2.1 Residential Development

Years ago, the City initially explored a variety of potential types of development for the Project site, including residential development. However, as discussed in Section 3.6, Hazards and Hazardous Materials, and elsewhere throughout this EIR, the proposed Project site is contaminated and is being remediated and monitored by Atlantic Richfield Company (ARC) under the jurisdiction of the California Department of Toxic Substances (DTSC). The Final Remedial Action Plan (RAP) was approved by DTSC on June 30, 2022 (Appendix G3). The Final RAP includes provisions for long-term monitoring and maintenance by ARC of an engineering cap for a large portion of the proposed Project's parking area, soil vapor via soil vapor probes and by groundwater monitoring wells. The Final RAP also includes a provision for a legal land use covenant to limit future uses of the site to be recorded on the property, which will limit future uses to commercial and industrial uses and bar residential and other sensitive uses.

Infeasibility. The forthcoming land use covenant for the Project site, as also stated in PDF-HAZ-1, Remedial Action of the Gardena Sumps Site, will limit future uses of the site to commercial and industrial uses and prohibit sensitive uses, such as residential developments, because the RAP will not achieve a cleanup standard that is safe for residential and other sensitive uses. Therefore, residential development will not be allowed on the Project site and would be infeasible due to legal and health and safety considerations. No further discussion of this alternative is required.

5.2.2 Avoid Significant Construction Noise Impacts

As described in Section 3.9, Noise, Project construction would exceed City noise standards at residential receptors near the Project site, in particular the residential receptor immediately (15 feet) west of the Project site, which would be significant for all construction phases except for architectural coating, even with the incorporation of all feasible mitigation. Constructing the building on the eastern side of the Project site and the parking on the western side would move many major noise-generating construction elements farther from the residential receptor to the west and create a buffer that would reduce construction noise impacts. However, the Final RAP precludes the construction of buildings on the east portion of the Project site (Cooper Sump area) due to contamination present from the past sump activities and the location of the engineered cap there over which the RAP prohibits vertical construction.

Infeasibility. The Final RAP prohibits the construction of buildings on the eastern side of the Project site (Cooper Sump area) due to the location of the former sump and the engineered cap that ARC will install in this area as such construction could damage the cap and impede access to it needed for its operation, maintenance and repair. Therefore, developing the Project building on the eastern side of the Project site is not allowed and is therefore infeasible. No further discussion of this alternative is required.

5.2.3 All-Commercial Alternative

The City considered an alternative that includes all commercial uses, including big box retail, which would be allowed under the forthcoming land use covenant for the Project site, as also stated in PDF-HAZ-1, Remedial Action of the Gardena Sumps Site, will limit future uses of the site to commercial and industrial uses. An All-Commercial Alternative could therefore be allowed on the Project site.

Infeasibility. The Project site was identified within the former Artesia Corridor Specific Plan, which was in place from July 2006 to February 2023. The Specific Plan identified commercial land uses, ideally big box retail for the Project site. A report called Retail Development Potential for the Artesia Boulevard Retail District was also completed by the City in April of 2006 (Appendix L). During the entire duration when the Specific Plan was in place, no commercial development was proposed for the Project site. Since the time of preparation of the Specific Plan, the market for retail commercial development has changed such that big box retail is less in demand and many of the retailers that were discussed in the 2006 report no longer even exist. As such, it is infeasible to implement an All-Commercial Alternative. This alternative has been rejected due to market infeasibility.

5.3 Alternatives Carried Forward for Consideration

Pursuant to Section 15126.6 of the CEQA Guidelines, the City selected a reasonable range of alternatives to the Project that would feasibly attain most of the basic objectives of the Project but could avoid or substantially lessen one or more of the effects of the Project. As discussed previously, the Project would result in significant and unavoidable environmental impacts related to construction noise. Only the No Project Alternative would avoid or reduce this impact. However, the other alternatives would reduce impacts in other resource areas. Based on the evaluation of potential alternatives that were considered but rejected in Section 5.2, four alternatives have been carried forward for further analysis in Sections 5.3.1 through 5.3.4. Pursuant to Section 15126.6(d) of the CEQA Guidelines, sufficient information about each alternative has been included in the descriptions below to allow meaningful evaluation, analysis, and comparison with the proposed Project.

In analyzing the alternatives, it is important to note that the RAP will be implemented regardless. The RAP involves demolition of the two buildings closest to Artesia Boulevard – the U-Haul building and the front warehouse, leaving in place the rear warehouse and a residential unit.

5.3.1 Alternative 1 – No Project Alternative

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate the specific alternative of “no project” along with its impact. As stated in this section of the CEQA Guidelines, the purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed Project with the impacts of not approving the proposed Project. As specified in Section 15126.6(e)(3)(B) of the CEQA Guidelines, the no project alternative for a development project consists of the circumstance under which a proposed project does not proceed. Section 15126.6(e)(3)(B) further states that “in certain instances, the no project alternative means ‘no build’ wherein the existing environmental setting is maintained.” In this case, Alternative 1 assumes the proposed Project would not proceed and no new permanent development or land uses would be introduced. However, Alternative 1 assumes that remediation of the site as stipulated in the Final RAP would proceed as that document has been approved by DTSC and the remediation process would occur absent the proposed Project, which would include demolition of two existing structures. The other two existing structures would remain as nonconforming uses.

