IPT ENTERPRISE BUSINESS CENTER LLC PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT

SCH NO. 2024030755

CITY OF LAKE FOREST
100 CIVIC CENTER DRIVE
LAKE FOREST, CA 92630

JULY 2025

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DRAFT ENVIRONMENTAL IMPACT REPORT

IPT ENTERPRISE BUSINESS CENTER LLC PROJECT

CITY OF LAKE FOREST, CALIFORNIA

Submitted to:

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LIST OF ABBREVIATIONS AND ACRONYMS

°C	degrees Celsius
°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AB	Assembly Bill
ACMs	asbestos-containing materials
ACS	American Community Survey
ADA	Americans with Disabilities Act
afy	acre-feet per year
AGR	agricultural supply
amsl	above mean sea level
APA	American Planning Association
APN	Assessor's Parcel Number
APS	Alternative Planning Strategy
APST	Aboveground Petroleum Storage Tank
AQMP	Air Quality Management Plan
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
Basin	South Coast Air Basin
Basin Plans	Water Quality Control Plans
BAU	business-as-usual
BEP	Business Emergency Plan
BERD	Built Environment Resources Directory
bgs	below ground surface

BIOL	preservation of biological habitats of special significance
BIOS	Biogeographic Information and Observation System
BMP	Best Management Practice
BTU	British thermal unit
CA MUTCD	California Manual on Uniform Traffic Control Devices
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAD	Computer-Aided Design
CAFE	Corporate Average Fuel Economy
Cal/OSHA	California Occupational Safety and Health Administration
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen Code	California Green Building Standards Code
California Register	California Register of Historical Resources
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife

CDR	Center for Demographic Research
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERS	California Environmental Reporting System
CESA	California Endangered Species Act
CFC	California Fire Code
CGP	Construction General Permit
CGS	California Geological Survey
CH_4	methane
CHHSL	California Human Health Screening Levels
CHRIS	California Historical Resources Information System
City	City of Lake Forest
CIWMB	California Integrated Waste Management Board
CIWMP	Countywide Integrated Waste Management Plan
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COMM	commercial and sport fishing
Commission	California Fish and Game Commission

County	County of Orange
CPTED	Crime Prevention through Environmental Design
CPUC	California Public Utilities Commission
CRA	Colorado River Aqueduct
CSS	coastal sage scrub
CTR	California Toxics Rule
CUI	Culturally Unidentifiable Human Remains Inventories
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWC	California Water Code
DAMP	Drainage Area Management Plan
dBA	A-weighted decibel
DDT	dichlorodiphenyltrichloroethane
Design Guidelines	Citywide Design Guidelines
DHS	California Department of Health Services
DIR	California Department of Industrial Relations
DOC	California Department of Conservation
DOSH	Division of Occupational Safety and Health
DPF	Diesel Particulate Filter
DPM	diesel particular matter
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EDD	California Employment Development Department
EIA	United States Department of Energy, Energy Information Administration

EIR	Environmental Impact Report
EJ	environmental justice
Energy Code	California Building Energy Efficiency Standards
EO	Executive Order
EOP	Emergency Operations Plan
EPA	United States Environmental Protection Agency
ERIS	Environmental Risk Information Services
ESA	Environmental Site Assessment
ESA	Federal Endangered Species Act, also FESA
EST	estuarine habitat
EV	electric vehicle
EVSE	electric vehicle supply equipment
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act, also ESA
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
Forest Practice Act	Z'Berg-Nejedly Forest Practice Act
FRA	Federal Responsibility Areas
FRAP	Fire and Resources Assessment Program
FSZ	Farmland Security Zone
ft	foot/feet

g/L	grams per liter
GHG	greenhouse gas
gpd	gallons per day
gpm	gallons per minute
GSAs	Groundwater Sustainability Agencies
GSP	Gross State Product, also Groundwater Sustainability Plan
GWh	gigawatt-hours
GWP	global warming potential
GWR	groundwater recharge
HA	Hydrologic Area
HASP	Health and Safety Plan
HBW	Home-Based Work
HCA	Orange County Health Care Agency
HCP	Habitat Conservation Plan
HDM	Highway Design Manual
HFCs	hydrofluorocarbons
HI	Hazard Index
HMBP	Hazardous Materials Business Plan
HMD	Hazardous Materials Disclosure
HMSS	OCFA's Hazardous Materials Services Section
hp	horsepower
HRA	Health Risk Assessment
HRI	California State Historic Resources Inventory
HSA	Hydrologic Subarea

HVAC	heating, ventilation, and air conditioning
HW	Hazardous Waste
I-5	Interstate 5
in/sec	inches per second
IND	industrial service supply
IPCC	Intergovernmental Panel on Climate Change
IRWD	Irvine Ranch Water District
IS/NOP	Initial Study/Notice of Preparation
ISR	Warehouse Indirect Source Rule
ITE	Institute of Transportation Engineers
IWMP	Integrated Waste Management Plan
Juaneño	Juaneño Band of Mission Indians
JWA	John Wayne Airport
Kizh Nation	Gabrieleno Band of Mission Indians – Kizh Nation
kWh	kilowatt-hours
lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
L_{dn}	Day-Night Noise Level
LEA	Local Enforcement Agency
LED	light emitting diode
LEED	Leadership in Energy and Environmental Design
L_{eq}	Equivalent Continuous Sound Level
LFTAM	Lake Forest Transportation Analysis Model
LHMP	Local Hazard Mitigation Plan

LI	Light Industrial
LID	low impact development
LIP	Local Implementation Plan
LOS	level of service
LRA	Local Responsibility Area
LST	localized significance thresholds
MAR	marine habitat
MBTA	Migratory Bird Treaty Act
MEI	maximally exposed individual
Metropolitan	Metropolitan Water District of Southern California, also MWD
mg/L	milligrams per liter
MICR	maximum individual cancer risk
MLD	Most Likely Descendant
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MRMPs	Mineral Resource Management Policies
MRZs	Mineral Resource Zones
MS4	Municipal Separate Storm Sewer System
MT	metric tons
MT CO_2e	metric tons of carbon dioxide equivalent

MT CO_2e/yr	metric tons of carbon dioxide equivalent per year
MTBE	methyl tertiary-butyl ether
MUN	municipal and domestic supply
MW	megawatts
MWD	Metropolitan Water District of Southern California, also Metropolitan
MWDOC	Municipal Water District of Orange County
MWELO	Model Water Efficient Landscape Ordinance
MWRP	Michelson Water Recycling Plant
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NAV	navigation
NCCP/HCP	Natural Community Conservation Plan/Habitat Conservation Plan
NCES	National Center for Education Statistics
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHTSA	National Highway Traffic Safety Administration
NIMS	National Incident Management System
NO_2	nitrogen dioxide
NOI	Notice of Intent
NOP	Notice of Preparation

NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NZE	near-zero-emissions
O_3	ozone
OA	Orange County Operational Area
OC Parks	Orange County Parks
OCFA	Orange County Fire Authority
OCFCD	Orange County Flood Control District
OCPL	Orange County Public Libraries
OCSD	Orange County Sheriff's Department
OCTA	Orange County Transportation Authority
OCWD	Orange County Water District
OCWR	Orange County Waste & Recycling
OEHHA	California Office of Environmental Health Hazard Assessment
OHWM	ordinary high water mark
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PACM	presumed asbestos-containing materials
Pb	lead
PCBs	polychlorinated biphenyls
PCEs	passenger car equivalents
PCH	Pacific Coast Highway, also SR-1
PFCs	perfluorocarbons

pH	percentage of hydrogen
PM	particulate matter
$PM_{2.5}$	particulate matter less than 2.5 microns in size
PM_{10}	particulate matter less than 10 microns in size
Porter-Cologne Act	California Porter-Cologne Water Quality Control Act
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PRD	Permit Registration Documents
PRIMP	Paleontological Resources Impact Mitigation Program
PROC	industrial process supply
project	IPT Enterprise Business Center LLC Project
psi	pounds per square inch
RARE	rare, threatened, or endangered species
RCM	Regulatory Compliance Measure
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
REC1	water contact recreation
REC2	non-contact water recreation
RECs	recognized environmental conditions
RHNA	Regional Housing Needs Assessment
RMP	Risk Management Plan
RMS	root-mean-square

ROGs	reactive organic gases
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCH	State Clearinghouse
SCSs	Sustainable Community Strategies
SDSs	Safety Data Sheets
SDWA	Safe Drinking Water Act
SEMS	Standard Emergency Management System
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act of 2014
SHEL	shellfish harvesting
SHL	California State Historical Landmarks
SHMA	Seismic Hazard Mapping Act
SHMP	State Hazard Mitigation Plan
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan

SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SMARTS	Stormwater Multiple Application and Report Tracking System
SMGB	California State Mining and Geology Board
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SPHI	California State Points of Historical Interest
SPWN	spawning, reproduction, and development
sq ft	square foot/feet
sq mi	square mile
SR-1	State Route 1, also Pacific Coast Highway or PCH
SR-55	State Route 55
SR-74	State Route 74
SR-91	State Route 91
SR-241	State Route 241
SRA	Source Receptor Area, also State Responsibility Area
SUV	sport utility vehicle
SVUSD	Saddleback Valley Unified School District
SWAT	Special Weapons and Tactics Team
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TA Guidelines	*City of Lake Forest Transportation Analysis Guidelines*
TACs	toxic air contaminants

TAZ	Traffic Analysis Zone
TCRs	Tribal Cultural Resources
TDM	Traffic Demand Management
TIA	Traffic Impact Analysis
TMDL	Total Maximum Daily Load
tpd	tons per day
TPZs	Timberland Production Zones
TRI	Toxics Release Inventory
TWLTL	two-way left-turn lane
UNFCCC	United Nations Framework Convention on Climate Change
URF	unit risk factor
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Planning Act
VCP	vitrified clay pipe
VDECS	Verified Diesel Emission Control Strategies
VES	vapor encroachment screening

VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOCs	volatile organic compounds
WAIRE	Warehouse Actions and Investments to Reduce Emissions
WARM	warm freshwater habitat
WB-67	wheelbase-67
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirements
WILD	wildlife habitat
WQMP	Water Quality Management Plan
WUI	Wildland-Urban Interface
ZE	zero-emissions
ZNE	zero net energy

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1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that local government agencies, before taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An Environmental Impact Report (EIR) is a document designed to provide to the public and to local and State governmental agency decision-makers an analysis of potential environmental consequences of a project to support informed decision-making.

This EIR has been prepared by the City of Lake Forest (City) to evaluate environmental impacts associated with the proposed IPT Enterprise Business Center LLC Project (project); to discuss alternatives; and to propose mitigation measures that will minimize, offset, or otherwise reduce or avoid the identified potentially significant environmental impacts.

This EIR has been prepared pursuant to the requirements of CEQA and the *State CEQA Guidelines*. The City is the Lead Agency, and as such, has reviewed all submitted drafts, technical studies, and reports for consistency with applicable City regulations and policies and has commissioned the preparation of this EIR to reflect its own independent judgment.

Data for this EIR were obtained from on-site field observations; discussion with affected agencies; review of adopted plans and policies; review of available studies, reports, and data; and specialized environmental assessments prepared for the project (i.e., Air Quality, Greenhouse Gas, and Energy Impact Report; Health Risk Assessment; Cultural Resources Assessment; Biological Resources Report; Geotechnical Investigation; Infiltration Report; Water Quality Management Plan; Hydrologic and Hydraulic Drainage Report; Phase I Environmental Site Assessment; Noise and Vibration Impact Analysis; and Traffic Impact Analysis).

The Executive Summary is intended to highlight the major areas of importance in the environmental analysis for the proposed project as required by *State CEQA Guidelines* Section 15123. The Executive Summary includes a brief description of the proposed project, areas of controversy known to the City, including issues raised by agencies and the public, a summary of the significant unavoidable impacts of the proposed project, and a summary of alternatives evaluated in the EIR. This Executive Summary also provides a table summarizing (1) the potential environmental impacts that would occur as a result of project implementation and operation; (2) the level of significance prior to implementation of mitigation measures; (3) regulatory compliance measures and mitigation measures that avoid or reduce the significant impacts of the proposed project; and (4) the level of significance after mitigation measures are implemented.

1.2 SUMMARY OF PROJECT DESCRIPTION

The proposed project at 26200 Enterprise Way (project site) is located in the north-central portion of Lake Forest in Orange County, California. The project site is bordered to the north, south, and west by existing industrial buildings that include a mix of permitted uses, including office, manufacturing, and warehouse uses. The recently constructed Meadows Residential Development

(formerly the Nakase Nursery site) is to the northeast/east of the project site. Regional access to the project site is provided by State Route 241 (SR-241), which is located approximately 0.7 mile north of the project site, and Interstate 5 (I-5), which is located approximately 3.75 miles southwest of the project site.

The proposed project involves the demolition of the existing 144,906-square-foot (sq ft), two-story office/industrial building and redevelopment, construction and operation of a 35-foot (ft) tall, 165,803 sq ft tilt-up concrete industrial building. The project includes a gated truck loading area, truck and auto parking spaces, and new landscaping throughout the site. Although the tenant has not been determined yet, the proposed project includes a mix of office, manufacturing, and warehouse space. Additionally, the project includes off-site improvements at five intersections within the City to enhance public safety and address concerns related to large truck turning movements.

1.3 AREAS OF CONTROVERSY

Pursuant to *State CEQA Guidelines* Section 15123, this EIR acknowledges the areas of controversy and issues to be resolved that are known to the City or were raised during the scoping process. The City held public scoping meetings at Lake Forest City Hall on Wednesday, April 3, 2024, and Wednesday April 24, 2024, to present the proposed project and to solicit input from interested parties regarding environmental issues that should be addressed in this EIR. The material environmental issues and concerns raised in response to the Notice of Preparation (NOP) or at the scoping meeting included:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Transportation
- Tribal Cultural Resources
- Wildfire

Please note that this is not an exhaustive list of areas of controversy but rather key issues that were raised during the scoping process. This EIR addresses each of these areas of concern or controversy in detail, examines project-related and cumulative environmental impacts, identifies significant adverse environmental impacts, and proposes mitigation measures and/or alternatives designed to reduce or eliminate potentially significant impacts. Appendix A to this EIR includes the NOP, copies of written comments received in response to the NOP, and comments received at the Public Scoping Meeting, as well as written comment cards received in response to the public scoping meeting. Appendix A also includes a comment summary.

1.4 SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) of the *State CEQA Guidelines* requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less than significant level. The following is a summary of the impacts that are

considered significant adverse and unavoidable after all mitigation is applied. These impacts are also described in detail in Chapter 4.0, Existing Environmental Setting, Environmental Analysis, Impacts, and Mitigation Measures.

1.4.1 Transportation and Traffic

As discussed in Section 4.17, Transportation and Traffic, of this EIR, the proposed project's vehicle miles traveled (VMT) rate would exceed the City of Lake Forest's (City) VMT threshold (Target VMT Rate) by 20 percent. In accordance with the Lake Forest Municipal Code, the proposed project is required to implement feasible Traffic Demand Management (TDM) measures that would reduce project VMT, as stipulated by **Mitigation Measure (MM) TRA-1**. Providing bike lanes and an enhanced bikeway network, as required by **MM TRA-1**, can increase access to and from transit hubs. This encourages a mode shift from vehicles to bicycles and displaces VMT. According to the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (December 2021) (CAPCOA Handbook), the addition of bike lanes (T-20 Expand Bikeway Network) can provide a maximum VMT reduction of 0.5 percent. Assuming this TDM measure could achieve the maximum 0.5 percent VMT reduction, the reduction achieved would not reduce the project's VMT to below the City's VMT threshold. Therefore, even with implementation of **MM TRA-1** (addition of bike lanes), the proposed project would result in a significant and unavoidable impact related to VMT.

1.4.2 Greenhouse Gas Emissions

As discussed in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR, the proposed project would not result in any significant impacts related to mass emissions of GHG, and no mitigation is required. However, the proposed project would conflict with the goals of the 2022 Scoping Plan related to VMT. As described directly above under Section 1.4.1 and in Section 4.17, Transportation and Traffic, the proposed project would be required to implement TDM measures as specified in MM TRA-1 to promote alternative transportation with the intent of reducing VMT. While implementation of this TDM measure could reduce VMT, the proposed project would still result in a significant and unavoidable impact related to VMT. As such, the proposed project would not contribute to its "fair share" of emission reductions required to support SB 743 and the goals of the 2022 Scoping Plan related to VMT. Because the proposed project would conflict with the plans and policies adopted for the purpose of reducing the emissions of GHGs, including the 2022 Scoping Plan, the proposed project would result in a significant and unavoidable cumulatively considerable impact related to GHG emissions.

1.5 ALTERNATIVES

1.5.1 Alternatives Evaluated in this EIR

Public Resources Code (PRC) Section 21100 and *State CEQA Guidelines* Section 15126 require an EIR to identify and discuss a No Project Alternative and a reasonable range of alternatives to the proposed project that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant environmental impacts. The following three alternatives have been determined to represent a reasonable range of alternatives that have the

potential to feasibly attain most of the basic objectives of the proposed project but that may avoid or substantially lessen any of the significant impacts of the proposed project. Therefore, the alternatives considered in this EIR include the following:

- **Alternative 1 – No Project Alternative:** CEQA requires analysis of a "No Project" Alternative. 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. According to *State CEQA Guidelines* Section 15126.6(e)(3)(C), the lead agency should proceed to analyze the impacts of the No Project Alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. Under Alternative 1, the No Project Alternative, the project site would remain in its current condition. No development of a new building, site improvements, or ground disturbance would occur. Under Alternative 1, the No Project Alternative, the existing underutilized office/ industrial building would remain in place and would remain vacant, consistent with existing conditions.

- **Alternative 2 – Previous Use and Associated Site Development Permit Alternative.** Under Alternative 2, the existing office/industrial building would be occupied by office uses consistent with the existing Site Development Permit. No modifications would be made to the exterior of the building, parking, or landscaping. The existing office/industrial building would remain in place and no construction (aside from interior tenant improvements), or ground-disturbing activities would occur.

- **Alternative 3 – Reduced Project Alternative.** Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent. All building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new 35 ft tall 124,352.25 sq ft tilt-up concrete industrial building would be constructed. The building would include 7,500 sq ft of office space, 48,750 sq ft of manufacturing space, and 68,102.25 sq ft of warehouse space. The additional available square footage at the project site that would result from the decreased building square footage would be designated for vehicle and truck parking. Consistent with the proposed project, Alternative 3 would include a gated truck loading area, truck and auto parking spaces, and new landscaping throughout the site.