Ability to Meet Project Objectives

The No Project Alternative would not achieve the underlying purpose of the Project or meet any of the Project objectives. Because it would not develop a project and would leave the Project site as it currently exists, with the exception of implementation of the RAP, it would not redevelop an underutilized, blighted and environmentally impacted property with economically vibrant industrial and commercial uses along a major development corridor within the City, develop appropriate uses in an area with a legacy of contamination in a manner that protects human health and the environment and allows for continued monitoring of remediated areas, produce short-and long-term jobs during construction and operations phases, generate property tax revenues for the City to enhance its services to the community and infrastructural improvements, provide the City a substantial monetary public benefit to the City’s General Fund, or provide the City with a space to host periodic community outdoor events.

Comparison of the Environmental Effects of Alternative 1 to the Proposed Project

All construction and operational impacts associated with the proposed Project would be avoided under the No Project Alternative because no Project development would occur on the Project site. While some construction impacts would occur under the RAP, those impacts were evaluated in the environmental analysis completed for RAP implementation. As such, Alternative 1 would not require implementation of MM-HAZ-1 and the No Project Alternative would reduce all environmental impacts associated with the Project and avoid the one significant and unavoidable construction noise impact.

5.3.2 Alternative 2 – Reduced Density Alternative

Alternative 2 consists of a Project with the same elements as the proposed Project but reduced in square footage and development footprint by 50%. Therefore, this Alternative assumes 93,000 square feet of self-storage uses consisting of 740 storage units, 36,000 square feet of industrial warehouse/distribution uses, and 5,000 square feet of office/mezzanine uses, which would be developed on the western half of the Project site. Operations would be proportionately less under this Alternative. Special events would remain unchanged from the proposed Project under Alternative 2.

Ability to Meet Project Objectives

Because the Project elements included in Alternative 2 are the same as the proposed Project, Alternative 2 would meet all of the Project objectives but not to the same degree as the proposed Project. It would redevelop an underutilized, blighted and environmentally impacted property with economically vibrant industrial and commercial uses along a major development corridor within the City, develop appropriate uses in an area with a legacy of contamination in a manner that protects human health and the environment and allows for continued monitoring of remediated areas, produce short-and long-term jobs during construction and operations phases – although it would only employ approximately 20 people instead of 40, generate property tax revenues for the City to enhance its services to the community and infrastructural improvements, and provide the City with a space to host periodic community outdoor events. However, due to its reduced density, it would not meet the financial-related objectives as well as the proposed Project. Because of its smaller scale, Alternative 2 would produce fewer short-and long-term jobs during construction and operations phases, generate less property tax revenues for the City to enhance its services to the community and infrastructural improvements and the City would not receive any monetary public benefit to the City's General Fund.

Comparison of the Environmental Effects of Alternative 2 to the Proposed Project

Because Alternative 2 would develop half the building square footage over the Project footprint of half the size and would generate half the operational employment of the proposed Project, it would reduce environmental impacts in many resource areas compared to the proposed Project but it would not eliminate the significant and unavoidable construction noise impact. Further details are provided in the subsections that follow.

Air Quality, Energy, and Greenhouse Gas Emissions

Due to its reduced development footprint and building size, Alternative 2 would result in lower overall construction impacts related to air quality, energy, and GHG emissions than the proposed Project. However, daily construction intensity and associated emissions would likely remain the same. Because air quality impacts are based on maximum daily construction emissions, impacts would not change under Alternative 2 and would thus remain less than significant for the same reasons described in Section 3.1, Air Quality, of this EIR. For construction health risk, even assuming that reducing the Project by half would result in a corresponding reduction of the health risk by half, the risk would still be above the threshold of significance and would require implementation of MM-AQ-1. Construction-related GHG emissions and energy use would be reduced compared to the proposed Project and would remain less than significant.

Operational activity for Alternative 2, including vehicle trips, energy use, maintenance, and stationary sources, would be reduced by half compared to the proposed Project. As such, air pollutant emissions, energy use, and GHG emissions during operation would be less than the proposed Project and would remain less than significant for the same reasons described in Section 3.1, Section 3.3, and Section 3.5 of this EIR.

Cultural Resources

Alternative 2 would be located on the same site as the proposed Project but with a reduced footprint that covers the western half of the Project site. Alternative 2 would result in the demolition of the same existing on-site structures and excavation to the same depth for construction of the building as the proposed Project. Although the construction footprint would be reduced under Alternative 2, ground disturbance would still occur over the whole proposed Project site due to excavation associated with implementation of the Final RAP. Therefore, as with the proposed Project, MM-CUL-1 through MM-CUL-3 would apply to Alternative 2 and would reduce impacts to less than significant for the same reasons described in Section 3.2, Cultural Resources, of this EIR.

Geology and Soils

Alternative 2 would be located on the same site as the proposed Project but with a reduced footprint that covers the western half of the Project site. As such, it would impact the same geological setting as the proposed Project but within a smaller area and its impacts related to geology and soils would be similar to those of the proposed Project. Alternative 2 would be designed and built with adherence to the same building code requirements as the proposed Project, which would ensure that as with the proposed Project, geology and soils impacts of Alternative 2 would be less than significant for the same reasons described in Section 3.4, Geology and Soils, of this EIR.