1.5.2 Identification of the Environmentally Superior Alternative

CEQA requires the identification of an Environmentally Superior Alternative among the alternatives evaluated in an EIR. *State CEQA Guidelines* Section 15126.6(e)(2) provides that, if the No Project/No Build Alternative is the Environmentally Superior Alternative, then the EIR shall also identify an Environmentally Superior Alternative among the other alternatives. With the exception of Alternative 1, the environmentally superior alternative would be Alternative 3, the Reduced Intensity Alternative. Alternative 3 would result in similar or reduced environmental impacts compared to the proposed project because the project site would be developed at a reduced density, thereby reducing most of the proposed project's environmental impacts. However,

Alternative 3 would not reduce the significant impacts related to VMT or cumulatively considerable significant impacts related to GHG emissions to a less than significant level, and these impacts would remain significant and unavoidable. Although Alternative 3 would achieve all of the project objectives, it would not achieve those objectives to the same degree as the proposed project. Accordingly, it is determined that Alternative 3 is the Environmentally Superior Alternative because it would meet all of the project objectives and result in reduced environmental impacts as compared to the proposed project.

1.6 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1.A identifies the potential project environmental impacts, proposed mitigation measures, and level of significance after mitigation is incorporated into the project. Environmental topics addressed in this EIR include: Aesthetics, Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils and Paleontological Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation and Traffic, Tribal Cultural Resources, Utilities, and Wildfire.

1.6.1 Secondary Effects of Mitigation Measures

In accordance with *State CEQA Guidelines* Section 15126.4(a)(1)(D), if any mitigation measure would cause one or more significant effects in addition to those that would be caused by the proposed project, the effects of the mitigation measure shall be discussed. The mitigation measures proposed (as listed on Table 1.A) require the Applicant to provide the City with construction plans or provide evidence that the project would adhere to existing programs, regulations, or recommendations in technical reports. The regulations and policies listed in the mitigation measures have been evaluated during their respective adoptions or approval processes. No secondary effects related to the proposed mitigation measures are expected to occur.

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Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
4.1: Aesthetics			
Threshold 4.1.1: The proposed project would not have a substantial adverse effect on a scenic vista.	No Impact	No mitigation is required.	No Impact
Threshold 4.1.2: The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	No Impact	No mitigation is required.	No Impact
Threshold 4.1.3: The proposed project would not conflict with applicable zoning and other regulations governing scenic quality.	No Impact	No mitigation is required.	No Impact
Threshold 4.1.4: The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Cumulative Impact related to Aesthetics: The proposed project would adhere to City and State regulations designed to reduce and/or avoid impacts related to aesthetics and therefore would not result in cumulative impacts to aesthetics.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.2: Agricultural and Forestry Resources			
Threshold 4.2.1: The proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	No Impact	No mitigation is required.	No Impact
Threshold 4.2.2: The proposed project would not conflict with existing zoning or agricultural use, or a Williamson Act contract.	No Impact	No mitigation is required.	No Impact
Threshold 4.2.3: The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).	No Impact	No mitigation is required.	No Impact
Threshold 4.2.4: The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use.	No Impact	No mitigation is required.	No Impact
Threshold 4.2.5: The proposed project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.	No Impact	No mitigation is required.	No Impact
Cumulative Impact related to Agricultural Resources: The proposed project is not located on or nearby existing agricultural or forest land and would not result in cumulative impacts related to agriculture and forestry.	No Impact	No mitigation is required.	No Impact
4.3: Air Quality			
Threshold 4.3.1: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.3.2: The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard.	Potentially Significant Impact	**Mitigation Measure AQ-1: Tier 4 Interim Construction Equipment.** Prior to issuance of a building permit, the project Applicant shall submit construction plans to the City of Lake Forest verifying that all construction equipment used during construction of the project shall be equipped with Tier 4 Interim engines or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement as certified by the California Air Resources Board (CARB). [1] During construction activities, the equipment shall be properly maintained and tuned in accordance with manufacturer specifications.	Less than Significant with Mitigation Incorporated
Threshold 4.3.3: The proposed project would not expose sensitive receptors to substantial pollutant concentrations.	Potentially Significant Impact	Refer to Mitigation Measure AQ-1.	Less than Significant with Mitigation Incorporated

[1] CARB. 2015. Verified Diesel Emission Control Strategy (VDECS). Website: https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/faq/vdecsfaq.pdf (accessed June 2025)

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
Threshold 4.3.4: The proposed project would not result in other emissions (such as those leading to odors adversely affecting a substantial number of people).	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Cumulative Impacts related to Air Quality: The proposed project's construction-related regional daily emissions would exceed SCAQMD significance thresholds for VOCs if constructed at the same time as the two Western Realco Projects. Therefore, the proposed project's cumulative air quality impacts would be potentially significant.	Potentially Significant Impact	**Mitigation Measure AQ-2: Volatile Organic Compounds.** Prior to issuance of a grading permit, the Project Applicant shall submit construction plans to the City of Lake Forest that state that the project shall utilize "Super-Compliant" low volatile organic compounds (VOC) paints for nonresidential interior and exterior surfaces and low VOC paint for parking lot surfaces. Super-Compliant low VOC paints have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. **Mitigation Measure AQ-3: Tier 4 Final Construction Equipment.** Prior to issuance of a building permit, the project Applicant shall consult with the City on the status of Western Realco Projects 1 and 2. If in this consultation, the City identifies that the construction schedule of Western Realco Projects 1 and 2, and the IPT Enterprise Business Center LLC Project (proposed project) will be under construction at the same time, the proposed project shall equip all construction equipment during the overlapping period with Tier 4 Final engines or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the California Air Resources Board. The equipment shall be properly maintained and tuned in accordance with manufacturer specifications. The project Applicant shall submit construction plans to the City of Lake Forest denoting the projected equipment Tier rating that will be used during the construction period.	Less than Significant with Mitigation Incorporated
4.4: Biological Resources			
Threshold 4.4.1: The proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Less than Significant Impact	**Regulatory Compliance Measure BIO-1: Nesting Bird Clearance Survey.** If construction/ground disturbing activities, including demolition, occurs between February 1 and August 31, a Qualified Biologist shall conduct a pre-construction clearance survey for nesting birds within 3 days of the start of any construction, vegetation clearing, or grading activities (including disking and demolition) to ensure that no nesting birds are disturbed during construction. The Qualified Biologist shall be retained by the Construction Contractor. The Qualified Biologist conducting the clearance survey shall document a negative survey with a brief letter report indicating that no impacts to active avian nests would occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. In general, the no-disturbance buffer shall be a minimum of 50 feet for passerines and 250 feet for raptors. However, a species' sensitivity to disturbance can vary among species, the level of noise or construction disturbance, and the line of sight between the nest and the disturbance. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel shall be instructed on the sensitivity of nest areas. A biological monitor, with experience in monitoring active nests, shall be present to delineate the boundaries of the buffer area and to monitor daily all active nests to observe the efficacy of the no-disturbance buffers and to document any new nesting occurrences to ensure that nesting behavior is not adversely affected by the construction activity. Adversely affected nesting behavior, as determined by the biological monitor, includes, but is not limited to, disrupting reproductive behavior, nest abandonment, and/or prolonged absences of parents while incubating eggs. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction, vegetation clearing, or grading activities (including disking and demolition) within the buffer area can occur. Field memorandums shall be prepared by the biological monitor within 24 hours of each day of monitoring and shall be submitted to the City of Lake Forest to document compliance with the applicable resource protection measures.	Less than Significant Impact
Threshold 4.4.2: The proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	No Impact	No mitigation is required.	No Impact
Threshold 4.4.3: The proposed project would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	No Impact	No mitigation is required.	No Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
Threshold 4.4.4: The proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Less than Significant Impact	Refer to **Regulatory Compliance Measure BIO-1**: Nesting Bird Clearance Survey.	Less than Significant Impact
Threshold 4.4.5: The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	No Impact	No mitigation is required.	No Impact
Threshold 4.4.6: The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	No Impact	No mitigation is required.	No Impact
Cumulative Impacts related to Biological Resources: The proposed project would not contribute to a cumulatively significant impact related to biological resources.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.5: Cultural Resources			
Threshold 4.5.1: The proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.5.2: The proposed project would potentially cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.	Less than Significant Impact	**Regulatory Compliance Measure CUL-1: Unknown Archaeological Resources.** In the event that archaeological resources are discovered during excavation, grading, or construction activities, work shall cease within 50 feet of the find until a qualified archaeologist from the Orange County List of Qualified Archaeologists has evaluated the find in accordance with federal, State, and local guidelines to determine whether the find constitutes a "unique archaeological resource," as defined in Section 21083.2(g) of the California Public Resources Code (PRC). Personnel of the proposed project shall not collect or move any archaeological materials and associated materials. Construction activity may continue unimpeded beyond 100 feet from the find on other portions of the project site. The found deposits shall be treated in accordance with federal, State, and local guidelines, including those set forth in PRC Section 21083.2. Prior to issuance of a grading permit, the Director of Community Development, or designee, shall ensure that this regulatory compliance measure is documented on the grading plans.	Less than Significant Impact
Threshold 4.5.3: The proposed project would potentially disturb human remains, including those interred outside of formal cemeteries.	Less than Significant Impact	**Regulatory Compliance Measure CUL-2: Human Remains.** If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated grave goods in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment. Prior to issuance of a grading permit, the Director of Community Development, or designee, shall ensure that this regulatory measure is documented on the grading plans.	Less than Significant Impact
Cumulative Impacts related to Cultural Resources: Potential impacts of the proposed project to unknown cultural resources, when combined with the impacts of past, present, and reasonably foreseeable projects in the City of Lake Forest, would not contribute to a cumulatively significant impact to cultural resources with compliance with existing regulatory measures.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.6: Energy			
Threshold 4.6.1: The proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
Threshold 4.6.2: The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Cumulative Impacts related to Energy: There are sufficient planned energy supplies to serve the proposed project and related projects. The proposed project's contribution to impacts related to the inefficient, wasteful, and unnecessary consumption of energy would not be cumulatively considerable.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.7: Geology and Soils			
Threshold 4.7.1(i): The proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.	No Impact	No mitigation is required.	No Impact
Threshold 4.7.1(ii): The proposed project could directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	Potentially Significant Impact	**Mitigation Measure GEO-1**: **Compliance with Applicable California Building Code and Project-Specific Geotechnical Specifications**. Prior to the final grading permit and the issuance of building permits, the project Applicant shall provide final project plans to applicable City of Lake Forest (City) staff for review and approval showing that the project, including site preparation and construction of proposed buildings, has been designed and will be constructed in conformance with applicable provisions of the most current California Building Code at the time of City review, the City's Building Code, and the specifications cited in the Geotechnical Investigation, prepared by Southern California Geotechnical, dated November 2021. During grading, an on-site inspection shall be conducted by the Applicant-hired Project Geotechnical Consultant and the City of Lake Forest Director of Public Works/ City Engineer, or designee, to ensure compliance with geotechnical specifications as incorporated into project plans. Prior to the final grading permit, the Project Geotechnical Consultant shall submit a Final Testing and Observation Geotechnical Report for Rough Grading to the City of Lake Forest Director of Public Works/City Engineer, or designee. Prior to the issuance of a Certificate of Occupancy for the new building, the Project Geotechnical Consultant shall provide a letter regarding contractor compliance with project plans and required geotechnical. The letter shall be submitted to the City of Lake Forest Building Division for review and approval.	Less than Significant Impact
Threshold 4.7.1(iii): The proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.	No Impact	No mitigation is required.	No Impact
Threshold 4.7.1(iv): The proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	No Impact	No mitigation is required.	No Impact
Threshold 4.7.2: The proposed project would not result in substantial soil erosion or the loss of topsoil.	Less than Significant Impact	Refer to **Regulatory Compliance Measures WQ-1 through WQ-4**.	Less than Significant Impact
Threshold 4.7.3: The proposed project would 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.	Potentially Significant Impact	**Mitigation Measure GEO-2**: **Corrosive Soils.** Prior to issuance of building permits, the project Applicant/Developer shall retain the services of a licensed corrosion engineer to conduct additional site testing and final design evaluation regarding the possible on-site presence of significant volumes of corrosive soils. At a minimum, the corrosion engineer shall (1) verify the soluble sulfate concentrations of the soils that are present at pad grade within the building areas at the completion of rough grading; (2) provide detailed corrosion protection measures for cast iron and/or ductile iron pipes, as necessary; (3) confirm that soluble sulfates and chloride levels in the on-site soils do not warrant specialized concrete mix design; and (4) confirm that nitrates present in the on-site soil do not warrant protection for copper materials. During grading, on-site inspection shall be conducted by the Project Geotechnical Consultant and City of Lake Forest Director of Public Works/City Engineer, or designee, to ensure compliance with the corrosion protection measures of the corrosion engineer, as incorporated into the project plans. Prior to issuance of a building permit, the Director of the City of Lake Forest Public Works Department, or designee, shall verify that the project plans incorporate the corrosion protection measures of the corrosion engineer.	Less than Significant Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
Threshold 4.7.4: The proposed project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.7.5: The proposed project would not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water	No Impact	No mitigation is required.	No Impact
Threshold 4.7.6: The proposed project would potentially directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Potentially Significant Impact	**Mitigation Measure GEO-3**: **Paleontological Resources Impact Mitigation Program**. Prior to the final grading permit and the issuance of building permits, the project Applicant/Developer shall provide a letter to the Director of Community Development Department, or designee, stating that they have retained a qualified paleontologist (defined as a practicing paleontologist who is recognized in the paleontological community and proficient in vertebrate paleontology) who is listed on the County of Orange list of certified paleontologists. Prior to the final grading permit and the issuance of building permits, the qualified paleontologist shall submit to the City, a Paleontological Resources Impact Mitigation Program (PRIMP) for this project. The PRIMP shall include the methods that will be used to protect paleontological resources that may exist within the project site, as well as procedures for monitoring, fossil preparation and identification, curation into a repository, and preparation of a report at the conclusion of grading. The PRIMP shall be consistent with the guidelines of the Society of Vertebrate Paleontology. The City shall not issue a grading permit for the project until the letter and PRIMP, both referenced above, have been received. During construction, excavation and grading activities in deposits with high paleontological sensitivity shall be monitored by a paleontological monitor as defined by the PRIMP. No monitoring is required for excavations in deposits with no or low paleontological sensitivity (i.e., engineered fill soils). If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to temporarily redirect construction away from the area of the find in order to assess its significance. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected, and a paleontologist shall be contacted to assess the find for significance. Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a scientific institution prepared by the Applicant-hired qualified paleontologist. Prior to the issuance of building permits, a report of findings shall be prepared to document the results of the monitoring program prepared by the Applicant-hired qualified paleontologist. The report shall be provided to the Director of Community Development, or designee.	Less than Significant Impact
Cumulative Impacts related to Geology and Soils: Potential impacts of the proposed project to unknown paleontological resources and unique geologic features, when combined with the impacts of past, present, and reasonably foreseeable projects in the City of Lake Forest, could contribute to a cumulatively significant impact due to the overall loss of paleontological remains unique to the region. However, when resources are assessed and/or protected as they are discovered, impacts to these resources are less than significant. The proposed project could contribute to regional seismic issues; however, compliance with applicable codes and design standards would reduce cumulatively considerable impacts to a less than significant level.	Potentially Significant Impact	Refer to Mitigation Measure GEO-3.	Less than Significant Impact
4.8: Greenhouse Gas Emissions			
Threshold 4.8.1: The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
Threshold 4.8.2: The proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Potentially Significant Impact	**Mitigation Measure GHG-1: Electric Vehicle Charging.** Provisions shall be made at the project site for emerging electric truck technology. Prior to the issuance of a shell building permit, the City shall verify that the site plan identifies an on-site location for future electric truck charging stations, with space available for a minimum of four (4) trucks to simultaneously charge when charging stations are installed in the future. The conduit trenching shall be installed to that location for future conduit pull as a requirement of the shell building permit. In conjunction with the approval of tenant improvement plans and permits, the applicant shall install electric truck charging stations on site for a minimum of four (4) electric trucks to simultaneously charge.	Significant and Unavoidable Impact
Cumulative Impacts related to Greenhouse Gas Emissions: The proposed project would conflict with the goals and policies of the 2022 Scoping Plan related to VMT and therefore would result in a significant cumulatively considerable impact related to GHG emissions when combined with the Western Realco Projects. Impacts would significant and unavoidable.	Significant and Unavoidable Impact	Refer to Mitigation Measure GHG-1.	Significant and Unavoidable Impact
4.9: Hazards and Hazardous Materials			
Threshold 4.9.1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.9.2: The proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.9.3: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.9.4: The proposed project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, it would not create a significant hazard to the public or the environment.	No Impact	No mitigation is required.	No Impact
Threshold 4.9.5: The proposed project is not 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, and would not result in a safety hazard or excessive noise for people residing or working in the project area	No Impact	No mitigation is required.	No Impact
Threshold 4.9.6: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.9.7: The proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.	No Impact	No mitigation is required.	No Impact
Cumulative Impacts related to Hazards and Hazardous Materials: The proposed project would not contribute to a cumulatively significant impact related to hazards or hazardous materials.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
4.10: Hydrology and Water Quality			
Threshold 4.10.1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Less than Significant Impact	**Regulatory Compliance Measure WQ-1: Construction General Permit.** Prior to the issuance of a grading permit, the Construction Contractor shall obtain coverage under the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ, NPDES No. CAS000002) (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including a Notice of Intent for coverage under the permit to the SWRCB via the Stormwater Multiple Application and Report Tracking System (SMARTs). The Construction Contractor shall provide the Waste Discharge Identification Number (WDID) to the Lake Forest Public Works Director, or designee, to demonstrate proof of coverage under the Construction General Permit. Project construction shall not be initiated until a WDID is received from the SWRCB and is provided to the City, or designee. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared by a Qualified SWPPP Developer in accordance with the requirements of the Construction General Permit and submitted via SMARTs. These include: Best Management Practices (BMPs) for erosion and sediment control, site management/housekeeping/waste management, management of non-storm water discharges, run-on and runoff controls, and BMP inspection/maintenance/repair activities. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association's Stormwater Best Management Handbook: Construction. The SWPPP shall include a construction site monitoring program that identifies requirements for dry weather visual observations of pollutants at all discharge locations, and as appropriate (depending on the Risk Level), sampling of the site effluent and receiving waters. A Qualified SWPPP Practitioner shall be responsible for implementing the BMPs at the site and performing all required monitoring and inspection/maintenance/repair activities. Upon completion of construction and stabilization of the site, a Notice of Termination shall be submitted via SMARTs. **Regulatory Compliance Measure WQ-2: City of Lake Forest Municipal Code.** Prior to the issuance of a grading permit, the Project Applicant shall submit and obtain approval of an Erosion Control Plan in compliance with Article XIII of Chapter 8.30 of the City of Lake Forest Municipal Code from the Lake Forest Public Works Director, or designee. The Erosion Control Plan shall be submitted to the City of Lake Forest Building Official for approval by September 15 each year for projects under a grading permit. All grading shall be undertaken in accordance with the BMPs for pollution prevention adopted by the City, the City's NPDES Permit regulating discharges into and from its Municipal Separate Storm Sewer System (MS4), the Drainage Area Management Plan (DAMP), and any other conditions, requirements and water quality management plans adopted by the City. Additionally, the project Applicant shall adhere to the erosion and sediment control and water quality system maintenance requirements listed in Section 8.30.154 of the Lake Forest Municipal Code. **Regulatory Compliance Measure WQ-3: Final Water Quality Management Plan.** Prior to issuance of a grading permit, the project Applicant shall submit and obtain approval of a Final Water Quality Management Plan (WQMP) to the Lake Forest Public Works Director, or designee. The project shall implement project design features identified in the Final WQMP. The Final WQMP shall demonstrate that any proposed on-site development plan includes BMPs for source control, pollution prevention, site design, low impact development (LID) implementation, and structural treatment control. BMPs shall be designed and implemented to address 303(d) listed pollutants and retain the project site's minimum design capture volume and hydromodification volume to ensure that post-development storm water runoff volume or time of concentration does not exceed pre-development storm water runoff by more than 10 percent of the 2-year peak flow in accordance with the Santa Ana Regional Water Quality Control Board Order Number R8-2009-0030, NPDES Permit No. CAS618030, as amended by Order No. R8-2010-0062, also known as the North Orange County MS4 permit. The proposed LID BMPs specified in the Final WQMP shall be incorporated into the grading and development plans submitted to the City of Lake Forest for review and approval. Periodic maintenance of any required BMPs and landscaped areas during project occupancy and operation shall be in accordance with the schedule outlined in the Final WQMP. **Regulatory Compliance Measure WQ-4: Final Hydrology and Hydraulic Analyses.** Prior to issuance of grading permits, the project Applicant shall submit and obtain approval of the Final Hydrology and Hydraulic Analyses to the Lake Forest Director of Public Works, or designee, and the Orange County Flood Control District (OCFCD). The Final Hydrology and Hydraulic Analyses shall be prepared consistent with the requirements of the Orange County Hydrology Manual (Orange County Environment Agency 1986) and Orange County Hydrology Manual Addendum No. 1 (Orange County Environment Agency	Less than Significant Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
		1996), or subsequent guidance manuals. The Final Hydrology and Hydraulic Analyses shall confirm that the on-site storm drains, on-site detention basins, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the peak flow of stormwater discharge from the project site is less than existing conditions. The Final Hydrology and Hydraulic Analyses shall also demonstrate that the detention facilities meet the hydromodification requirements of the Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the Incorporated Cities of Orange County within the Santa Ana Region Areawide Urban Storm Water Runoff Orange County (North Orange County MS4 Permit), Order R8-2009-0030, NPDES No. CAS618030 (as amended by Order No. R8-2010-0062). In compliance with the hydromodification requirements, the post-project runoff discharge volume for the 2-year storm shall not exceed that of the predevelopment condition by more than 5 percent, and the time of concentration of post-development runoff for the 2 year storm event shall not be greater than 5 percent less than that of the predevelopment condition. The Director of the City of Lake Forest Public Works Department, or designee, shall ensure that the drainage facilities specified in the Final Hydrology and Hydraulic Analyses are incorporated into the final project design.	
Threshold 4.10.2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.10.3(i): The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site.	Less than Significant Impact	Refer to **Regulatory Compliance Measures WQ-1 through WQ-4**.	Less than Significant Impact
Threshold 4.10.3(ii): The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.	Less than Significant Impact	Refer to **Regulatory Compliance Measures WQ-3 and WQ-4**.	Less than Significant Impact
Threshold 4.10.3(iii): The proposed project would not 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 create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.	Less than Significant Impact	Refer to **Regulatory Compliance Measures WQ-1 through WQ-4.**	Less than Significant Impact
Threshold 4.10.3(iv): The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.	No Impact	No mitigation is required.	No Impact
Threshold 4.10.4: The proposed project would not be in a flood hazard, tsunami, or seiche zone, risking the release of pollutants due to project inundation.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.10.5: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Less than Significant Impact	Refer to **Regulatory Compliance Measures WQ-1 through WQ-4.**	Less than Significant Impact
Cumulative Impacts related to Hydrology and Water Quality: The proposed project and other related projects would comply with applicable NPDES and City requirements; therefore, cumulative hydrology and water quality impacts would be less than significant. Therefore, the proposed project would not contribute to a cumulatively significant impact related to hydrology and water quality.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
4.11: Land Use & Planning			
Threshold 4.11.2: The proposed project would not physically divide an established community.	No Impact	No mitigation is required.	No Impact
Threshold 4.11.3: The proposed project would not 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.	No Impact	No mitigation is required.	No Impact
Cumulative Impacts related to Land Use & Planning: The proposed project would not contribute to a cumulatively significant impact related to land use and planning.	No Impact	No mitigation is required.	No Impact
4.12: Mineral Resources			
Threshold 4.12.1: The proposed project would not result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state.	No Impact	No mitigation is required.	No Impact
Threshold 4.12.2: The proposed project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	No Impact	No mitigation is required.	No Impact
Cumulative Impacts related to Mineral Resources: The proposed project would have no impact on mineral resources and therefore would not contribute to a cumulatively significant impact related to mineral resources.	No Impact	No mitigation is required.	No Impact
4.13: Noise			
Threshold 4.13.1: The proposed project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Less than Significant Impact	**Regulatory Compliance Measure NOI-1: City of Lake Forest Municipal Code, Section 11.16.060(D)**. During construction, construction activities shall be limited to between the hours of 7:00 a.m. and 8:00 p.m. Mondays through Saturdays. No construction shall be permitted outside of these hours or on Sundays or legal City of Lake Forest holidays, without a specific exemption issued by the City of Lake Forest.	Less than Significant Impact
Threshold 4.13.2: The proposed project could result in the generation of excessive groundborne vibration or groundborne noise levels.	Less than Significant Impact	**Regulatory Compliance Measure NOI-2: Pre-Construction Vibration Assessment.** After a specific project equipment list has been determined and prior to the issuance of a building permit, the following actions shall be implemented: 1) A qualified structural engineer, as approved by the Director of Community Development, or designee shall identify all structures that are located within the distances established in Table 2 of Section 11.16.090 of the City's Municipal Code and that have the potential to be affected by ground-borne vibration originating from the construction; and 2) A qualified acoustical engineer shall compile a list of proposed construction equipment and compare to the City's accepted vibration criteria. If it is determined that the proposed equipment would generate vibration levels below the City's standard of 0.3 inches per second (in/sec) peak particle velocity (PPV), no further vibration assessment is necessary. However, if vibration levels would potentially exceed the City's standard of 0.3 in/sec PPV, the Project Applicant shall develop a Vibration Monitoring and Construction Contingency Plan for approval by the Director of Community Development, or designee, to ensure that vibration levels would not exceed the City's accepted vibration damage criteria of 0.3 in/sec PPV. If a Vibration Monitoring and Construction Contingency Plan is deemed necessary, monitoring of vibration during initial construction activities shall be required. Monitoring results may indicate the need for more or less intensive measurements. The Vibration Monitoring and Construction Contingency Plan, at the discretion of the Director of Community Development or designee, shall include the following items as necessary: ● Identification of structures where monitoring would be conducted; ● A vibration monitoring schedule; ● Defined structure-specific vibration limits; ● Photographic, elevation, and crack surveys to document before and after construction conditions; and ● Identification of construction contingencies for when vibration levels approach the limits. When vibration levels approach the limits specified in Section 11.16.090 of the City's Municipal Code, construction shall be suspended and contingencies identified in the approved Vibration Monitoring and Construction Contingency Plan shall be	Less than Significant Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
		implemented as necessary to lower vibration levels, which could include shielding or protecting the affected building from potential vibration impacts as a possible alternative to changing construction methods	
Threshold 4.13.3: The proposed project would not be 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, and would not expose people residing or working in the project area to excessive noise levels.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Cumulative Impacts related to Noise and Vibration: The proposed project would not contribute to a cumulatively significant impact related to noise and vibration.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.14: Population and Housing			
Threshold 4.14.1: The proposed project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.14.2: The proposed project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	No Impact	No mitigation is required.	No Impact
Cumulative Impacts related to Population and Housing: The proposed project would not contribute to a cumulatively significant impact related to population and housing.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.15: Public Services			
Threshold 4.15.1(i): The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.15.1(ii): The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.15.1(iii): The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.15.1(iv): The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
Threshold 4.15.1(v): The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Cumulative Impacts related to Public Services: The proposed project would not contribute to a cumulatively significant impact to fire services, police protection, school services, public libraries, or public transportation.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.16: Recreation			
Threshold 4.16.1: The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.16.2: The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	No Impact	No mitigation is required.	No Impact
Cumulative Impacts related to Recreational Resources: The proposed project would not contribute to a cumulatively significant impact related to recreation.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.17: Transportation and Traffic			
Threshold 4.17.1: The proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.17.2: The proposed project would conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b).	Potentially Significant Impact	**Mitigation Measure TRA-1 Bike Lanes.** Prior to issuance of a certificate of occupancy for the proposed industrial building, the project Applicant shall retain a licensed Civil Engineer by the State of California to prepare Civil Street Improvements and Signing & Striping Plans (collectively Construction Plans) for the implementation of bike lanes in both directions on Commercentre Drive between Alton Parkway and Dimension Drive. These bike lanes on Commercentre Drive would connect the proposed project site on Enterprise Way to the existing bike lanes on Alton Parkway, which eventually connects to the Irvine Transportation Center, a multi-model transit hub including Metrolink and Amtrak commuter train services and OCTA bus services. Based on a preliminary design assessment, the Construction Plans shall include an asphalt slurry seal of Commercentre Drive to modify the existing lane striping for the addition of standard striped bike lanes and green bike markings. The project Applicant shall use these Construction Plans to obtain a Public Works Encroachment Permit to construct said improvements for bike lanes on Commercentre Drive. The construction of said improvements shall be completed per the plans and to the satisfaction of the Public Works Department. The project Applicant shall use these Construction Plans to obtain a Public Works Encroachment Permit to construct said improvements for bike lanes on Commercentre Drive.	Significant and Unavoidable Impact
Threshold 4.17.3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.17.4: The proposed project would not result in inadequate emergency access.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Cumulative Impacts related to Transportation and Traffic: The proposed project would result in a significant and unavoidable impact related to VMT which would contribute to significant and unavoidable cumulative transportation and traffic impacts.	Potentially Significant Impact	Refer to **Mitigation Measure TRA-1**.	Significant and Unavoidable Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
4.18: Tribal Cultural Resources			
Threshold 4.18.1: The proposed project would not 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).	Potentially Significant Impact	**Mitigation Measure TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities**. A. 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 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. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor 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 later of the following (1) written confirmation to the Kizh 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) prior to approval of final building permit, a determination and written notification by the Kizh 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 Kizh TCRs. **Mitigation Measure TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funeral/Non-Ceremonial).** A. Upon discovery of any TCRs, 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 Kizh monitor and/or Kizh archaeologist. 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. **Mitigation Measure TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects.** A. Native American human remains are defined in California Public Resources Code (PRC) 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed. C. Human remains and grave/burial goods shall be treated alike per California PRC Section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.	Less than Significant Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
Threshold 4.18.2: The proposed project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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.	Potentially Significant Impact	Refer to **Mitigation Measures TCR-1, TCR-2, and TCR-3**.	Less than Significant Impact
Cumulative Impacts related to Tribal Cultural Resources: The proposed project would not contribute to a cumulatively significant impact on tribal cultural resources.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.19: Utilities and Service Systems			
Threshold 4.19.1: The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.19.2: The proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.19.3: The proposed project would result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.19.4: The proposed project 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.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.19.5: The proposed project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Cumulative Impacts related to Utilities and Service Systems: The proposed project would not contribute to a cumulatively significant impact on wastewater, portable water, solid waste, electricity, natural gas, or telecommunications services.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
4.20: Wildfire			
Threshold 4.20.1: The proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.20.2: The proposed project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and therefore would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Threshold 4.20.3: The proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact

Table 1.A: Summary of Project Impacts, Regulatory Compliance Measures, Mitigation Measures, and Level of Significance after Mitigation

Environmental Impact	Level of Significance Prior to Mitigation	Regulatory Compliance Measures and Mitigation Measures	Level of Significance After Mitigation
Threshold 4.20.4: The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff post-fire slope instability, or drainage changes.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact
Cumulative Impacts related to Wildfire: The proposed project and all related projects are required to adhere to City, State, and federal regulations designed to reduce and/or avoid impacts related to wildfire. With compliance with these regulations, the proposed project would not contribute to a cumulatively significant impact related to wildfire.	Less than Significant Impact	No mitigation is required.	Less than Significant Impact

2.0 INTRODUCTION

This Environmental Impact Report (EIR) has been prepared to evaluate environmental impacts associated with the proposed IPT Enterprise Business Center LLC Project (project) in Lake Forest, California. The City of Lake Forest (City) is the "public agency which has the principal responsibility for carrying out or approving the project"[1] and, as such, is the "Lead Agency" for the proposed project under the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.). CEQA requires the Lead Agency to consider the information contained in the EIR prior to taking any discretionary action on the proposed project. This EIR is intended to serve as an informational document to be considered by the City and any Responsible Agencies during deliberations on the proposed project. PRC Section 21069 defines a "Responsible Agency" as a public agency other than the Lead Agency that has responsibility for carrying out or approving a project. The approvals and permits associated with the proposed project are detailed in Chapter 3.0, Project Description.

The City, as Lead Agency, determined that the proposed project may have a significant effect on the environment and that an EIR would be required to fully evaluate potential adverse environmental impacts that may result from development of the proposed project. As a result, this EIR has been prepared in accordance with CEQA and the *State CEQA Guidelines* (California Code of Regulations [CCR], Title 14, Section 15000 et seq.). This EIR also complies with the procedures established by the City for the implementation of CEQA.

Questions regarding the preparation of this document and City review of the proposed project should be referred to the following person:

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Lake Forest, CA 92630
Email: EnterpriseProjects@lakeforestca.gov
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2.1 PURPOSE AND TYPE OF EIR/INTENDED USES OF THE EIR

This EIR has been prepared to evaluate potential environmental impacts that could result from implementation of the proposed project. As the Lead Agency, the City has the principal responsibility for approving the proposed project. In that capacity, the City has decided to prepare this EIR and, after the public review process, will decide whether to certify the Final EIR.

The City and any Responsible Agencies have the authority to make decisions on discretionary actions relating to development of the proposed project. As stated previously, this EIR is intended to serve as an informational document to be considered by the City and Responsible Agencies during deliberations on the proposed project. This EIR evaluates a reasonable worst-case scenario of

[1] As defined in Public Resources Code Section 21067.

potential impacts associated with the proposed project and identifies feasible mitigation and alternatives for any identified potentially significant impacts.

This EIR will serve as a Project EIR pursuant to *State CEQA Guidelines* Section 15161. According to Section 15161 of the *State CEQA Guidelines*, a Project EIR is appropriate for specific development projects and should examine the environmental impacts that could result from all phases of the project, including planning, construction, and operation.

As the Lead Agency for the proposed project under CEQA, the City must consider the information contained in the Final EIR prior to taking any discretionary action with respect to the proposed project. This EIR provides information to the Lead Agency and other public agencies, the general public, and decision-makers regarding the potential environmental impacts from construction and operation of the proposed project. The purpose of the public review of this EIR is to evaluate the adequacy of the environmental analysis in terms of compliance with CEQA. *State CEQA Guidelines* Section 15151 states the following regarding standards from which adequacy is judged:

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

PRC Section 21002.1(a) states:

> "The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided."

An EIR is the most comprehensive form of environmental documentation identified in CEQA and the *State CEQA Guidelines* and provides the information needed to assess the environmental consequences of a proposed project. EIRs are intended to provide an objective, factually supported, full-disclosure analysis of the environmental consequences associated with a proposed project that has the potential to result in significant, adverse environmental impacts.

2.2 PUBLIC REVIEW PROCESS

In compliance with CEQA and the *State CEQA Guidelines,* the City has taken steps to promote opportunities for the public and other public agencies to participate in the environmental review process. The City conducted the scoping process, issued a Notice of Preparation (NOP), and determined that an EIR was required to evaluate the potentially significant environmental effects of the proposed project and related actions. Additionally, a public scoping session was conducted, as discussed below.

2.2.1 Notice of Preparation

On March 20, 2024, an NOP for the proposed project was distributed by the City via the State Clearinghouse (SCH). The SCH issued a project number for this EIR (SCH No. 2024030755). On April 15, 2024, the City extended the review period until May 15, 2024. In accordance with *State CEQA Guidelines* Section 15082, the NOP was circulated to the agencies and individuals listed in Appendix A and was posted at the Orange County Clerk's Office for a minimum period of 30 days, during which time written comments were solicited pertaining to environmental issues/topics that this EIR should evaluate. The NOP was also made available for public review at the City's Planning Department and on the City's website during the review period. Responses to the NOP were received from the following agencies:

- Bureau of Environmental Justice
- California Department of Transportation (Caltrans)
- California Native American Heritage Commission (NAHC)
- City of Irvine
- South Coast Air Quality Management District (SCAQMD)

The City received a total of 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR.

2.2.2 Scoping Meeting and Areas of Controversy

The City held public scoping meetings at Lake Forest City Hall on Wednesday, April 3, 2024, and Wednesday April 24, 2024, from 6:00 p.m. to 7:00 p.m., to present the proposed project and to solicit input from interested parties regarding environmental issues that should be addressed in this EIR. The material environmental issues and concerns raised in response to the NOP or at the scoping meeting included:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gases
- Hazards and Hazardous materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Transportation
- Tribal Cultural Resources
- Wildfire

Please note that this is not an exhaustive list of areas of controversy, but rather key issues that were raised during the scoping process. This EIR addresses each of these areas of concern or controversy in detail, examines project-related and cumulative environmental impacts, identifies significant adverse environmental impacts, and proposes mitigation measures and/or alternatives designed to reduce or eliminate potentially significant impacts. Appendix A to this EIR includes the NOP and copies of written comments received in response to the NOP, comments received at the Public Scoping Meeting, as well as written comment cards received in response to the public scoping meeting. Appendix A also includes a comment summary.