Hazards and Hazardous Materials

Although the proposed Project would only include parking over the eastern half of the Project site, which would not interfere with or damage the engineered cap being installed as part of the Final RAP, Alternative 2 would be located only on the western half of the Project site and would completely avoid the engineered cap. Therefore, the operation of Alternative 2 would not include any responsibilities or requirements related to maintaining the remedy. As such, portions of PDF-HAZ-1, as described in

Section 3.6 of this EIR would not be applicable to Alternative 2 because the reduced Project alternative would be outside the footprint of the remediation area. However, similar to the proposed Project, Alternative 2 would include a building on the western half of the Project site. Therefore, the installation of a soil vapor barrier and ventilation system beneath the structure, required as specified in PDF-HAZ-2, would apply to Alternative 2.

Under the RAP, two of the buildings will be demolished. During construction, Alternative 2 would require the demolition of the remaining existing industrial building on the western half of the Project and the residence in the southwestern corner of the site, which, based on their age, have the potential to contain asbestos-containing materials, lead-based paints, and other hazardous building materials. As such, implementation of MM-HAZ-1 would be required during demolition of the on-site structures on the western portion of the Project site under Alternative 2 to reduce impact to less than significant. Additionally, construction of Alternative 2 would occur on the west side of the Project site where there are small areas of diesel contamination above risk-based screening levels (ESLs) for construction and commercial exposure, and gasoline-range organics and PCE concentrations in soil vapor above ESLs for commercial exposure. As such, excavation and relocation/removal of these soils could result in hazards to the public or environment such that impacts would be potentially significant if the contaminated soil is not appropriately managed for the same reasons described in Section 3.6. Therefore, development of a soil management plan (SMP) in accordance with MM-HAZ-2 would be required under Alternative 2 to reduce impacts to less than significant.

Hydrology and Water Quality

Alternative 2 would have a construction footprint half the size of the proposed Project's footprint and would require less water for dust suppression during construction. Because Alternative 2 would be half the size of the proposed Project, its water demand during operation would be half that of the proposed Project. As such, Alternative 2's impact on groundwater supplies would be less than that of the proposed Project and would remain less than significant for the same reasons discussed in Section 3.7, Hydrology and Water Quality, of this EIR. Alternative 2 would include the same drainage features as the proposed Project, sized proportionally for the drainage and runoff that would be generated by a development with half the footprint of the proposed Project. As such, its impact related to runoff would remain less than significant for the same reasons discussed in Section 3.7 of this EIR. Alternative 2 would employ BMPs as part of a SWPPP during construction and as stated previously, would have a reduced water demand compared to the proposed Project and employ the same drainage features as the proposed Project. Therefore, Alternative 2's impacts related to water quality control plans and sustainable groundwater management plans would remain less than significant for the same reasons discussed in Section 3.7 of this EIR.

Land Use and Planning

Alternative 2 would develop the same uses on the same site as the proposed Project but within a smaller footprint. Therefore, its consistency with land use plans, policies and regulations would be the same as the proposed Project, as discussed in Section 3.8, Land Use and Planning, of this EIR, and would remain less than significant.

Noise

Alternative 2 would have a reduced construction period compared to the proposed Project. However, construction of Alternative 2 would include the same construction equipment and phases as the proposed Project and be located the same distance from the nearest sensitive receptor as the proposed Project. Therefore, for the same reasons discussed in Section 3.9 of this EIR, Alternative 2 would result in a significant and unavoidable noise impact to nearby receptors during construction.

As the operation of Alternative 2 would contain the same uses but be half the size of the proposed Project, operational noise from Alternative 2 would likely be reduced compared to the proposed Project and would therefore remain less than significant for the same reasons discussed in Section 3.9.

Transportation

Because Alternative 2 would include the same operational uses as the proposed Project but at half the size, it would also generate half the trips as the proposed Project. The industrial warehouse/distribution and self-storage components under Alternative 2 would generate approximately 60 trips and 54 trips, respectively, which are still above the screening threshold of 110 trips for VMT analysis. However, because the trips generated by Alternative 2 would be half of those generated for the proposed Project, the VMT impacts would be less than significant for the same reasons discussed in Section 3.10, Transportation, of this EIR. Because site access would be the same as the proposed Project but with half the vehicle volume, Alternative 2's impacts related to hazards due to a geometric design feature or incompatible use would remain less than significant for the same reasons discussed in Section 3.10 of this EIR.

Tribal Cultural Resources

Alternative 2 would be located on the same site as the proposed Project but with a reduced footprint that covers the western half of the Project site. As such, it would impact the same tribal cultural resources setting as the proposed Project but within a smaller area. Alternative 2 would result in excavation to the same depth for construction of the building as the proposed Project. Because of its reduced footprint, the likelihood of encountering unanticipated tribal cultural resources would be reduced compared to the proposed Project but encountering resources could still be a possibility. Therefore, MM-TCR-1 through MM-TCR-4 would apply to Alternative 2 and would reduce impacts to less than significant for the same reasons discussed in Section 3.11, Tribal Cultural Resources, of this EIR.