2.2.3 EIR Public Review Period

This EIR is being distributed to numerous public agencies and other interested parties for review and comment. This EIR is also available at the following locations and on the City's website for the proposed project (https://www.lakeforestca.gov/en/environmental):

City of Lake Forest
Community Development Department
Planning Division
100 Civic Center Drive
Lake Forest, CA 92630

Foothill Ranch Library
27002 Cabriole
Foothill Ranch, CA 92610

El Toro Library
24672 Raymond Way
Lake Forest, CA 92630

All comments received from agencies and individuals on this EIR will be accepted during the public comment period, which will not be less than 45 days, in compliance with CEQA and the *State CEQA Guidelines*. All comments on this EIR should be sent to the following City contact person:

Amy Stonich, Assistant Director of Community Development
City of Lake Forest Community Development Department
100 Civic Center Drive
Lake Forest, CA 92630
Email: EnterpriseProjects@lakeforestca.gov
Phone: (949) 461-3479

Following the close of the public comment period, the City will prepare written responses to all written comments received during the public comment period and will compile these comments and responses, together with any text changes to this EIR, into a Final EIR that includes all of the information required pursuant to *State CEQA Guidelines* Section 15132. The Final EIR will be provided to all public agencies that submitted comments on this EIR at least 10 days prior to certification of the Final EIR. The Final EIR shall consist of the EIR or a revision of the draft; comments and recommendations received on the EIR either verbatim or in summary; a list of persons, organizations, and public agencies commenting on the EIR; the response of the City to significant environmental points raised in the review and consultation process and in comments submitted on the Draft EIR; and any other information added by the City.

The City will make findings regarding the extent and nature of the impacts as presented in the Final EIR. The Final EIR must be certified as complete by the City Council prior to making a decision on the requested entitlements for the proposed project. Public input is encouraged at all public hearings regarding the proposed project.

2.3 SCOPE OF THIS EIR

As required by *State CEQA Guidelines* Section 15128, this EIR must identify the effects of the proposed project that are determined to be significant. Environmental topics addressed in this EIR include: Aesthetics, Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Paleontological Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation and Traffic, Tribal Cultural Resources, Utilities, and Wildfire.

2.4 FORMAT OF THE EIR

This EIR contains the information and analysis required by CEQA and the *State CEQA Guidelines*, including Sections 15122–15131, and is generally organized as follows:

- **Chapter 1.0: Executive Summary.** Chapter 1.0 contains the Executive Summary of this EIR, which lists all significant project impacts, feasible mitigation measures that have been recommended to reduce any significant impacts of the proposed project, and the level of significance of each impact following feasible mitigation. The summary is presented in a table format.

- **Chapter 2.0: Introduction.** Chapter 2.0 contains a discussion of the purpose and intended use of this EIR.

- **Chapter 3.0: Project Description.** Chapter 3.0 includes a discussion of the proposed project's geographical setting, the project site's previous uses, and the proposed project's objectives, characteristics, components, and construction phases, as well as the anticipated discretionary and ministerial permits and approvals for the proposed project.

- **Chapter 4.0: Environmental Impact Analysis.** Chapter 4.0 includes an analysis of the proposed project's environmental impacts. It is organized into the following topical sections: aesthetics, agricultural resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service system, and wildfire.

  The environmental setting discussions describe the "existing conditions" of the environment on the project site and in the vicinity of the site as they pertain to the environmental issues being analyzed (*State CEQA Guidelines* Section 15125).

  The impact discussions identify and focus on the potentially significant environmental effects of the proposed project. The direct and indirect effects of the proposed project on the environment are identified and described, giving due consideration to both the short-term and long-term effects, as necessary (*State CEQA Guidelines* Section 15126.2[a]).

  Chapter 4.0 also includes within the analysis of each environmental topic a discussion of the cumulative effects of the proposed project when considered in combination with other projects

causing related impacts, as required by *State CEQA Guidelines* Section 15130. Cumulative impacts are based on the build out of the proposed project and the known relevant approved and proposed projects in the surrounding area.

The discussions of mitigation measures identify and describe feasible measures that could minimize or lessen potentially significant impacts for each significant environmental effect identified in this EIR (*State CEQA Guidelines* Section 15126[e]). The levels of significance before and after mitigation are provided. Significant unavoidable adverse effects are identified where mitigation is not expected to reduce the effects to less than significant levels.

- **Chapter 5.0: Alternatives to the Proposed Project.** In accordance with CEQA, the alternatives discussion in Chapter 5.0 describes a reasonable range of alternatives that could feasibly attain the basic objectives of the proposed project and are capable of eliminating or substantially reducing any of the proposed project's significant unavoidable adverse environmental effects or reducing them to a less than significant level. The alternatives analyzed in Chapter 5.0 include a No Project Alternative, Previous Use and Associated Site Development Permit Alternative, and a Reduced Project Alternative.

- **Chapter 6.0: Other CEQA Considerations.** Chapter 6.0 contains discussions on the following topics as required by *State CEQA Guidelines* Section 15126: (1) growth-inducing impacts of the proposed project; and (2) whether there are any significant adverse environmental impacts associated with the proposed project for which either no mitigation or only partial mitigation is feasible.

- **Chapter 7.0: Mitigation Monitoring and Reporting Program (MMRP).** Chapter 7.0 contains the MMRP.

- **Chapter 8.0: List of Preparers.** Chapter 8.0 provides the organizations and persons contacted during preparation of this EIR, the EIR preparers and technical report authors, and other experts involved in the preparation of this EIR.

- **Chapter 9.0: References.** Chapter 9.0 provides the references used in this EIR.

2.5 INCORPORATION BY REFERENCE

An EIR may incorporate by reference all or portions of another document that is a matter of public record or is generally available to the public, consistent with *State CEQA Guidelines* Section 15150. Informational details from the documents that have been incorporated by reference are summarized in the appropriate sections of this EIR, along with descriptions regarding how the public may review these documents. All documents are available for review at the City of Lake Forest, Planning Division. These documents include:

- City of Lake Forest General Plan (available online at: https://www.lakeforestca.gov/en/departments/community-development/planning/planning-documents)

- City of Lake Forest Municipal Code (available online at: https://ecode360.com/LA4954/)

3.0 PROJECT DESCRIPTION

This Draft Environmental Impact Report (EIR) has been prepared pursuant to the California Environmental Quality Act (CEQA) to evaluate the environmental impacts that may result from construction and operation of the proposed IPT Enterprise Business Center LLC Project (proposed project) at 26200 Enterprise Way (project site) in Lake Forest, California. The proposed project would result in the demolition of an existing 144,906-square-foot (sq ft), two-story office/industrial building and redevelopment, construction and operation of a 35-foot tall, 165,803 sq ft industrial building with proposed interior mezzanine space. The City of Lake Forest (City) is the Lead Agency for review of the proposed project under CEQA. A description of the proposed project, including its location, objectives, and required approvals, is provided below.

3.1 REGIONAL LOCATION

The project site is located at 26200 Enterprise Way in the north-central portion of Lake Forest in Orange County, California. As shown on Figure 3-1, Project Vicinity, regional access to the project site is provided by State Route 241 (SR-241), which is located approximately 0.7 mile north of the project site, and Interstate 5 (I-5), which is located approximately 3.75 miles southwest of the project site.

3.1.1 Project Vicinity and Surrounding Land Uses

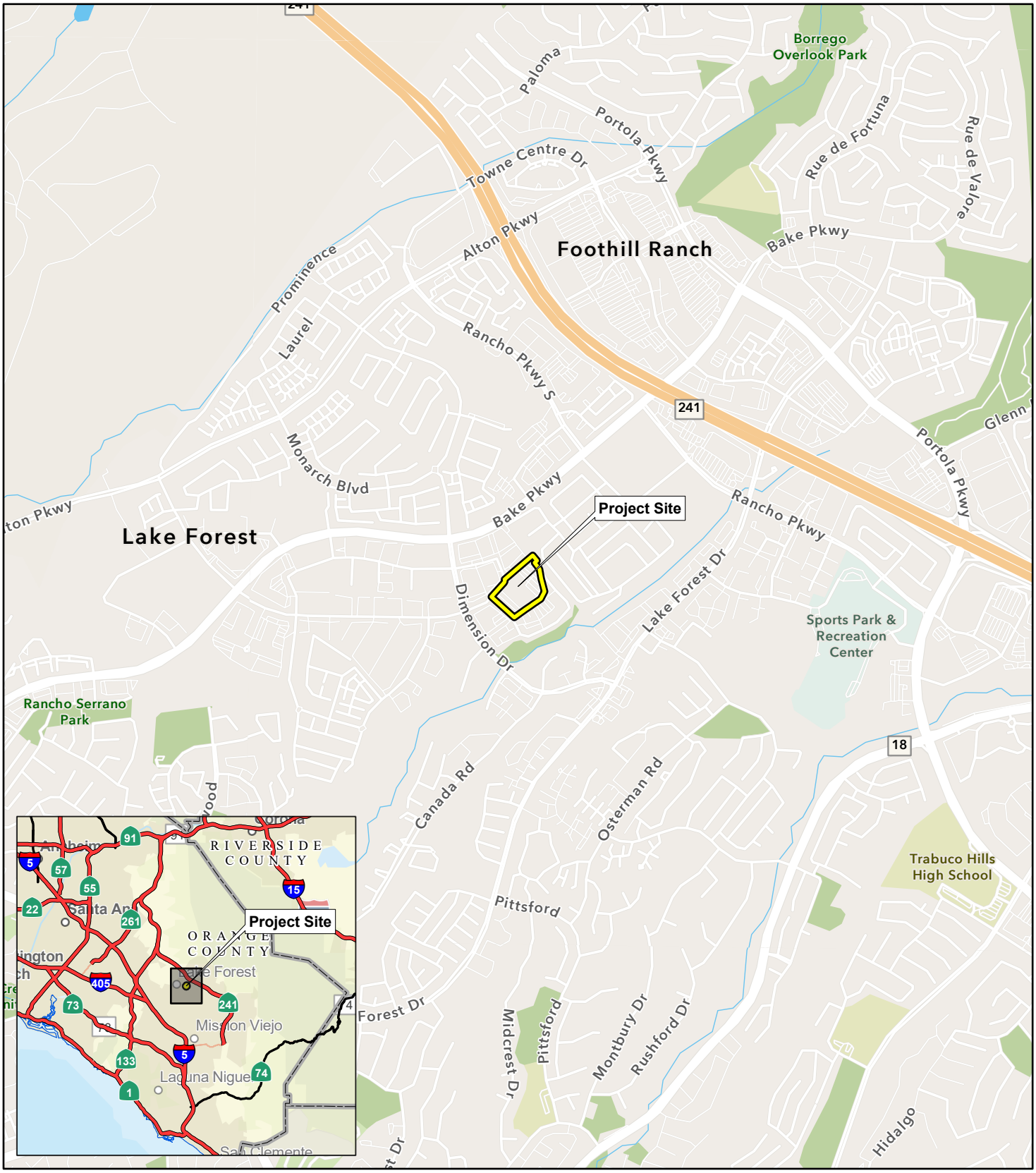
There is an existing 144,906 sq ft, two-story tilt-up office/industrial building on the 8.83-acre project site (Assessor's Parcel Number [APN] 610-401-06), which was previously used as an office, manufacturing, and research testing facility by Panasonic Avionics. Following Panasonic Avionics vacating the building, the building has remained unoccupied. As shown on Figure 3-2, Project Location, the areas surrounding the project site consist of a mix of land uses, including industrial and residential uses. The project site is bordered to the north, south, and west by existing industrial buildings that include a mix of permitted uses, including office, manufacturing, and warehouse uses. The recently constructed Meadows Residential Development (formerly the Nakase Nursery site) is to the northeast/east of the project site. Local access to the project site is provided by Enterprise Way, which is accessed from Dimension Drive. Other surrounding main arterial streets include the following: Bake Parkway is approximately 0.11 mile north, Lake Forest Drive is approximately 0.4 mile south, and SR-241 is approximately 0.7 mile north of the project site.

3.2 ENVIRONMENTAL SETTING

3.2.1 Existing Project Site Conditions

In its existing condition, the project site is developed with a two-story office/industrial building totaling approximately 144,906 sq ft (previously occupied by Panasonic Avionics). The project site also consists of surface parking and associated landscaping. Figure 3-3, Existing Conditions, shows existing conditions on the project site.

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Project Site

FIGURE 3.1

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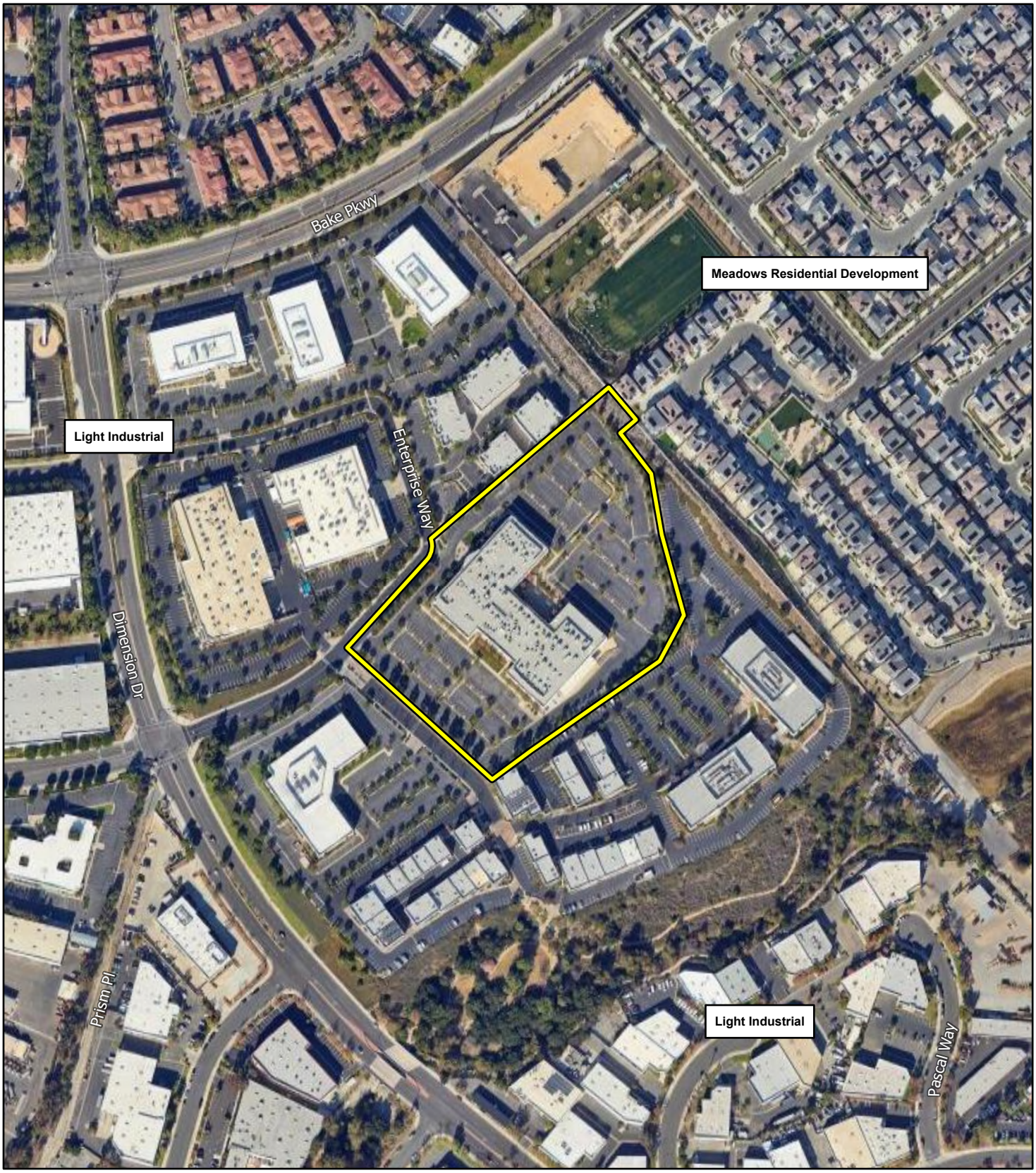
SOURCE: Esri Community Map (2023)

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IPT Enterprise Business Center LLC Project

Project Vicinity

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Project Site

FIGURE 3.2

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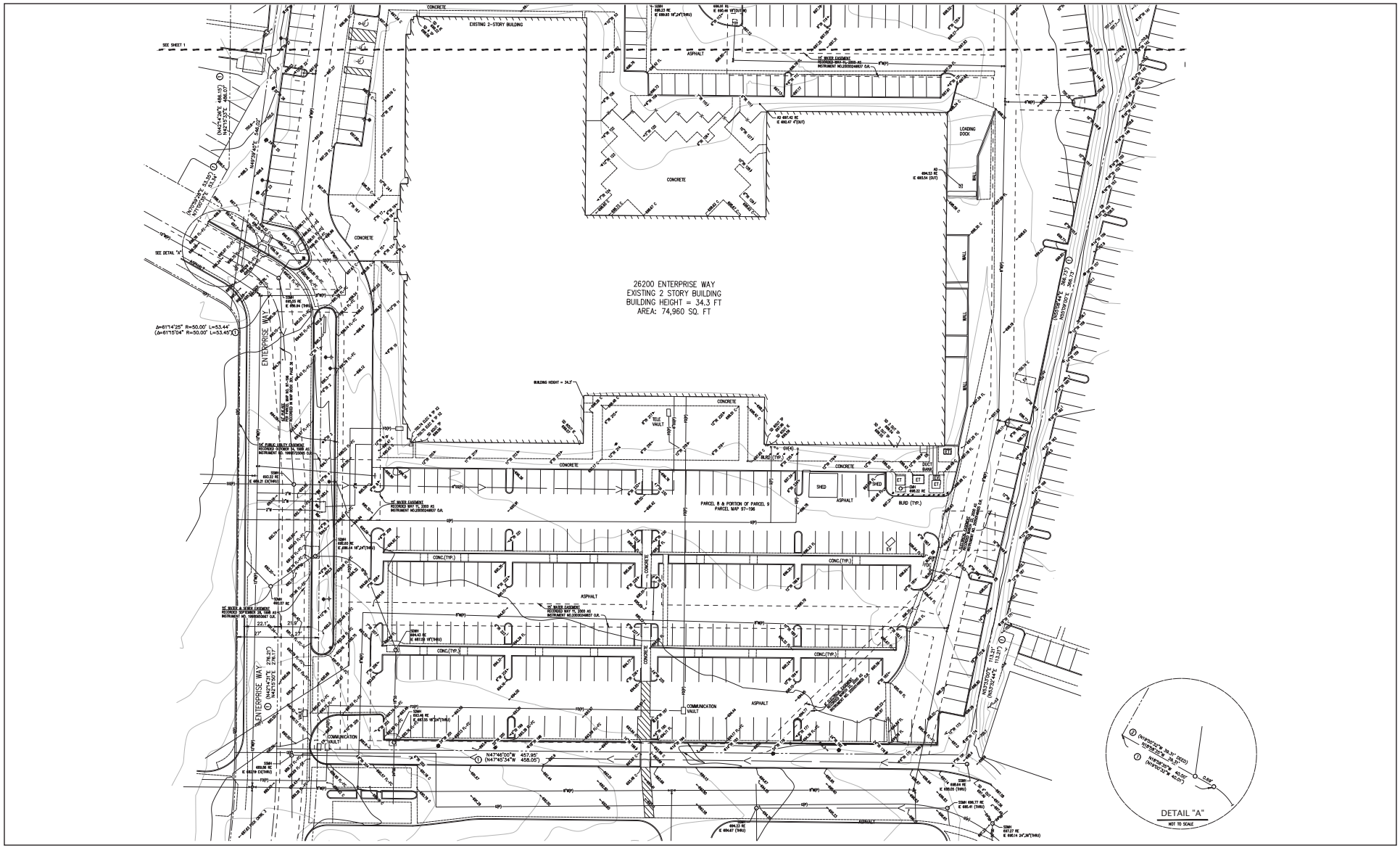
SOURCE: Google Maps (2023)

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IPT Enterprise Business Center LLC Project

Project Location

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FIGURE 3.3

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SOURCE: Kier+Wright, April 2023

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IPT Enterprise Business Center LLC Project

Existing Conditions

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The project site is generally flat; however, there are north- and west-facing slopes along the eastern and southern boundaries of the site. These slopes ascend 10 to 15 feet from the project site to the adjacent property. A concrete-lined drainage swale is near the midpoint of the slope. Vegetation covers the remaining areas of the slopes.