Utilities and Service Systems

Alternative 2 would develop a Project half the size of the proposed Project but with the same uses. As such, its demand on all utilities, water supplies and wastewater treatment and its solid waste generation would be half that of the proposed Project and would remain less than significant for the same reasons discussed in Section 3.12, Utilities and Service Systems, of this EIR.

5.3.3 Alternative 3 – Self-Storage Only Alternative

Alternative 3 consists of self-storage only development at the Project site. Like the proposed Project, this Alternative assumes a single building totaling 268,000 square feet. However, under this Alternative, the building would be entirely self-storage, except for 2,000 square feet for office/lease space. Assuming a similar proportion of self-storage units to overall square footage, this Alternative assumes 2,100 self-storage units.

Alternative 3 would include similar construction activities as the Project, given the same parking, square footage, and landscaping would be constructed. Operation of Alternative 3 would result in fewer employees, given self-storage uses require fewer employees than industrial warehouse/distribution uses. City-sponsored special events would remain unchanged under this Alternative.

Ability to Meet Project Objectives

Because Alternative 3 involves construction and operation of a facility of the same size and within the same footprint as the proposed Project but without the industrial warehouse/distribution use, Alternative 3 would meet all of the Project objectives but not to the same degree as the proposed Project. It would redevelop an underutilized, blighted and environmentally impacted property with an economically commercial use along a major development corridor within the City, develop appropriate uses in an area with a legacy of contamination in a manner that protects human health and the environment and allows for continued monitoring of remediated areas, produce short- jobs during the construction phase and only two jobs during the operations phase and provide the City with a space to host periodic community outdoor events. However, due to the elimination of the industrial use, it would not meet the financial-related objectives as well as the proposed Project. Alternative 3 would produce fewer long-term jobs during the operational phase and generate less property tax revenues for the City to enhance its services to the community and infrastructural improvements and would not provide the revenue to make any monetary contribution to the City.

Comparison of the Environmental Effects of Alternative 3 to the Proposed Project

Because Alternative 3 involves construction and operation of a facility of the same size and within the same project footprint as the proposed Project but without the industrial warehouse/distribution use, it would have essentially the same impacts as the proposed Project in most resource areas, with the exception of operational air quality and transportation impacts, which would be reduced given that fewer vehicle trips would occur. Alternative 3 would not reduce or eliminate the significant and unavoidable construction noise impact. Further details are provided in the subsections that follow.

Air Quality, Energy, and Greenhouse Gas Emissions

Because Alternative 3 would construct a structure of the same square footage on the same footprint and with the same parking SF and landscaping components as the proposed Project, construction emissions would be approximately the same as those of the proposed Project. As such, impacts would not change under Alternative 3 and would thus remain less than significant for the same reasons described in Section 3.1 of this EIR. For construction health risk, because construction emissions would be approximately the same as the proposed Project, the risk would be above the threshold of significance and would require implementation of MM-AQ-1.

Operational activity for Alternative 3, including energy use, maintenance, and stationary source emissions, would be similar to the proposed Project. Because Alternative 3 would include primarily self-storage (2,100 units) and no industrial warehouse/distribution component, trip generation for Alternative 3 would be 380 total daily trips when compared to the 578 total daily trips under the proposed Project. Alternative 3 would also not include truck trips associated with the industrial warehouse uses. Therefore, mobile source emissions would be reduced when compared to the proposed Project. As such, air pollutant emissions, energy use, and GHG emissions during operation would be reduced when compared to the proposed Project, and impacts would be less than significant for the same reasons discussed in Section 3.1, Section 3.3, and Section 3.5 of this EIR.

Cultural Resources

Alternative 3 would be located on the same site and within the same development footprint as the proposed Project. As such, it would impact the same cultural resources setting as the proposed Project. Alternative 3 would result in the demolition of the same existing on-site structures and excavation to the same depth for construction of the building as the proposed Project. Therefore, for the same reasons discussed in Section 3.2 of this EIR, MM-CUL-1 through MM-CUL-3 would apply to Alternative 3 and would reduce impacts to less than significant.

Geology and Soils

Alternative 3 would be located on the same site and within the same development footprint as the proposed Project. As such, it would impact the same geological setting as the proposed Project. Alternative 3 would be designed and built with adherence to the same building code requirements as the proposed Project, which would ensure that as with the proposed Project, geology and soils impacts of Alternative 3 would be less than significant for the same reasons discussed in Section 3.4 of this EIR.

Hazards and Hazardous Materials

Alternative 3 would be located on the same site and within the same development footprint as the proposed Project. As such, it would overlap the engineered cap being installed over the Cooper Sump area of the Project site as part of the Final RAP. Therefore, for the same reasons discussed in Section 3.6 of this EIR, Alternative 3 would require adherence to PDF-HAZ-1 and PDF-HAZ-2.

As discussed in Section 3.6 for the proposed Project, Alternative 3 would require the additional demolition of the remaining industrial building and residence on the western half of the Project site, which, based on their age, have the potential to contain asbestos-containing materials, lead-based paints, and other hazardous building materials. As such, implementation of MM-HAZ-1 would be required during construction of Alternative 3 to reduce impact to less than significant. Additionally, construction of Alternative 3 would encounter the small areas of diesel contamination above risk-based screening levels (ESLs) for construction and commercial exposure, and gasoline-range organics and PCE concentrations in soil vapor above ESLs for commercial exposure on the west side of the Project site. As such, excavation and relocation/removal of these soils could result in hazards to the public or environment such that impacts would be potentially significant if the contaminated soil is not appropriately managed. Therefore, development of a soil management plan (SMP) in

accordance with MM-HAZ-2 would be required under Alternative 3 to reduce impacts to less than significant for the same reasons discussed in Section 3.6 of this EIR.

Hydrology and Water Quality

Alternative 3 would have the same construction footprint as the proposed Project. As such, it would require the same amount of water for dust suppression during construction. Because Alternative 3 would not include the industrial warehouse/distribution use, its water demand would be the same or less than proposed Project. As such, its impact on groundwater supplies would remain less than significant for the same reasons discussed in Section 3.7 of this EIR. Alternative 3 would include the same drainage features as the proposed Project. As such, its impact related to runoff would remain less than significant for the same reasons discussed in Section 3.7 of this EIR. Alternative 3 would employ BMPs as part of a SWPPP during construction and as stated previously, would have a similar water demand compared to the proposed Project and employ the same drainage features as the proposed Project. Therefore, Alternative 3's impacts related to water quality control plans and sustainable groundwater management plans would remain less than significant for the same reasons discussed in Section 3.7 of this EIR.

Land Use and Planning

Alternative 3 would develop a Project within the same footprint as the proposed Project that contains two of the uses included in the proposed Project (self-storage and office). Therefore, its consistency with land use plans, policies and regulations would be the same as the proposed Project, as discussed in Section 3.8 of this EIR and would remain less than significant.

Noise

Because Alternative 3 would involve development of a building and Project footprint that is the same as the proposed Project, construction of Alternative 3 would be approximately the same as that of the proposed Project. It would include the same construction equipment and phases and be located the same distance from the nearest sensitive receptors. Therefore, for the same reasons discussed in Section 3.9 of this EIR, Alternative 3 would result in a significant and unavoidable noise impact to nearby receptors during construction.

Alternative 3 would not include truck and loading dock activities. However, as shown in Table 3.9-8, Stationary Source Noise Levels (dBA), of the EIR, truck and loading dock activities would not produce the highest noise level at any of the nearby receivers under the proposed Project. Storage loading and unloading activities would produce the highest noise levels at residential receptors to the southwest and west given their immediate adjacency to residential uses. Therefore, self-storage only operation as proposed under Alternative 3 would likely result in the same operational noise levels at nearby sensitive receptors as under the proposed Project.

Transportation

Alternative 3 would include approximately 2,100 self-storage units and no industrial warehouse/distribution use. Alternative 3 would result in a total of 380 total daily trips when compared to the 578 total daily trips under the proposed Project. Because the trips generated by

Alternative 3 would be notably less than those generated for the proposed Project, the VMT impacts would be less than significant for the same reasons discussed in Section 3.10 of this EIR.

Because site access would be the same as the proposed Project under Alternative 3, impacts related to hazards due to a geometric design feature or incompatible use would remain less than significant for the same reasons discussed in Section 3.10.

Tribal Cultural Resources

Alternative 3 would be located on the same development footprint with excavation to the same depth as the proposed Project. As such, it would impact the same tribal cultural resources setting as the proposed Project and have the same chance of encountering unanticipated tribal cultural resources as the proposed Project. Therefore, for the same reasons discussed in Section 3.11 of this EIR, MM-TCR-1 through MM-TCR-4 would apply to Alternative 3 and would reduce impacts to less than significant.

Utilities and Service Systems

Alternative 3 would develop a Project of the same size as the proposed Project but without the industrial warehouse/distribution use. As such, its demand on all utilities, water supplies and wastewater treatment and its solid waste generation would be less than that of the proposed Project and would remain less than significant for the same reasons discussed in Section 3.12 of this EIR.

5.3.4 Alternative 4 – Truck-Storage Lot Alternative

Alternative 4 would replace the Project's self-storage, industrial, and office/mezzanine use building (totaling 268,000 SF) with a truck parking and storage lot. Alternative 4 would include 165 trailer parking stalls for heavy-duty trucks to drop off and store trailers as well as a security check-in station at the northwest corner at the entrance/exit. Alternative 4 would include demolition of all on-site structures and paving of the entire Project site. A conceptual site plan for Alternative 4 is depicted on Figure 5-1.

Operations would result in an estimated two employees for nighttime security purposes only. Heavy-duty trucks would drive onto the site via Artesia Boulevard and store trailers, typically for up to 48 hours. Some heavy-duty trucks may drop off their trailers and containers at the site, which could be stored at the site for longer periods of time up to 1 month. Special events would not occur under Alternative 4 because the entire Project site would be needed for trailer and container storage on a 24-hour, 7-day-per-week basis with all tractor trailer spaces available due to the unpredictability of the number of spaces needed at any given time.