Access to the project site is currently provided via two driveways on Enterprise Way and a shared drive aisle that connects to the adjacent property at the northeast corner of the site.

3.2.2 General Plan Land Use Designations

The project site currently has a Lake Forest General Plan land use designation of Light Industrial. The Light Industrial designation is intended to provide for a variety of light industrial uses.

Permitted uses include wholesale businesses, light manufacturing and processing, research and development uses, warehousing and storage, distribution and sales, high technology production, ancillary retail sales, and related uses. The proposed project is consistent with the Light Industrial land use designation. No General Plan Amendment is required for the proposed project.

3.2.3 Current Zoning

The project site is located within the Pacific Commercentre Planned Community and has a zoning designation of LI – Light Industrial. The LI Zoning District is intended to provide for a broad range of industrial uses as specified in the City's Municipal Code Section 9.72.090 (Non-Residential Land Use Matrix), column "I". Permitted uses include, but are not limited to, a variety of office, manufacturing, and warehouse uses. Pursuant to the zoning designation, the construction of the proposed industrial building requires City approval of a Site Development Permit.

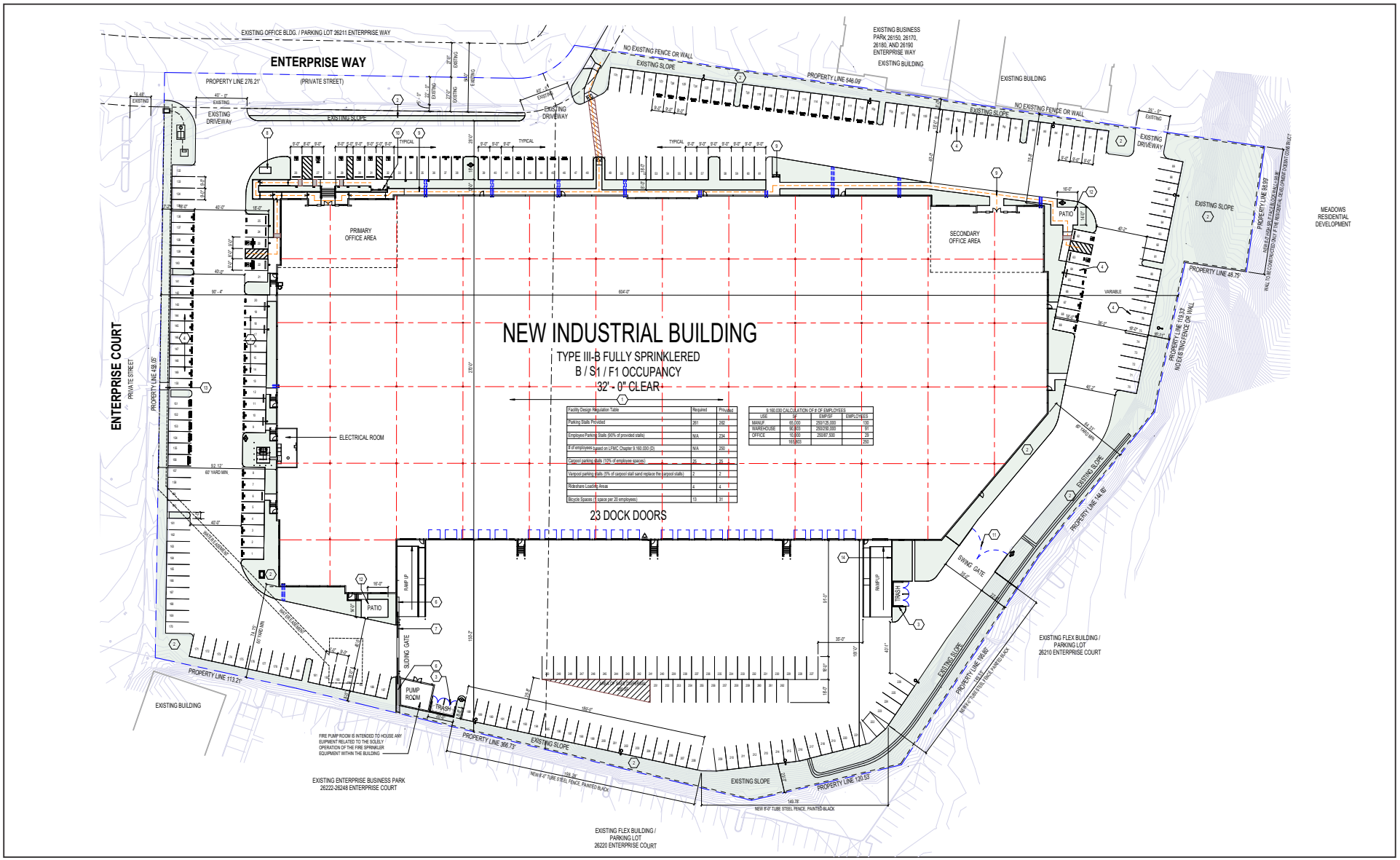
3.2.4 Project Site History

With the exception of the northeast portion of the project site, which appears to have been utilized for orchards from approximately 1938 to 1952, the project site was vacant and undeveloped land from at least 1930 until development of the existing structure in 1999. The following occupants have been associated with the existing office/industrial building: Matsushita Avionics Systems (2000–2005), and Panasonic Avionics Corporation (2006–2021). The existing building is currently vacant.

3.3 PROJECT CHARACTERISTICS

The proposed project involves the demolition of the existing 144,906 sq ft, two-story building and redevelopment of the property with a new use that is permitted under the site's zoning designation. In place of the building to be demolished, a new 35-foot-tall, 165,803 sq ft tilt-up concrete industrial building will be redeveloped, constructed and operated as shown on Figure 3-4, Conceptual Site Plan. The project includes a gated truck loading area, truck and auto parking spaces, and new landscaping throughout the site. At this time, the future tenant remains undetermined.

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FIGURE 3.4

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SOURCE: RGA Architects

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IPT Enterprise Business Center LLC Project

Conceptual Site Plan

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Although the tenant has not been determined yet, the proposed project includes a mix of office, manufacturing, and warehouse space. Approximately 10,000 sq ft could serve as office space, with up to 65,000 sq ft proposed for manufacturing use, and the remainder to be utilized for warehouse use. A maximum of 23 usable dock high doors, a gated truck loading area, a 16-foot-(ft) high, 65 ft long wall located at the eastern end of the loading docks, west of the proposed trash enclosure, and up to 262 parking spaces for passenger vehicles would be provided for this proposed use. Additionally, the project includes the following off-site improvements which would be constructed by the project developer prior to occupancy of the proposed industrial building to enhance public safety and address concerns related to large truck turning movements:

- **Intersection of Bake Parkway and Commercentre Drive:** Modifications would be made to the traffic signal to accommodate protected eastbound and westbound left-turn phasing (from split phasing). Lane geometrics would be modified for the westbound approach to accommodate dual left-turn lanes and a shared through right-turn lane. Additionally, modifications would be made to the traffic signal equipment.

- **Intersection of Bake Parkway and Dimension Drive:** Modifications would be made to the median to accommodate a 430-foot westbound left-turn lane. Additionally, modifications would be made to the traffic signal equipment.

- **Intersection of Dimension Drive/Commercentre Drive – Enterprise Way:** Modifications would be made to the traffic signal to accommodate protected eastbound and westbound left-turn phasing (from permissive phasing). The radius of the southeast corner at this intersection would be modified to accommodate wheelbase-67 (WB-67) truck turns (northbound right turn). Additionally, modifications would be made to the traffic signal equipment.

- **Intersection of Lake Forest Drive and Dimension Drive:** Modifications would be made to accommodate a 250-foot northbound left-turn lane and a 205-foot eastbound left-turn lane. Additionally, modifications would be made to the traffic signal equipment.

- **Intersection of Lake Forest Drive and Rancho Parkway:** Modifications would be made to accommodate a new 225-foot northbound right-turn lane, a 470-foot northbound left-turn lane, and a 440-foot southbound left-turn lane. Additionally, modifications would be made to the traffic signal equipment.

The potential environmental impacts and mitigation measures associated with implementation of these off-site improvements are being evaluated within this EIR.

3.4 BUILDING AND SITE DESIGN

3.4.1 Architecture

The proposed building would be 35 feet tall (maximum) and would be constructed of architecturally enhanced tilt-up concrete panels. The building is proposed to be painted different shades of gray with a blue accent color. The building's main entrances would be emphasized with vertical and horizontal bands, windows, and decorative light sconces. Building articulation would be provided at the entrances by changes in the façade planes and height variation in roof line. The building architecture

utilizes scoring, color transitions, and windows to provide articulation to long façades of the building. The truck doors, which would be painted to match the building, would be located on the south elevation of the building, and would not be visible from the surrounding streets nor from residential properties. The overall building treatment and façade will be compatible and consistent with the remainder of the existing, surrounding industrial park.

3.4.2 Impervious Surface Area

Existing conditions on the project site include 1.6 acres (19 percent) of pervious surface area and 6.8 acres (81 percent) of impervious surface area[1]. The proposed project would decrease the pervious surface area to 0.9 acres (11 percent) and increase impervious surface area to 7.5 acres (89 percent).

3.4.3 Landscaping

As shown on Figure 3-5, Conceptual Landscape Plan, landscaping on the project site would be provided in accordance with the requirements outlined in the Pacific Commercentre Planned Community District Regulations and the Citywide Design Guidelines.[2,3] Landscaping would total approximately 17.29 percent of the gross project site (66,559 sq ft). A variety of trees, shrubs, and groundcover surrounding the proposed industrial building is proposed. The existing landscaping around the east, west, and south perimeter of the project site would remain. Landscaping along the north perimeter of the project site would be enhanced to provide additional screening from the Meadows Residential Development.

3.4.4 Lighting

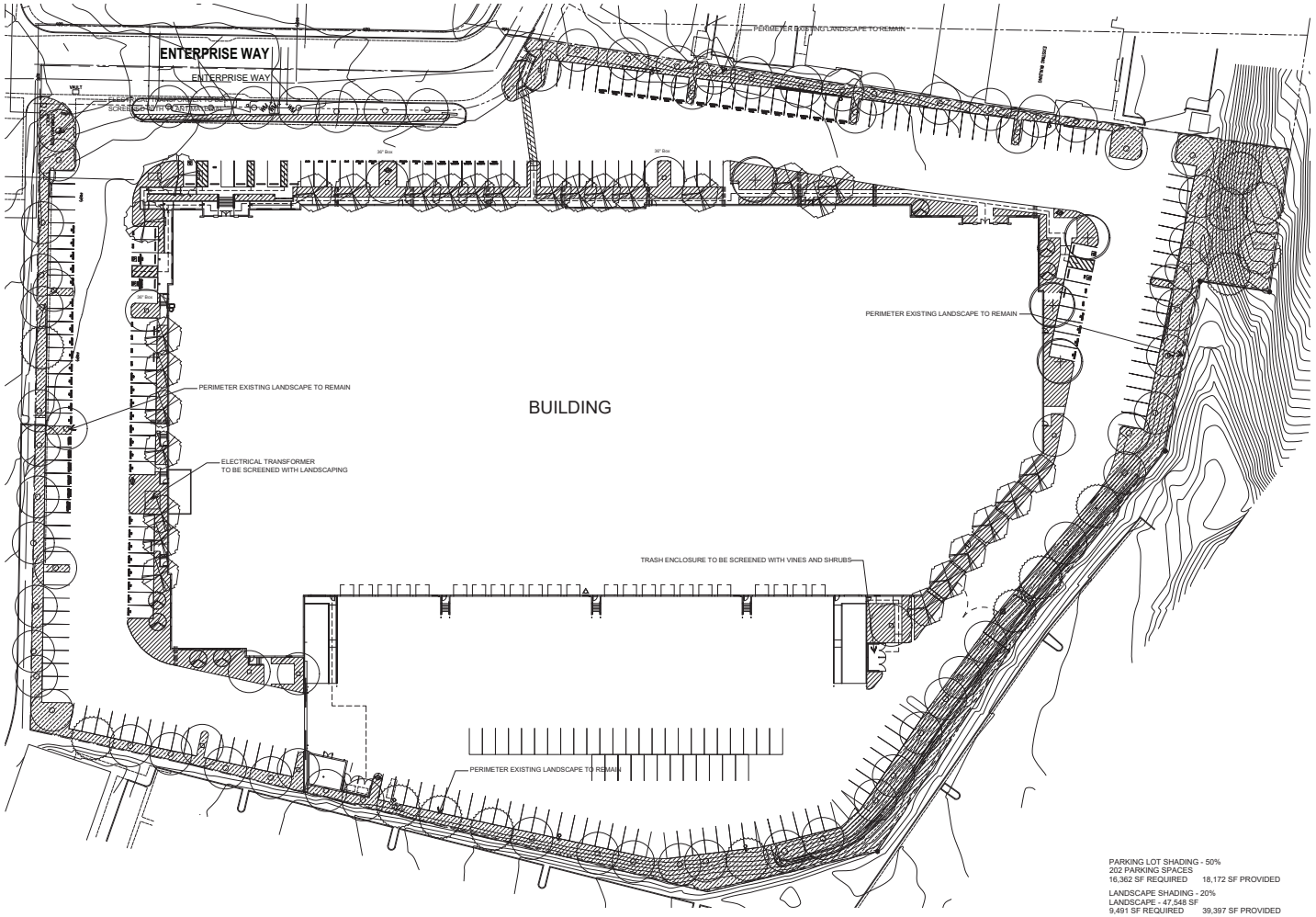
Proposed on-site lighting includes, but is not limited to, streetlights, parking lot lights, and accent lighting on buildings. All lighting would be light emitting diode (LED) that is either wall or pole mounted. Both the wall-mounted and pole-mounted fixtures would be downlit and would be provided with cut-off lenses as required to prevent light spillage onto adjacent sites. Access entry light wall sconces would be located along the northern wall of the building facing Enterprise Way, in the east corner of the southern wall of the building facing 20220 Enterprise Court parking lot, along the western wall of the building facing Enterprise Court Drive, and in the west corner of the eastern wall of the building facing 26221 Enterprise Court parking lot.

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1 Street easements within the 8.83-acre project site have been excluded from the project's drainage area. Therefore, for the purposes of the Water Quality analysis within this EIR, the project's drainage area totals 8.4 acres.

2 Orange County Planning Commission. 1987. *Pacific Commercentre Planned Community District Regulations* {ZC87-2P). Approved June 23, 1987. Website: https://www.lakeforestca.gov/sites/default/files/lake-forest/departments/PC%206%20-%20Pacific%20Commercentre_202104071618166555.pdf (accessed August 2024).

3 City of Lake Forest. n.d. *Citywide Design Guidelines.* Website: https://www.lakeforestca.gov/sites/default/files/lake-forest/departments/Citywide%20Design%20Guidelines%20(PDF)_201502101257198032.pdf (accessed August 2024).



PARKING LOT SHADING - 50%
202 PARKING SPACES
16,362 SF REQUIRED 18,172 SF PROVIDED

LANDSCAPE SHADING - 20%
LANDSCAPE - 47,548 SF
9,491 SF REQUIRED 39,397 SF PROVIDED

HARDSCAPE SHADING - 20%
LANDSCAPE - 6,502 SF
1,300 SF REQUIRED 2,195 SF PROVIDED

PLANTING LEGEND

TREES

SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	WUCOLS	REMARKS
	Koelreuteria bipinnata Chinese Flame Tree	36" Box	2	M	Multi
	Lagerstroemia i 'Muskogee' Crape Myrtle	24" Box	7	M	Multi
	Pinus eldarica	48" Box 36" Box	3 10	L	Standard
	Pistacia chinensis Chinese Pistache	24" Box	4	L	Standard
	Rhus lancea African Sumac	24" Box 36" Box	7 4	L	Standard
	Tristania conferta Brisbane Box	15 Gal	27	M	Standard
	Existing Tree to Remain				

SHRUBS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS	SPACING
	Acca sellowiana Pineapple Guava	5 Gal	L	3' OC
	Callistemon 'Little John' Dwarf Bottle Brush	5 Gal	L	3' OC
	Cistus 'Sunset Pink' Sunset Pink Rockrose	5 Gal	L	3' OC
	Elaeagnus pungens Silverberry	5 Gal	L	4' OC
	Ligustrum j. Texanum Texas Privet	5 Gal	M	3' OC
	Rhaphiolepis i. 'Springtime' Indian Hawthorn	5 Gal	L	3' OC
	Rosmarinus o. 'Tuscan Blue' Rosemary	5 Gal	L	3' OC
	Salvia greggii Autumn Sage	5 Gal	L	3' OC
	Salvia leucantha Mexican Sage	5 Gal	L	4' OC
	Westringia fruticosa Coast Rosemary	5 Gal	L	5' OC

ACCENTS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS	SPACING
	Agave 'Blue Flame' Blue Flame Agave	5 Gal	L	3' OC
	Agave 'Blue Glow' Blue Glow Agave	5 Gal	L	3' OC
	Agave victoria-reginae Agave	5 Gal	L	3' OC
	Aloe striata Coral Aloe	1 Gal	L	2' OC
	Dasylirion wheeleri Desert Spoon	5 Gal	L	4' OC
	Echeveria 'Ruffles' Ruffles Echeveria	5 Gal	L	1' OC
	Hesperaloe parviflora Red Yucca	5 Gal	L	3' OC

GROUNDCOVER

SYMBOL	BOTANICAL/COMMON NAME	SIZE	SPACING	WUCOLS
	Hemerocallis hybridus-Yellow Yellow Day Lily	1 Gal	24" O.C.	M
	Lonicera j. 'Halliana' Hall's Honeysuckle	1 Gal	48" O.C.	L
	Muhlenbergia capillaris Pink Muhly	1 Gal	36" O.C.	L
	Rosa 'Flower Carpet' -Red Red Flower Carpet Rose	1 Gal	30" O.C.	L
	Rosmarinus o. 'Huntington Carpet' Prostrate Rosemary	1 Gal	48" O.C.	L
	Sesleria autumnalis Moor Grass	1 Gal	18" O.C.	M
	Trachelospermum jasminiodes Star Jasmine	1 Gal	24" O.C.	M

EXISTING LANDSCAPE

SYMBOL	BOTANICAL/COMMON NAME	SIZE	SPACING	WUCOLS
	Existing Landscape			

NOTE: LANDSCAPE PLANS WILL COMPLY WITH THE CITY WATER EFFICIENCY LANDSCAPE ORDINANCE

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FIGURE 3.5

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SOURCE: Hunter Landscape

IPT Enterprise Business Center LLC Project

Conceptual Landscape Plan

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3.4.5 Signage

Proposed signage would include future tenant signage on the northern wall of the proposed building facing Enterprise Way. All signage within the project site would be in accordance with Chapter 9.164, Signs, of the Lake Forest Zoning Code.

3.4.6 Police and Fire Access

Fire and police access would be accommodated by the proposed vehicle access and circulation design. Per Lake Forest Municipal Code Chapter 8.24, California Fire Code, Section 903.2, an automatic sprinkler system would be installed throughout the proposed structures on the project site. The proposed project also includes the installation of seven fire hydrants on site. Four of these fire hydrants would replace existing fire hydrants that are being relocated on the site.

The Orange County Fire Authority (OCFA) provides fire protection and emergency services throughout Lake Forest. OCFA requires all developers to enter into a secured fire protection agreement with OCFA to ensure the availability of adequate fire protection services. The agreements specify a developer's pro-rata fair-share funding for capital improvements necessary to establish and maintain adequate fire protection facilities, equipment, and personnel.

3.5 CIRCULATION, ACCESS, AND PARKING

3.5.1 Vehicular Access

Vehicular access to the project site would continue to be provided via two existing driveways on Enterprise Way and an existing shared drive aisle that connects to the adjacent property at the north corner of the site.

Truck circulation would be accommodated from the west and east sides of the building. Loading docks would be located on the southwest side of the proposed building.

3.5.2 Pedestrian Access

There is an existing sidewalk on the north side of Enterprise Way. There is also an existing striped crosswalk across Enterprise Way that leads to an accessible ramp near the northeasterly driveway of the site. The crosswalk leads to the on-site accessible path of travel. The on-site accessible path of travel is proposed through the parking lot and leads to a paved walkway along the north side of the building, which leads to the primary office area in the northwest corner of the building and the secondary office area in the northeast corner of the building.

3.5.3 Parking

The City's Zoning Code (Chapter 9.168, Off-Street Parking) establishes parking requirements for industrial uses, and the proposed project would be subject to the City's parking requirements. Per the City's parking requirements, a total of 261 total parking spaces would be required for the proposed project. As currently designed, the proposed project would include 262 parking spaces around the perimeter of the proposed structure. Of the 262 parking spaces, 8 spaces would be designated as accessible parking stalls, 201 spaces would be standard stalls, 53 spaces would be electric vehicle (EV) capable, 14 spaces would be electric vehicle supply equipment (EVSE) designated, 1 space would be

EVSE van accessible, and 1 space would be EVSE standard accessible. In compliance with the 2022 California Green Building Standards Code (January 1, 2023), bike racks (31 spaces total) would also be provided on site. Exterior bicycle racks would be provided along the northwest corner of the building and directly west of the parking stalls along the northern perimeter of the building. Additional indoor bicycle storage/racks would be provided on the west side of the first floor of the building, south of the proposed electrical room.

3.6 INFRASTRUCTURE IMPROVEMENTS

The project site is served by all major utilities (e.g., water, wastewater, and electricity) in the existing condition. The proposed project infrastructure components to be implemented would require connections to existing off-site infrastructure systems. These systems, which consist of water, sanitary sewer, and storm water drains, would be constructed on site and would be fully provided and maintained by the property owner. All on-site systems would connect to existing infrastructure in Enterprise Way. The following infrastructure improvements would serve the future development included in the proposed project:

- **Water:** The project site receives domestic and recycled water service from the Irvine Ranch Water District (IRWD). The project site has an existing private on-site water system that connects to a 12-inch-diameter water main in Enterprise Way. The existing on-site water distribution system would be removed and replaced with new water lines that would use the existing water connection to the water main in Enterprise Way. All connections to the existing water lines would be reviewed and approved by the City's Public Works Department and IRWD, as applicable. New water lines and the associated water meter(s) would also be approved by IRWD.

- **Sewer Service:** As in the existing condition, wastewater from the project site would be treated by the IRWD. The project site currently has an on-site sewer system that connects with the existing 8-inch-diameter vitrified clay pipe (VCP) sewer in Enterprise Way. The proposed project would reuse an existing on-site sewer service lateral that connects to the sewer main in Enterprise Way. All connections to the existing wastewater lines would be reviewed and approved by the City's Public Works Department and IRWD, as applicable.

- **Dry Utilities:** The project site receives electricity service from Southern California Edison (SCE). A new transformer is proposed on the northwest side of the proposed structure next to Enterprise Court. The proposed transformer would be screened by landscaping on four sides. The proposed project includes the installation of new, on-site underground gas, cable, and telephone utility lines. All electricity improvements would be completed consistent with the requirements of SCE and other applicable dry utility providers.

- **Storm Water Best Management Practices (BMPs):** The proposed project would include three on-site modular wetland systems placed throughout the site to meet treatment requirements.

- **Drainage System:** The project proposes to surface drain all runoff to modular wetland systems that will be placed around the site to capture storm water runoff and treat it prior to discharging into the public system. Storm water runoff from 8.43 acres of the 8.83 acres (approximately 95 percent) of the site would be conveyed to three underground detention basins after being

treated. Flow from the detention basin would be released in a controlled manner to reduce peak flood flows. The storm drainage would ultimately exit the site at two locations, an existing manhole at the northwest of the site to the main in Enterprise Way and to an existing manhole at the northeast of the building that carries flow to the public system.

3.7 SUSTAINABILITY FEATURES

The proposed project would be consistent with the California Green Building Standards Code (CALGreen Code) and Assembly Bill (AB) 1881 water efficient landscape requirements. Additionally, the proposed project would be consistent with California's Building Energy Efficiency Standards (Energy Code) and requirements for solar photovoltaic systems. The proposed project will be seeking Leadership in Energy and Environmental Design (LEED) certification through the applicant's LEED Volume program. Some of the features included in the design will include, but not be limited to, drought-tolerant landscaping, low-flow fixtures, high-efficiency lighting, solar, and infrastructure for EV charging. In addition, the proposed project is required by law to comply with the South Coast Air Quality Management District's (SCAQMD) Warehouse Indirect Source Rule (ISR) (Rule 2305). The ISR is designed to reduce emissions from day-to-day warehouse operations, including trucks transporting goods to and from warehouses. This rule applies to owners and operators of warehouses with at least 100,000 sq ft of indoor floor space in a single building. Warehouse operators are required to earn a certain number of points for actions and investments in clean technologies annually (called WAIRE, or Warehouse Actions and Investments to Reduce Emissions, points) depending on the number of trucks visiting their facility. Examples of actions and investments that can generate WAIRE points under this rule include acquisition and use of near-zero-emission (NZE) and zero-emission (ZE) trucks, acquisition and use of ZE yard tractors, acquisition and use of ZE fueling infrastructure for on-road vehicles, and acquisition and use of solar panels for on-site electricity generation.

3.8 PROJECT CONSTRUCTION

3.8.1 Phasing and Staging

Construction activities associated with the proposed project would include demolition of the existing structure on the project site, site preparation, grading, building construction, paving, and architectural coating activities. Construction of the proposed project would tentatively commence in January 2026 and is expected to be completed in about 1 year.

The proposed project would require the demolition of a 144,906 sq ft structure and 5.51 acres of pavement, which is expected to generate approximately 8,889 tons of material for recycling or disposal. Removal of the demolition debris is anticipated to require 879[4] hauling trips.

Construction of the proposed project would require a maximum of 13,400 cubic yards (cy) of cut and approximately 12,500 cy of fill, resulting in a net export of approximately 900 cy of material.[5] Grading

[4] LSA Associates, Inc. (LSA). 2024a. *Air Quality, Greenhouse Gas, and Energy Impact Report, IPT Enterprise Business Center LLC Project, Lake Forest, California.* August.

[5] RGA. 2023. *26200 Enterprise Use Permit Plan Set.* June 9.

is expected to require 88 haul trips, and demolition is expected to require 340 haul trips.[6] Excavation depths are expected to reach a maximum of 6 feet below ground surface (bgs).[7]

Demolition activities would involve the use of standard demolition equipment (e.g., concrete/ industrial saws, excavators, and dozers). Grading and building construction activities would involve the use of standard earthmoving equipment such as tractors, bulldozers, excavators, cranes, forklifts, scrapers, and other related equipment. Paving activities would require the use of paving equipment, and rollers and architectural coating would require the use of air compressors.

All construction equipment, including construction worker vehicles, would be staged on the project site for the duration of the construction period.

The City's Noise Ordinance (Lake Forest Municipal Code Title 11 Division II, Chapter 11.16.060, Exemptions) governs the time of day that construction work can be conducted. The Noise Ordinance exempts noise sources associated with construction, repair, remodeling, and grading provided those activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays and Saturdays, or at any time on Sunday or a legal City of Lake Forest holiday. Construction of the proposed project may occur on Saturdays but would not occur after 8:00 pm or on Sundays or holidays.

3.9 PROJECT OBJECTIVES

The following objectives have been established for the proposed project:

1. Provide a permitted land use that is consistent with the General Plan land use and zoning designation and that helps fulfill the demands of businesses and residents in the City of Lake Forest;

2. Re-envision an existing underutilized office/industrial property to build a new financially and environmentally sustainable building;

3. Re-envision an existing underutilized office/industrial property to provide a building type that is flexible and accommodating to a variety of permitted land uses to extend the useful life of the building;

4. Provide industrial development that is attractive and minimizes conflicts with the surrounding existing uses;

5. Provide employment opportunities and facilitate job-creation for the residents of Lake Forest and surrounding communities to reduce the need for members of the local workforce to commute outside the area for employment;

[6] LSA. 2025a. Op. cit.

[7] Southern California Geotechnical. 2021a. *Geotechnical Investigation Proposed Warehouse 26200 Enterprise Way, Lake Forest, California.* November 18.

6. Redevelop an underutilized site for improvement and enhanced contribution to the City of Lake Forest's fiscal benefits; and

7. Cluster land uses in proximity to other similar industrial/commercial uses and close to access points of the State highway system, such as State Route 241, to reduce traffic congestion on surface streets and reduce local air pollution emissions from vehicle sources.

3.10 REQUIRED PERMITS AND APPROVALS

3.10.1 Discretionary Actions

Development of the proposed project would require discretionary approvals by the City as the Lead Agency. The City's discretionary actions would include the following:

- **Site Development Permit 06-21-5437:** A Site Development Permit is required for new structures within the Light Industrial zoning designation per the requirements of the Pacific Commercentre Planned Community District Regulations and Lake Forest Municipal Code.

3.10.2 Other Ministerial City Actions

Ministerial permits/approvals (e.g., grading permits and building permits) would be issued by the City or other appropriate agency to allow site preparation, curb cuts (if necessary), and connections to the utility infrastructure, paving, building construction, landscaping, signage, walls and fences, and other project features subject to ministerial permits.

3.10.3 Probable Future Actions by Responsible Agencies

Because the project also involves approvals, permits, or authorization from other agencies, these agencies are "Responsible Agencies" under CEQA. Section 15381 of the *State CEQA Guidelines* defines Responsible Agencies as public agencies other than the Lead Agency that will have discretionary approval power over the project or some component of the project, including mitigation. These agencies include, but are not limited to, the agencies identified in Table 3.A, below.

Table 3.A: Probable Future Actions by Responsible Agencies

Responsible Agency	Action
Orange County Fire Authority (OCFA)	Approval of Secured Fire Protection Agreement and Fire Master Plan.
State Water Resources Control Board (SWRCB)	Applicant/Developer must submit Permit Registration Documents, including a Notice of Intent, to comply with the National Pollutant Discharge Elimination System (NPDES) North Orange County Permit (Order No. R8-2009-030 as amended by Order No. R8-2010-0062).
South Coast Air Quality Management District (SCAQMD)	The requirements of SCAQMD Rule 2305 would be applicable to the proposed project. The Applicant/Developer must submit a Warehouse Operations Notification to the SCAQMD, disclosing building and tenant information, and must submit annual documentation to SCAQMD demonstrating ongoing compliance with Rule 2305.

Source: Compiled by LSA (2025).

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4.0 EXISTING SETTING, ENVIRONMENTAL ANALYSIS, IMPACTS, AND MITIGATION MEASURES

4.1 OVERVIEW OF ENVIRONMENTAL SETTING

The proposed IPT Enterprise Business Center LLC Project (proposed project) at 26200 Enterprise Way (project site) is located in the north-central portion of Lake Forest in Orange County, California. As shown on Figure 3-1, Project Vicinity (Chapter 3.0, Project Description), regional access to the project site is provided by State Route 241 (SR-241), which is located approximately 0.7 mile north of the project site, and by Interstate 5 (I-5), which is located approximately 3.75 miles southwest of the project site.

As shown on Figure 3-2, Project Location (Chapter 3.0), the areas surrounding the project site consist of a mix of land uses, including industrial and residential. The project site is bordered to the north, south, and west by existing industrial buildings that include a mix of permitted uses, including office, manufacturing, and warehouse uses. The recently constructed Meadows Residential Development (formerly the Nakase Nursery site) is to the northeast/east of the project site. Local access to the project site is provided by Enterprise Way, which is accessed from Dimension Drive. Other surrounding main arterial streets include the following: Bake Parkway is approximately 0.11 mile north, Lake Forest Drive is approximately 0.4 mile south, and SR-241 is approximately 0.7 mile north of the project site.

With the exception of the northeast portion of the project site, which appears to have been utilized for orchards from approximately 1938 to 1952, the project site was vacant and undeveloped land from at least 1930 until development of the existing structure in 1999.

In its existing condition, the project site is developed with a two-story office/industrial building totaling approximately 144,906 square feet (sq ft). The following occupants have been associated with the existing office/industrial building: Matsushita Avionics Systems (2000–2005), and Panasonic Avionics Corporation (2006–2021). The existing building is currently vacant. The project site also consists of surface parking and associated landscaping. Figure 3-3, Existing Conditions (Chapter 3.0), shows existing conditions on the project site. Access to the project site is currently provided via two driveways on Enterprise Way and a reciprocal access on the north corner of the site to the adjacent property.

4.2 CHAPTER FORMAT

This chapter contains 20 sections, and each section addresses one environmental topic listed in Appendix G of the Guidelines for the California Environmental Quality Act (*State CEQA Guidelines*) (California Code of Regulations [CCR] Title 14, Chapter 3, Sections 1500–15397).

For each environmental impact issue analyzed, the Environmental Impact Report (EIR) includes a detailed explanation of the existing conditions, thresholds of significance that will be applied to determine whether the project's impacts are significant or less than significant, analysis of the environmental impacts, and a determination of whether the project would have a significant impact

if implemented. A "significant impact" or "significant effect" means "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora fauna, ambient noise, and object of aesthetic significance. An economic or social change by itself shall not considered to be a significant effect on the environment." (14 CCR Section 15382). When potentially significant impacts are identified, mitigation measures have been prescribed to reduce the potentially significant impacts to the greatest extent feasible and identifies whether, with implementation, the impact would be reduced to less than significant. Additionally, each environmental topic section in Chapter 4.0 includes a discussion of the cumulative effects of the project when considered in combination with other projects, causing related impacts, as required by *State CEQA Guidelines* Section 15130.

Each of the sections is organized into nine subsections, as follows:

- **Introduction** briefly describes the topics and issues covered in the section.
- **Scoping Process** briefly summarizes any relevant comments that were received during the scoping process.
- **Methodology** describes the approach and methods employed to complete the environmental analysis for the issue under investigation.
- **Existing Environmental Setting** describes the relevant physical conditions that exist at the time of the issuance of the Notice of Preparation (NOP) that may influence or affect the issue under investigation. This section focuses on physical site characteristics that are relevant to the environmental topic being analyzed.
- **Regulatory Setting** lists and discusses the laws, ordinances, regulations, plans, and policies that relate to the specific environmental topic and how they apply to the proposed project.
- **Thresholds of Significance** sets forth the thresholds that are the basis of the conclusions regarding significance, which are primarily the criteria in Appendix G to the *State CEQA Guidelines*, General Plan, or Zoning Code.
- **Project Impacts** describes the potential environmental changes to the existing physical conditions that may occur if the proposed project is implemented. Evidence is presented to show the cause-and-effect relationship between the proposed project and potential changes in the environment. In accordance with *State CEQA Guidelines* Section 15126.2(a), this EIR is required to "identify and focus on the significant environmental effects" of the proposed project. The magnitude, duration, extent, frequency, and range or other parameters of a potential impact are ascertained to the extent feasible to determine whether impacts may be significant. In accordance with CEQA, potential project impacts, if any, are classified as follows for each of the environmental topics discussed in this EIR.
    - **Significant and Unavoidable Impact:** If the proposed project is approved with significant and unavoidable impacts, the decision-making body is required to adopt a statement of

overriding considerations pursuant to *State CEQA Guidelines* Section 15093 explaining why the project benefits outweigh the unavoidable adverse environmental effects caused by those significant and unavoidable environmental impacts.

- **Less than Significant Impact with Mitigation Incorporated:** This classification refers to potentially significant environmental impacts that can be feasibly mitigated to a level of insignificance. If the proposed project is approved, the decision-making body is required to make findings pursuant to *State CEQA Guidelines* Section 15091 that significant impacts have been mitigated to the extent feasible through implementation of mitigation measures.