Ability to Meet Project Objectives

Alternative 4 would meet some of the Project objectives but not to the same degree as the proposed Project. It would redevelop an underutilized, blighted and environmentally impacted property but not with the proposed Project's economically vibrant industrial and commercial uses. It would develop appropriate uses in an area with a legacy of contamination in a manner that protects human health and the environment and allows for continued monitoring of remediated areas. Alternative 4 would produce far fewer short-term jobs during construction and only two jobs during the operations phase.

Alternative 4 would also generate less property tax revenues for the City to enhance its services to the community and infrastructural improvements and would not provide the City any monetary public benefit to the City's General Fund. Additionally, Alternative 4 would not meet the objective of providing the City with a space to host periodic community outdoor events.

Comparison of the Environmental Effects of Alternative 4 to the Proposed Project

Construction of Alternative 4 would produce lesser air quality, GHG and noise impacts than the proposed Project because construction intensity and duration would be reduced. However, because construction activity would still occur over the entire Project site and at the same distances to surrounding sensitive receptors, Alternative 4 would not eliminate the significant and unavoidable noise impact. During operations, Alternative 4 would have lower operational noise, vibration, transportation, and pedestrian safety impacts than the proposed Project. Further details are provided in the subsections that follow.

Air Quality, Energy, and Greenhouse Gas Emissions

Because Alternative 4 would involve substantially less construction than the proposed Project, construction emissions would be reduced compared to the proposed Project. As such, impacts would remain less than significant for the same reasons described in Section 3.1 of this EIR. For construction health risk, while construction emissions would be less than the proposed Project, grading of the Project site would still be required, and thus the need for implementation of MM-AQ-1 is required. As such, impacts would be less than significant with mitigation.

Operational activity for Alternative 4, including energy use, maintenance, and stationary source emissions, would be substantially less than the proposed Project. Employee vehicle trips would also be greatly reduced (4 daily trips for security personnel) compared to 578 total daily trips under the proposed Project. And the stored trucks at the site would have engines off, thereby producing little to no air emissions. Therefore, mobile source emissions would be reduced when compared to the proposed Project. As such, air pollutant emissions, energy use, and GHG emissions during operation would be reduced when compared to the proposed Project, and impacts would be less than significant for the same reasons discussed in Section 3.1, Section 3.3, and Section 3.5 of this EIR.

Cultural Resources

Alternative 4 would be located on the same site and within the same development footprint as the proposed Project. As such, it would impact the same cultural resources setting as the proposed Project. Alternative 4 would result in the demolition of the same existing on-site structures. While the excavation depth would likely be reduced and thus potentially reduce impacts to such resources compared to the proposed Project, grading activities would still be required, and as such, for the same reasons discussed in Section 3.2 of this EIR, MM-CUL-1 through MM-CUL-3 would apply to Alternative 4 and would reduce impacts to less than significant.

Geology and Soils

Alternative 4 would be located on the same site and within the same development footprint as the proposed Project. As such, it would impact the same geological setting as the proposed Project.

However, Alternative 4 would not involve the construction of habitable structures as the security station would be modular. The parking lot, lighting and other elements of Alternative 4 would be designed and built with adherence to applicable code requirements. Therefore, the geology and soils impacts of Alternative 4 would be less than significant for the same reasons discussed in Section 3.4 of this EIR.

Hazards and Hazardous Materials

Alternative 4 would be located on the same site and within the same development footprint as the proposed Project. As such, it would overlap the engineered cap being installed over the Cooper Sump area of the Project site as part of the Final RAP. Therefore, for the same reasons discussed in Section 3.6 of this EIR, Alternative 4 would require adherence to PDF-HAZ-1 and PDF-HAZ-2.

As discussed in Section 3.6 for the proposed Project, Alternative 4 would require the demolition of the remaining existing industrial and residential buildings on the western half of the Project site, which, based on their age, have the potential to contain asbestos-containing materials, lead-based paints, and other hazardous building materials. As such, implementation of MM-HAZ-1 would be required during construction of Alternative 4 to reduce impacts to less than significant. Additionally, construction of Alternative 4 would encounter the small areas of diesel contamination above risk-based screening levels (ESLs) for construction and commercial exposure, and gasoline-range organics and PCE concentrations in soil vapor above ESLs for commercial exposure on the west side of the Project site. As such, excavation and relocation/removal of these soils could result in hazards to the public or environment such that impacts would be potentially significant if the contaminated soil is not appropriately managed. Therefore, development of a soil management plan (SMP) in accordance with MM-HAZ-2 would be required under Alternative 4 to reduce impacts to less than significant for the same reasons discussed in Section 3.6 of this EIR.

Hydrology and Water Quality

Alternative 4 would have the same construction footprint as the proposed Project. As such, it would require the same amount of water for dust suppression during construction. Because Alternative 4 would not involve buildings that would require water use during operations, water demand would be substantially less than proposed Project. As such, Alternative 4's impact on groundwater supplies would remain less than significant for the same reasons discussed in Section 3.7 of this EIR. Alternative 4 would include similar drainage features as the proposed Project. As such, its impact related to runoff would remain less than significant for the same reasons discussed in Section 3.7 of this EIR. Alternative 4 would employ BMPs as part of a SWPPP during construction and as stated previously, would have a much lower water demand compared to the proposed Project. Therefore, Alternative 4's impacts related to water quality control plans and sustainable groundwater management plans would remain less than significant for the same reasons discussed in Section 3.7 of this EIR.