- **Less than Significant Impact:** Less than significant impacts are environmental impacts that have been identified but are not potentially significant. No mitigation is required for less than significant impacts.

- **No Impact:** A "no impact" determination is made when the proposed project is found to have no environmental impact.

- **Level of Significance Prior to Mitigation** summarizes the potentially significant impacts of the project, if any, prior to mitigation.

- **Mitigation Measures** are project-specific measures that avoid, minimize, rectify, reduce, eliminate, or compensate for a potentially significant impact.

  - **Regulatory Compliance Measures** may also be identified in this section. Regulatory Compliance Measures describe any relevant and applicable laws or regulations that must be adhered to with respect to the construction or operation of the proposed project and would reduce or lessen potential impacts related to a particular issue area.

- **Level of Significance after Mitigation** describes the significance of potential impacts after implementation of mitigation measures. Potential significant unavoidable impacts are clearly stated in this section.

- **Cumulative Impacts** refers to potential environmental changes to the existing physical conditions that may occur as a result of project implementation together with all other reasonably foreseeable, planned, and approved future projects in the vicinity of the project site that produce related impacts. *State 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." Cumulative impacts may result from individually minor but collectively significant projects taking place over a period of time. Projects that have progressed to the stage where CEQA review has been initiated are normally treated as foreseeable probable future projects. For each of the environmental topics considered in this EIR, the geographic scope of the cumulative analysis is defined.

4.3 THRESHOLDS OF SIGNIFICANCE

The threshold questions used in this EIR are consistent with Appendix G of the *State CEQA Guidelines* (2024).

4.4 CUMULATIVE PROJECTS

In accordance with *State CEQA Guidelines* Section 15130, cumulative impacts are anticipated impacts of the proposed project along with reasonably foreseeable growth. Reasonably foreseeable growth may be based on either:

- A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or

- A summary of projections contained in the adopted General Plan or related planning document, or in a prior environmental document that has been adopted or certified, and that described or evaluated regional or areawide conditions contributing to the cumulative impact.

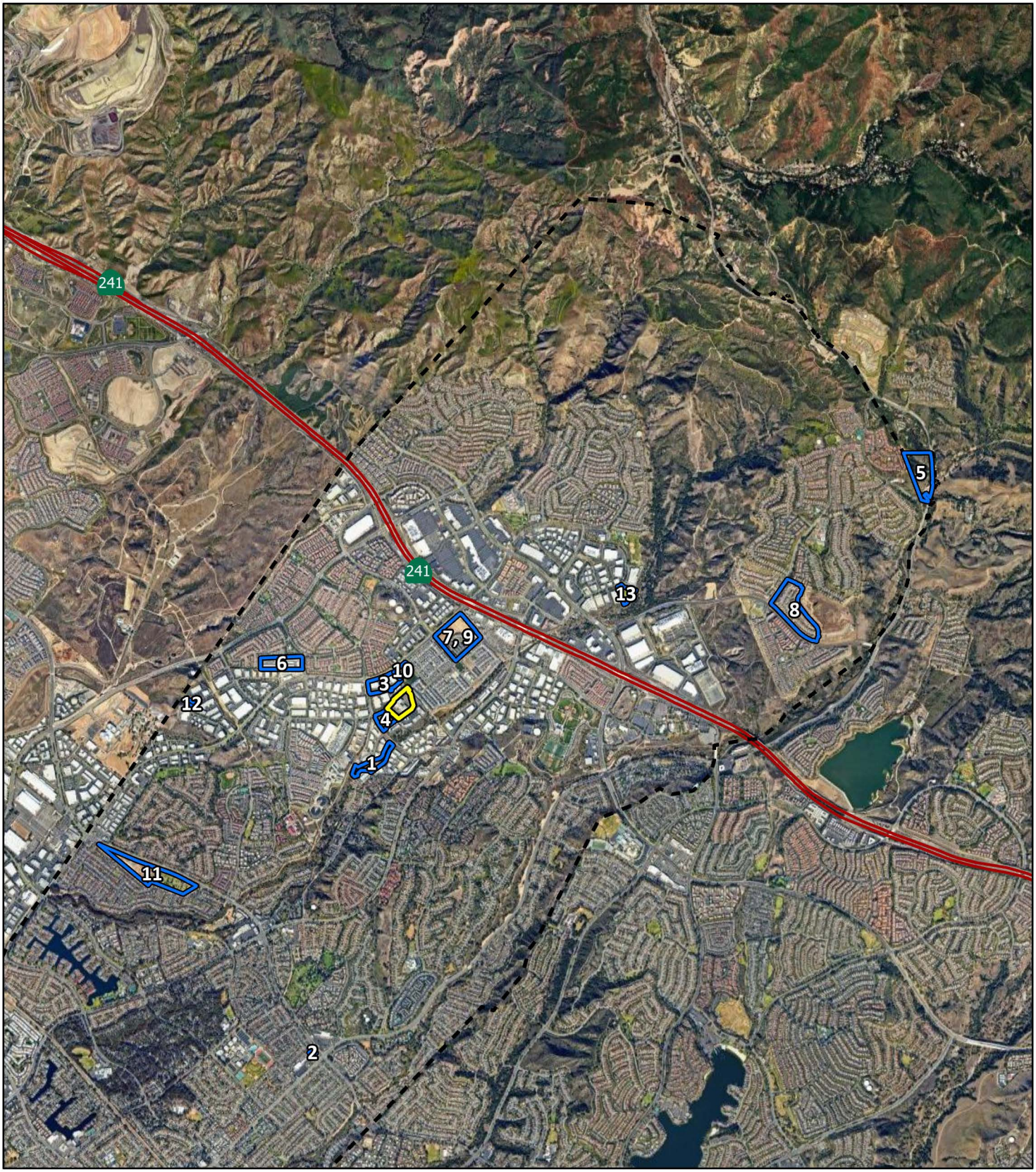
For the purposes of an EIR, a list of past, present, and probable future projects is used in the evaluation of potential cumulative impacts. All proposed, recently approved, under construction, and reasonably foreseeable projects that could produce a related or cumulative impact on the local environment when considered in conjunction with the proposed project are evaluated in an EIR. As stated above, an analysis of the cumulative impacts associated with the projects identified in Table 4.A, below, and the proposed project is provided in the cumulative impact discussion under each individual impact category in Chapter 4.0. See Figure 4-1 for the associated cumulative project locations.

Table 4.A: Summary of Cumulative Projects

Cumulative Project No.	Project	Description	Location	Project Status	Distance From the Proposed Project
City of Lake Forest					
1	General Plan Amendment 03-18-5145 / Zone Change 03-18-5144 / UP 03-18-5146 / TPM 2023-169 / Development Agreement	Rehabilitate an existing (unoccupied) single-family residence to be used as an office for the Great Scott Tree Care (GSTC) administrative functions, new parking areas for the tree service vehicles and equipment, and a concrete pad for drying wood chips associated with GSTC tree cutting operations.	20751 Linear Lane	Scheduled for City Council second reading on 11/5/24.	0.25 mile
2	Pre-Application 03-24-5686	Proposed demolition of the existing building and construction of a new approximately 1,000-square-foot drive-through only restaurant with no interior seating or on-site food preparation.	22401 El Toro Road	Not Submitted (Based on pre-application)	1.9 miles
3	Site Development Permit 08-23-5653 (Western Realco Project 1)	Demolition of three existing office buildings and reconstruction of two new industrial buildings with a total of 156,800 square feet (54,000 square feet and 102,800 square feet, respectively). The two new buildings would have a total of 59,800 square feet of warehouse, 79,000 square feet of manufacturing, and 18,000 square feet of office.	26110 Enterprise, 26140 Enterprise, 26160 Enterprise Way	Submitted - Not Approved	300 feet
4	Site Development Permit 09-32-5658 (Western Realco Project 2)	Demolition of a 76,978-square-foot two-story office building and construction of a 77,000-square-foot single-story and mezzanine building. The new building would have 69,000 square feet of warehouse and 8,000 square feet of office.	26250 Enterprise Way	Submitted - Not Approved	40 feet
5	Tentative Parcel Map 07-20-5369 / Site Development Permit 07-20-5368	Subdivision of an 18.28-acre parcel into 3 parcels, and construction of a new 4,200-square-foot building to be used as an electrical testing facility on Parcel 1.	19121 El Toro Road	Submitted - Not Approved	3.1 miles

Table 4.A: Summary of Cumulative Projects

Cumulative Project No.	Project	Description	Location	Project Status	Distance From the Proposed Project
City of Lake Forest					
6	Use Permit 01-23-5589	Construction of a new 3-story, 36-foot-tall, 90,621-square-foot self-storage building at the existing Extra Space Storage facility accessed off Baffin Bay Drive.	25650 Baffin Bay Drive	Approved by PC on 12/9/23. Under Plan check review- no permits issued.	0.53 mile
7	Vesting Tentative Tract Map 19299 and Site Development Permit 10-23-5661	Subdivision and development of 57 detached single-family homes in Neighborhood 6 (Sequoias) of the Meadows Residential Community.	Southeast corner of the intersection of Rancho Parkway and Bake Parkway	Approved by PC on 3/7/24. Under plan check review- no permits issued.	0.35 mile
8	Site Development Permit 08-18-5212 TTM 17300 (Amendment)	Construction of 223 single-family residences in the Oaks Residential Community.	Northeast corner of Glenn Ranch Road and Saddleback Ranch Road	Under Construction-Building permits issued for 102 homes. 93 homes have completed construction.	2.1 miles
9	Site Development Permit 06-21-5428, 05-21-5426, 02-21-5400, 05-21-5425, 05-21-5424	Construction of 541 detached single-family homes in the Meadows Residential Community.	Southeast corner of the intersection of Rancho Parkway and Bake Parkway	Under Construction-Building permits issued for all homes. 475 homes have completed construction.	Immediately adjacent
10	Site Development Permit 06-21-5435	Development of the Meadows Senior Housing Affordable Apartments including construction of a new two-story 64,064-square-foot senior affordable apartment complex consisting of 65 units.	101 Lopala	Under construction	350 feet
11	Changed Plan 06-22-5542	Expansion of the Ascension Cemetery to include new burial areas and a new 5,428-square-foot maintenance building.	24754 Trabuco Road	Under construction	1.46 miles
12	Site Development Permit 05-21-5422	Construction of a new 12,500-square-foot industrial building.	25101 Arctic Ocean	Approved by PC	1.07 miles
13	Site Development Permit 04-24-5698	Construction of a new one-story 36,000-square-foot manufacturing building and a 20,000-square-foot two-story office building on the vacant site.	19712 and 19722 Pauling	Submitted-Not Approved	1.30 miles



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FIGURE 4-1

IPT Enterprise Business Center LLC Project

Cumulative Project Locations

SOURCE: Google Imagery (2024), SCAG (2019)

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4.1 AESTHETICS

This section evaluates the potential impacts to visual and aesthetic resources from implementation of the proposed project. This section is based in part on the following:

- Visual simulations prepared for the proposed project;
- *City of Lake Forest Citywide Design Guidelines* (City of Lake Forest n.d.);
- *City of Lake Forest General Plan Land Use Element* (City of Lake Forest 2020); and
- *City of Lake Forest General Plan Recreation and Resources Element* (City of Lake Forest 2020).

4.1.1 Scoping Process

The Notice of Preparation (NOP) for the proposed project was published in March 2024, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft Environmental Impact Report (EIR). Eleven comment letters included comments related to aesthetics. These comments raised concerns about the project's compatibility with surrounding land uses and community character, alterations to the existing visual landscape, and the potential for increased nighttime lighting to be generated from the proposed project.

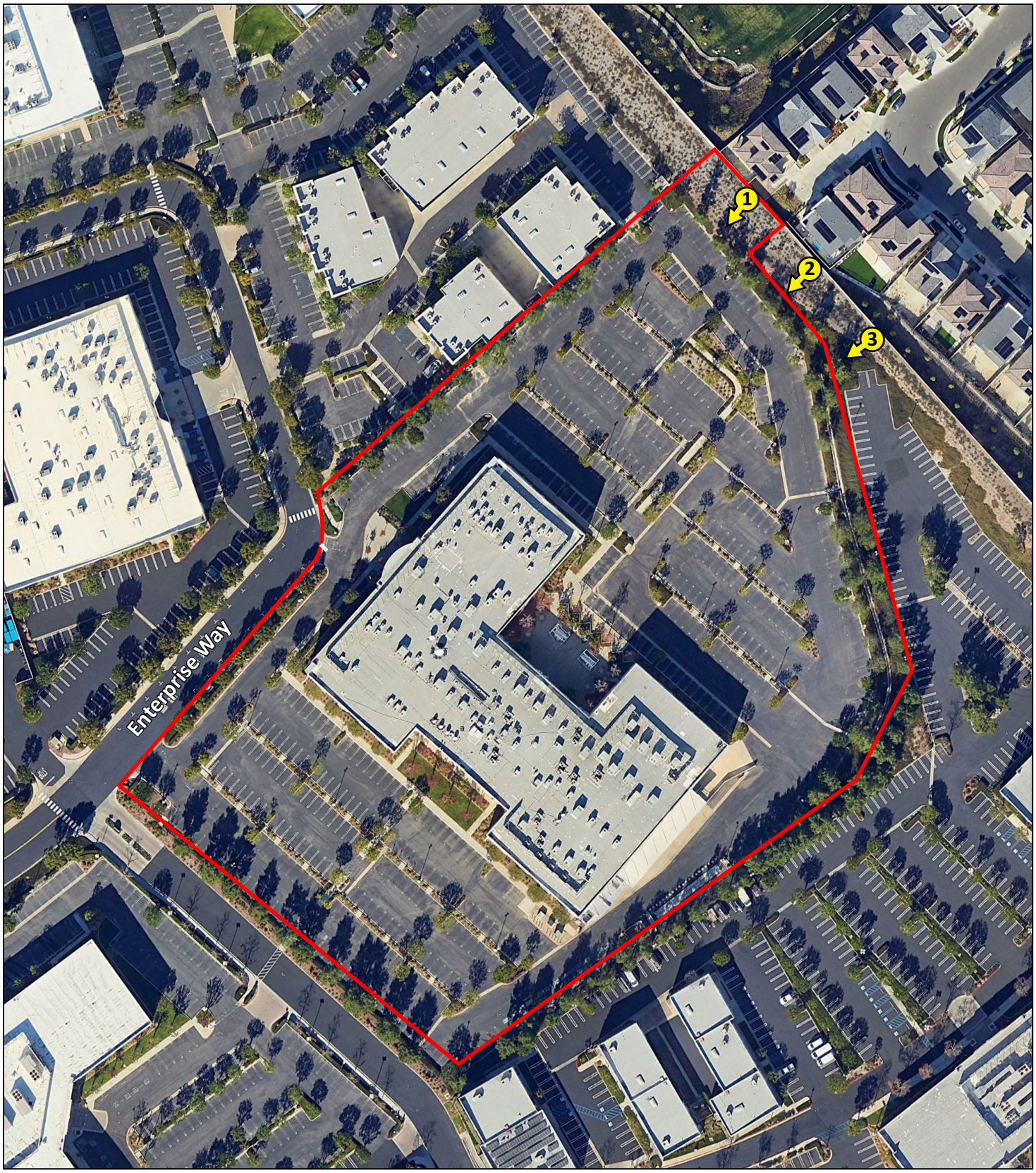
4.1.2 Methodology

The proposed project's potential aesthetic impacts are based on the nature and degree of visible change brought about by the project along with how viewers are likely to respond to those changes and is based on several factors, including: the scale of the development; the mass of the development; the context of the development (i.e., its consistency with and proportion to surrounding land uses); changes in vistas and viewsheds; potential conflicts with applicable zoning and other regulations governing scenic quality; changes to scenic resources along designated scenic roads, and the introduction of new sources of light and glare. The viewers' response to project-related aesthetic changes is assessed from three different vantage points or "viewing zones" as defined below. The comparison between the existing visual setting and the nature and degree of visual change is accomplished through the use of visual simulations, which are provided in Figure 4.1-1.

The viewshed impact analysis evaluates project-related impacts from three viewing distance zones, as explained below.

- **Foreground Views:** These views include elements that are seen at a close distance and that dominate the entire view. These vantage points are generally 500 feet or less from the project site, surrounding topography, and other prominent physical features in the project vicinity.
- **Middle-Ground Views:** These views include elements that are seen at a moderate distance and that partially dominate the view. These vantage points are generally located between 500 feet and 1 mile from the project site.
- **Background Views:** These views include elements that are seen at a long distance and typically comprise horizon-line views that are part of the overall visual composition of the area. These vantage points are generally farther than 1 mile from the project site.

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LEGEND

Project Site Boundary

View Simulation Photo Viewpoint

FIGURE 4.1-1
Page 1 of 4

0 110 220
FEET

SOURCE: Google Earth 2023

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IPT Enterprise Business Center LLC Project

Visual Simulation Viewpoints

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View 1 - Existing View



View 1 - Simulated View

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FIGURE 4.1-1

IPT Enterprise Business Center LLC Project

Comparison Between Existing Visual Setting and the Nature and Degree of Visual Change
View Simulation - View 1

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View 2 - Existing View



View 2 - Simulated View

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FIGURE 4.1-1

IPT Enterprise Business Center LLC Project

Comparison Between Existing Visual Setting and the Nature and Degree of Visual Change
View Simulation - View 2

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View 3 - Existing View



View 3 - Simulated View

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FIGURE 4.1-1

IPT Enterprise Business Center LLC Project

Comparison Between Existing Visual Setting and the Nature and Degree of Visual Change
View Simulation - View 3

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The analysis of light and glare identifies the location of light-sensitive land uses and describes the existing ambient conditions on and in the vicinity of the project site. The analysis describes the proposed project's light and glare sources and the extent to which project lighting would spill off the project site onto adjacent light-sensitive areas. The analysis also considers the potential for sunlight to reflect off of windows and building surfaces (glare) and the extent to which such glare would interfere with the operation of motor vehicles, aviation, or other activities. Glare can also be produced during evening and nighttime hours by artificial light sources, such as illuminated signage and vehicle headlights. Glare-sensitive uses generally include residences and transportation corridors (i.e., roadways).

The concepts and terminology used in this analysis are described below.

- **Scenic Resources:** Scenic resources are defined as natural or man-made elements that contribute to an area's scenic value and are visually pleasing. Scenic resources include landforms, vegetation, water, or adjacent scenery and may include a cultural modification to the natural environment.