Land Use and Planning

Alternative 4 would develop a Project within the same footprint as the proposed Project, which has a land use designation of Specific Plan and is zoned as the 1450 Artesia Specific Plan, with a notation that it would be developed for industrial and commercial uses once a specific plan was adopted.

Alternative 4 would develop an industrial use at the Project site, which would be consistent with the zoning and land use designation. Therefore, it would be consistent with land use plans, policies and regulations and would remain less than significant.

Noise

Construction of Alternative 4 would be less intensive, shorter and involve fewer types of construction equipment than the proposed Project. However, it would be constructed on the same footprint as the proposed Project and would therefore be constructed the same distance from surrounding sensitive receptors. Therefore, for the same reasons discussed in Section 3.9 of this EIR, Alternative 4 would result in a significant and unavoidable noise impact to nearby receptors during construction though the duration of the impact would be reduced.

Alternative 4 would not include storage loading and unloading activities, which were shown to produce the highest noise levels at off-site residential receptors to the southwest and west under the proposed Project. Therefore, Alternative 4 would result in lower operational noise levels at nearby sensitive receptors than the proposed Project. Impacts would remain less than significant for the same reasons discussed in Section 3.9 of this EIR.

Transportation

Alternative 4 would develop a truck-storage lot that would result in 4 total daily trips, compared to the 578 total daily trips under the proposed Project. Because the trips generated by Alternative 4 would be much less than those generated for the proposed Project, the VMT impacts would be less than significant for the same reasons discussed in Section 3.10 of this EIR.

Because site access would be the same as the proposed Project under Alternative 4, impacts related to hazards due to a geometric design feature or incompatible use would remain less than significant for the same reasons discussed in Section 3.10.

Tribal Cultural Resources

Alternative 4 would be located on the same development footprint as the proposed Project. As such, it would impact the same tribal cultural resources setting as the proposed Project. Alternative 4 would result in the demolition of the same existing on-site structures. While the excavation depth would likely be reduced and impacts to such resources would also likely be less compared to the proposed Project, grading of the Project site would still be required, and as such, for the same reasons discussed in Section 3.11 of this EIR, MM-TCR-1 through MM-TCR-4 would apply to Alternative 4 and would reduce impacts to less than significant.

Utilities and Service Systems

Alternative 4 would develop a truck-storage lot with minimal utility requirements. As such, its demand on all utilities, water supplies and wastewater treatment and its solid waste generation would be far less than that of the proposed Project and would remain less than significant for the same reasons discussed in Section 3.12 of this EIR.

5.4 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) indicates that an analysis of alternatives to a project shall identify an Environmentally Superior Alternative among the alternatives evaluated in an EIR. The CEQA Guidelines also state that should it be determined that the No Project Alternative is the Environmentally Superior Alternative, the EIR shall identify another Environmentally Superior Alternative among the remaining alternatives.

A summary of the environmental impacts associated with each alternative is provided in Table 5-1. As shown, Alternative 1 (No Project Alternative) would be the environmentally superior alternative, because it would avoid all of the environmental impacts of the proposed Project.

The environmental impacts of Alternative 2 (Reduced Density Alternative) would be reduced compared to the proposed Project in the areas of construction and operational air quality, greenhouse gas emissions and energy because construction and operational activity would be reduced by half. It would also reduce demand on utilities and water supplies by half and generate half the solid waste of the proposed Project. Alternative 2 would also avoid construction and operation over the engineered cap on the eastern half of the Project site, which would reduce potential exposure to the most contaminated portion of the site. Alternative 2 would also result in half the amount of vehicle trips when compared to the proposed Project. However, these reductions in impacts would not result in any different impact determinations than the determinations for the proposed Project. Additionally, Alternative 2 would not reduce or avoid the significant and unavoidable construction noise impact generated by the proposed Project.

The environmental impacts of Alternative 3 (Self-Storage Only Alternative) would be essentially the same as the proposed Project because the Project would be the same size and on the same footprint, with the exception of operational air quality and transportation impacts, which would be reduced when compared to the proposed Project because the trip generation would be reduced. Some reductions in demand on utilities and solid waste generation could occur with the removal of the industrial warehouse/distribution use but they would not be substantial and would not result in any different impact determinations than the determinations for the proposed Project. Additionally, Alternative 3 would not reduce or avoid the significant and unavoidable construction noise impact generated by the proposed Project.

The environmental impacts of Alternative 4 (Truck Storage Alternative) would be reduced compared to the proposed Project areas of construction and operational air quality, greenhouse gas emissions and energy because construction and operational activity would be greatly reduced as both constructing and operating a truck storage facility would be much less intensive than constructing and operating the proposed Project. It would also significantly reduce demand on utilities and water supplies and generate much less solid waste than the proposed Project. Alternative 4 would greatly reduce the number of vehicle trips when compared to the proposed Project, from 578 total daily trips under the proposed Project to 4 total daily trips under Alternative 4. However, Alternative 4 would not reduce or avoid the significant and unavoidable construction noise impact generated by the proposed Project.

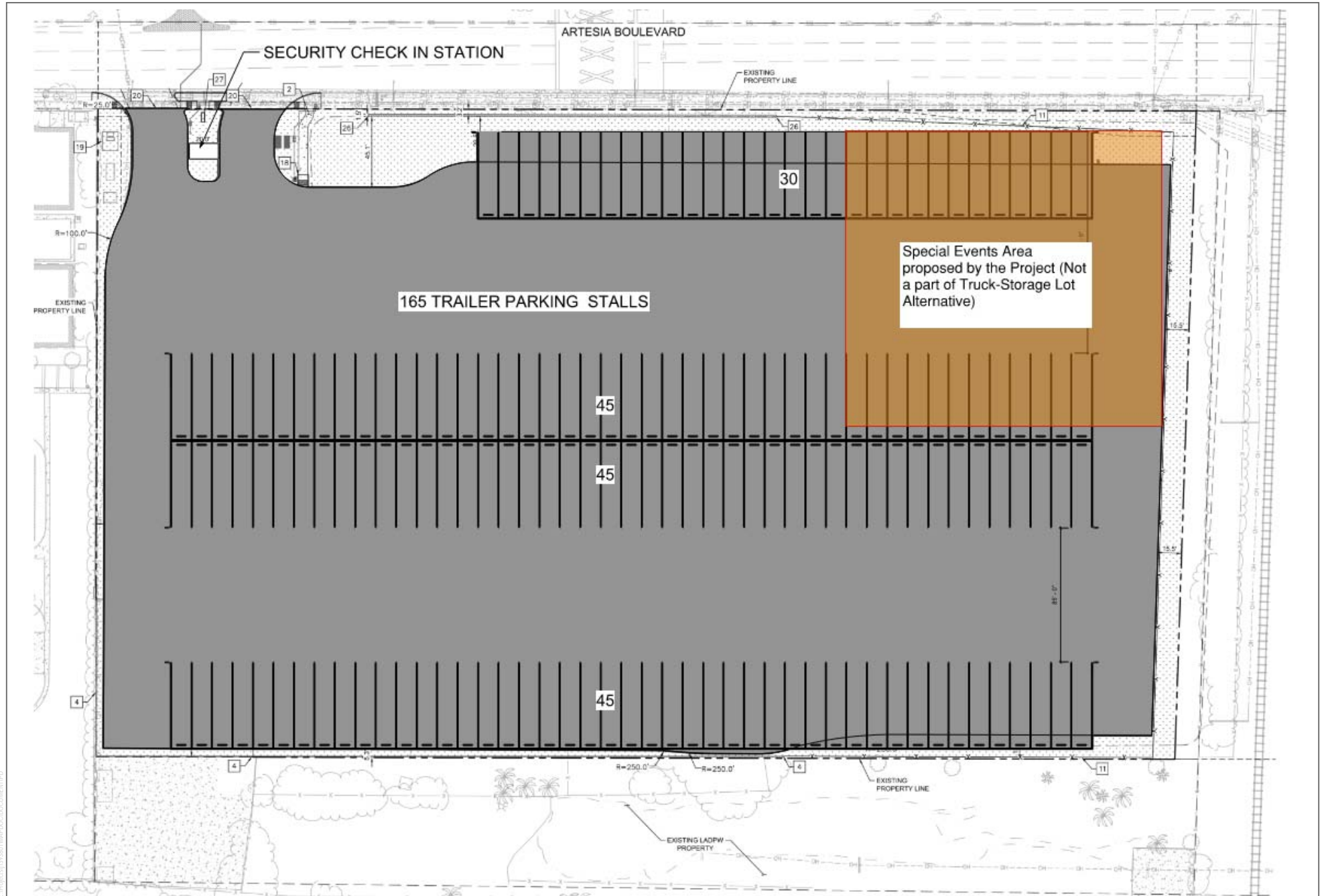
For these reasons, other than the No Project Alternative, Alternative 4 would be considered the environmentally superior alternative.

Table 5-1. Project Alternatives Environmental Impacts Comparison

Environmental Issue Area	Project	No Project Alternative (Alternative 1)	Reduced Density Alternative (Alternative 2)	Self-Storage Only Alternative (Alternative 3)	Truck-Storage Lot Alternative (Alternative 4)
Air Quality	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Cultural Resources	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Energy	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Geology and Soils	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Greenhouse Gas Emissions	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Hazards and Hazardous Materials	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Hydrology and Water Quality	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Land Use and Planning	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant
Noise	Significant and Unavoidable	No Impact	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
Transportation	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant

Table 5-1. Project Alternatives Environmental Impacts Comparison

Environmental Issue Area	Project	No Project Alternative (Alternative 1)	Reduced Density Alternative (Alternative 2)	Self-Storage Only Alternative (Alternative 3)	Truck-Storage Lot Alternative (Alternative 4)
Tribal Cultural Resources	Less than Significant with Mitigation	No Impact	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Utilities and Service Systems	Less than Significant	No Impact	Less than Significant	Less than Significant	Less than Significant



SOURCE: May 2023 Draft 1450 Artesia Specific Plan (City of Gardena)

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