- **Scenic Vista:** A scenic vista is a viewpoint that provides expansive views of a highly valued landscape for the public's benefit. It is usually viewed from some distance away. Aesthetic components of a scenic vista include (1) scenic quality, (2) sensitivity level, and (3) view access. A scenic vista can be impacted in two ways: a development project can have visual impacts by either directly diminishing the scenic quality of the vista or by blocking the view corridors or "vista" of the scenic resource. Important factors in determining whether a proposed project would block scenic vistas include the project's proposed height, mass, and location relative to surrounding land uses and travel corridors.

- **Scenic Corridors:** Scenic corridors are channels that facilitate movement (primarily by automobile, transit, bicycle, or foot) from one location to another with expansive views of natural landscapes and/or visually attractive man-made development. Scenic corridors analyzed under the California Environmental Quality Act (CEQA) typically include State-designated Scenic Highways and locally designated scenic routes.

- **Scenic Quality:** The scenic quality of a streetscape, building, group of buildings, or other man-made or natural feature creates an overall impression of an area. For example, a scenic vista along the boundary of a community, a pleasing streetscape with trees, and well-kept residences and yards are scenic resources that create a pleasing impression of an area. In general, concepts of scenic quality can be organized around four basic elements: (1) site utilization, (2) buildings and structures, (3) landscaping, and (4) signage. Adverse scenic quality effects can include the loss of aesthetic features or the introduction of contrasting features that could contribute to a decline in overall scenic quality.

- **Glare:** Glare is identified as a continuous or periodic intense light that may cause eye discomfort or be temporarily blinding to humans.

- **Light Source:** A device that produces illumination, including incandescent bulbs, fluorescent and neon tubes, halogen and other vapor lamps, and reflecting surfaces or refractors incorporated

into a lighting fixture, are considered to be light sources. Any translucent enclosure of a light source is considered to be part of the light source.

4.1.3 Existing Environmental Setting

4.1.3.1 Local Context

The project site is located at 26200 Enterprise Way in the north-central portion of Lake Forest in Orange County, California. The areas surrounding the project site consist of a mix of land uses, including industrial and residential. Local access to the project site is provided by Enterprise Way, which is accessed from Dimension Drive. Circulation in the surrounding area is provided by one- to four-lane roadways.

According to the United States Census Bureau, Lake Forest is located within the Mission Viejo-Lake Forest-San Clemente, CA Urbanized Area,[1] which also includes the cities of Aliso Viejo, Dana Point, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Mission Viejo, Rancho Santa Margarita, San Clemente, and San Juan Capistrano, and the unincorporated communities of Coto de Caza, Ladera Ranch, and Las Flores. As described in the *State CEQA Guidelines* Section 15387 and defined by the United States Census Bureau, an "urbanized area" is a central city or a group of contiguous cities with a population of 50,000 or more people, together with adjacent densely populated areas having a population density of at least 1,000 people per square mile (United States Census Bureau 2022).[2] Because Lake Forest is located in an urbanized area, the project site is also located within an urbanized area.

4.1.3.2 Existing Visual Character of the Project Site

The 8.83-acre site is developed with an existing 144,906-square-foot (sq ft), two-story tilt-up office/ industrial building (previously occupied by Panasonic Avionics) and associated parking (refer to Figure 3-3 in Chapter 3.0 of this Draft EIR). The project site is generally flat; however, the eastern and southern boundaries of the site have north- and west-facing slopes. These slopes ascend 10 to 15 feet from the project site to the adjacent property. A concrete-lined drainage swale is near the midpoint of the slope on the eastern side of the property. Ornamental, non-native vegetation covers the remaining areas of these slopes. The site also includes ornamental landscaping along the site perimeters, within the parking medians, and around the building.

Existing sources of light and glare on the project site and in the project vicinity are typical of industrial areas and include vehicle headlights on nearby roadways, streetlights in the nearby vicinity, building façade and interior lighting, and pole-mounted lighting in the parking areas within the project site and adjacent developments. Lighting from existing distant development within Lake Forest also contributes to the background lighting in the project vicinity.

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1 United States Census Bureau. n.d. Mission Viejo-Lake Forest-San Clemente, CA Urbanized Area No. 57709. Website: https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua57709_mission_viejo--lake_forest--san_clemente_ca/DC10UA57709.pdf (accessed April 24, 2024).

2 United States Census Bureau. 2022. 2020 Census Urban Areas FAQs. December 2022. Website: https://www2.census.gov/geo/pdfs/reference/ua/Census_UA_2020FAQs.pdf (accessed April 24, 2024).

The project site currently has a Lake Forest General Plan land use designation of Light Industrial. The Light Industrial designation is intended to provide for a variety of light industrial uses. The project site is located within the Pacific Commercentre Planned Community and has a zoning designation of LI – Light Industrial. Permitted uses include a variety of office, manufacturing, and warehouse uses. Pursuant to the zoning designation, the proposed industrial building is permitted subject to a Site Development Permit.

4.1.3.3 Visual Character of the Surrounding Area

The project area is characterized by relatively dense urban development with some open space and landscaping in the nearby vicinity. The project site is bordered to the north, south, and west by existing one- to two-story industrial buildings that include a mix of permitted uses, including office, manufacturing, and warehouse uses. The recently constructed Meadows Residential Development (formerly the Nakase Nursery site) is to the northeast/east of the project site, which consists of two-story single family residences. Light-sensitive uses near the project site include the residential uses to the northeast/east.

According to the California Scenic Highway Mapping System, there are no California Department of Transportation (Caltrans) designated scenic highways in proximity to the project site.[3]

While Lake Forest contains numerous areas and viewsheds with relatively high scenic value, there are no officially designated scenic vista points in the City. Significant visual resources in Lake Forest include several prominent creeks, including Aliso Creek, Serrano Creek, San Diego Creek, and the Borrego Canyon Wash, and the Eucalyptus groves that surround portions of these creeks. Other prominent visual features throughout the planning area include views of ridgelines, hillsides, and canyons. Additionally, the Recreation and Resources Element of the City's General Plan notes that natural resources and open space contribute to the visual quality of the City (City of Lake Forest 2020).

There are no significant visual resources present on the project site. The project site is located approximately 10 miles northeast of the Pacific Ocean, although the ocean cannot be seen from the project site due to the intervening San Joaquin Hills to the southwest of the City. The Santa Ana Mountains, which are the highest and most prominent mountains in Orange County, are visible in the east from the project site and surrounding area. The City's Nature Park (26215 Dimension Drive) is located approximately 400 feet southeast of the project site, and Serrano Creek is located approximately 600 feet southeast of the project site.

4.1.4 Regulatory Setting

Federal, State, and local regulations and programs related to aesthetics that are applicable to the proposed project are described below.

[3] California Department of Transportation (Caltrans). n.d. California Scenic Highway Mapping System. Website: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed April 24, 2024).

4.1.4.1 Federal Regulations

There are no federal regulations that apply to the proposed project with respect to aesthetics.

4.1.4.2 State Regulations

Caltrans Scenic Highway Program. The California Department of Transportation (Caltrans) Scenic Highway Program protects the natural scenic beauty of the State's highways and corridors through its designated Scenic Highways throughout the State. Caltrans defines a Scenic Highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality. Other considerations given to a Scenic Highway designation include how much of the natural landscape a traveler may see and the extent to which visual intrusions degrade the scenic corridor.

As described further below (Threshold 4.1.1), there are no officially designated Scenic Highways located in the vicinity of the project site.

4.1.4.3 Regional Regulations

There are no regional regulations that apply to the proposed project with respect to aesthetics.

4.1.4.4 Local Regulations

City of Lake Forest General Plan 2040. The City of Lake Forest General Plan is intended to guide future growth and development within the City and is comprised of several elements. Goals and policies related to aesthetics are intended to enhance the City's image and identity and create a sense of community. The Land Use Element of the City's General Plan contains goals and policies related to aesthetics.

The following goals and policies applicable to the proposed project and related to aesthetics and scenic quality are presented in the Land Use Element:

> **Goal LU-2 Compatible Development**: A community where new development blends harmoniously into the existing neighborhood fabric.
>
> > **Policy LU-2.1 Physical Characteristic Compatibility**: Ensure that new development fits within the existing community setting and is compatible with surrounding land uses and public infrastructure availability.
> >
> > **Policy LU-2.4 Scale and Character**: Ensure that the scale and character of new development is appropriate to the setting and intended use.
> >
> > **Policy LU-2.5 Visual Compatibility**: Require new development projects achieve visual compatibility with surrounding development through building, site, or design techniques, such as landscaping and architectural design, to achieve visual compatibility.
> >
> > **Policy LU-2.7 Interface with Residential Areas**: Promote compatibility of adjacent land uses along the interface of different residential density and non-residential intensity categories by paying special attention to buffers and transitional areas.

Action LU-2a: As part of the City's development review process, ensure that commercial projects are designed to be compatible with residential uses, including appropriate\e building massing and scale and minimization of impacts related to the operation of the use. Review of employment-generating projects should ensure that the following design concepts are addressed in projects that abut residential areas:

- Appropriate building scale and/or siting;
- Site design and noise-attenuating features to avoid exposure to excessive noise due to long hours of operation or inappropriate location of accessory structures;
- Site and structure design to avoid excessive glare or excessive impacts from light sources onto adjacent properties; and
- Site design to avoid unnecessary loss of community and environmental resources (archaeological, historical, ecological, recreational, etc.).

Action LU-2b: As part of the City's development review process, ensure that new developments are designed to minimize glare and light impacts onto adjacent properties.

Goal LU-3 Placemaking: A distinct community image and identity that promotes Lake Forest as a desirable place to live and do business.

Policy LU-3.4 High-Quality Design: Promote high-quality design for all public and private development projects, including building form, site design, landscaping, lighting, signage, and other components which impact the visual quality of a project.

Policy LU-3.6 Architectural Styles: Promote architectural styles that emphasize the established community identity while allowing for the introduction of other appealing architectural design strategies that are compatible with their surroundings.

Goal LU-4 Streetscapes: A community with streetscapes that enhance the economic vitality and overall visual quality of the City, support the circulation network, and encourage pedestrian-scale streets and patterns of activity.

Policy LU-4.3 Building Massing: Reduce the bulk and perceived size of large buildings by dividing their mass into smaller parts, stepping down to adjacent structures, recessing openings for doors/windows, and using pedestrian-scale features; single-plane massing is discouraged.

Policy LU-4.4 Building Footprint: Require and enforce appropriate residential and nonresidential development standards, including adequate building setbacks, to ensure that a building's footprint does not negatively affect adjacent uses or the visual quality of the area.

City of Lake Forest Municipal Code. The Lake Forest Municipal Code includes regulations related to zoning and lighting that are applicable to the proposed project and related to aesthetics and scenic quality.

Section 7.08.095 Street lighting. The Lake Forest Municipal Code requires that street lighting along local streets be provided at illumination levels specified in plans that have been approved by the City Engineer.

Section 9.72.085 Non-residential site development standards. The Lake Forest Municipal Code requires that all lights shall be designed and installed so that lighting is confined to the site and adjacent properties are protected from glare.

Citywide Design Guidelines. The *Citywide Design Guidelines* are intended to supplement the goals and policies set forth in the City's General Plan Land Use Element and the development standards in the City's Municipal Code. The design guidelines are intended to guide proposed development so that it is aesthetically pleasing, high quality, and reflective of the character of the surrounding community. The *Citywide Design Guidelines* are general in nature and provide examples of the expected level of design of development within the City. For example, the design guidelines provide direction on issues not typically covered by the development standards (e.g., building orientation, architectural styles, and building materials). Individual design guidelines should be viewed as qualitative rather than mandatory development standards, provided the project design meets or exceeds the intent of the guidelines.

4.1.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to aesthetics if it would:

Threshold 4.1.1: Have a substantial adverse effect on a scenic vista;

Threshold 4.1.2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

Threshold 4.1.3: In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; or

Threshold 4.1.4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

4.1.6 Project Impacts

Threshold 4.1.1: Would the project have a substantial adverse effect on a scenic vista?

No Impact. Development projects have the potential to impact scenic vistas in two ways: (1) a development could physically alter a designated scenic resource (e.g., disturb or develop upon a ridgeline, hillside, or other designated scenic resource), or (2) could block a view corridor or "vista" of the scenic resource from public view. Important factors in determining whether a project would block

scenic vistas include the project's proposed height, mass, and location relative to surrounding land uses and travel corridors. Under CEQA, a private residence would not be considered a viewing location from which to determine whether a proposed project would impact scenic views since views of scenic resources from a private location are not available to the public. California courts have ruled that the obstruction of private views in a project's immediate vicinity is not generally regarded as a significant environmental impact (*Banker's Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego*).[4]

As discussed previously in Section 4.1.2.3, Visual Character of the Surrounding Area, the Lake Forest General Plan does not officially designate any scenic vista points in the City. However, significant visual resources in Lake Forest include several prominent creeks, including Aliso Creek, Serrano Creek, San Diego Creek, and the Borrego Canyon Wash, and the Eucalyptus groves that surround portions of these creeks. Other prominent visual features throughout the planning area include views of ridgelines, hillsides, and canyons. Additionally, the General Plan Recreation and Resources Element notes that natural resources and open space contribute to the visual quality of the City.

The project site is located in a fully developed area in the northern portion of Lake Forest in Orange County, California. The Santa Ana Mountains, which are the highest and most prominent mountains in Orange County, are visible in background views to the east from the project site and surrounding area. However, views are intermittently obstructed by existing development and trees and are not of high quality. Therefore, the existing views are not considered to be of such high quality that they constitute a significant scenic vista. The City's Nature Park (26215 Dimension Drive) is located approximately 400 feet southeast of the project site, and Serrano Creek is located approximately 600 feet southeast of the project site. However, Nature Park and Serrano Creek are at a lower elevation than the project site and views of these visual resources are largely obstructed by existing development and trees. Due to distance, topography, and intervening development, no portion of Nature Park or Serrano Creek are visible from the project site. No other significant visual resources are visible from the project site or surrounding areas.

The proposed project would result in the demolition of the existing 144,906 sq ft two-story office/ industrial building with a height of approximately 35 feet (based on City records) and the replacement of this structure with a new 35-foot-tall, 165,803 sq ft tilt-up concrete industrial building. The proposed project includes a gated truck loading area, truck and auto parking spaces, and new landscaping throughout the site, and various off-site improvements at five intersections within the City to enhance public safety and address concerns over pre-existing and future large truck turning movements. The height and mass of the proposed structure would be similar to the existing structure and similar to the surrounding development (refer to Figure 4.1-1). Given that the proposed project is replacing an existing project of similar bulk and scale and there is existing development on all sides of the project site, which already obstructs views of the surrounding hillsides, park, and creek, the proposed project would not alter the foreground, middle ground, or background views of the project site or of nearby areas. Furthermore, as noted above, existing views from the project site are not considered to be of such high quality as to constitute a scenic vista. Therefore, the proposed project

[4] *Banker's Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego*, 139 Cal. App. 4th 249, 279 (2006).

would not result in a substantial adverse effect on views of scenic vistas. No impact would occur, and no mitigation is required.

Threshold 4.1.2: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no officially listed or eligible State Scenic Highways in the vicinity of the project site.[5] The only officially designated State Scenic Highway in Orange County is a portion of State Route 91 (SR-91) that is located approximately 14 miles north of the project site. The nearest State highways that are eligible for official designation as a State Scenic Highway include a portion of State Route 74 (SR-74) that is located approximately 10 miles southeast of the project site, and a portion of Pacific Coast Highway (PCH or State Route 1 [SR-1]) that is located approximately 10 miles southwest of the project site. Due to distance, topography, and intervening development, no portion of the project site or surrounding area is visible from the officially designated portion of SR-91 or the eligible portion of SR-74 or PCH (SR-1). Therefore, the proposed project would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway. No impact would occur, and no mitigation is required.

Threshold 4.1.3: In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point)? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact. As stated previously, the United States Census Bureau designates the project site as part of an urbanized area because the entire City is within the Mission Viejo-Lake Forest-San Clemente, CA Urbanized Area. The project site is zoned Light Industrial (LI) within the Pacific Commercentre Planned Community. The project site's General Plan land use designation is Light Industrial.

Zoning Code. Title 9, Planning and Zoning, of the Lake Forest Municipal Code includes provisions and regulations for planned development projects within the City. The LI Zoning District is intended to provide for a broad range of industrial uses as specified in City's Municipal Code Section 9.72.090 (Non-Residential Land Use Matrix), column "I." Permitted uses include a variety of office, retail, manufacturing, and retail uses. The proposed project would be compliant with all the development standards for the LI zoning, including but not limited to setbacks, building height, landscaping, and parking, as shown in Table 4.1.A. Table 4.1.A below provides a consistency analysis of the Site Development Standards governing scenic quality from the LI zoning district in the Pacific Commercentre Planned Community that are applicable to the proposed project. As stated in Table 4.1.A, the proposed project would be consistent with all of the applicable development standards.

[5] California Department of Transportation (Caltrans). n.d. California Scenic Highway Mapping System. Website: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed April 24, 2024).

Table 4.1.A: Pacific Commercentre Planned Community Site Development Standards - Aesthetics Consistency Analysis

Applicable Site Development Standards	Consistency Analysis
Building Height Limit: No maximum except that building heights shall comply with the provisions of Section 9.144.050 (Height Limits) of the Lake Forest Municipal Code. Within the High Technology and Light Industrial Planning Areas, prior to the issuance of any building permit for any structure or buildings which are proposed to be greater than 35 feet above the proposed grade elevation, applicant shall obtain approval of a Use Permit.	**Consistent.** The proposed building would be a maximum height of 35 feet and would comply with the provisions of Section 9.144.050 (Height Limits) of the Lake Forest Municipal Code. The proposed project would not conflict with this development standard.
Building Setbacks: All setbacks shall be measured from the ultimate right-of-way line and interior property lines. • **Adjacent to Local Street:** Along any local street, buildings shall be set back a minimum of 15 feet from the ultimate right-of-way line, except that unsupported roofs or architectural elements may project 6 feet into the required setback area • **Adjacent to a Non-Residential Parcel:** Along property lines that separate business park and non-residential uses there shall be no required minimum setback.	**Consistent.** The proposed building would be greater than 15 feet from the right-of-way lines for adjacent local streets, including Enterprise Way and Enterprise Court. The proposed project would not conflict with this development standard.
Loading: All loading shall be performed on the site. Loading platforms and areas shall be screened from view from adjacent streets and highways.	**Consistent**. The proposed project includes a gated truck loading area. Loading docks would be located on the southwest side of the proposed building and screened from the adjacent streets. The proposed project would not conflict with this development standard.
Trash and Storage Areas: All storage, including cartons, containers, materials, products or trash, shall be shielded from view within a building or area enclosed by a solid masonry wall not less than 6 feet in height.	**Consistent.** The proposed project would include two trash enclosures to shield trash storage. The trash enclosures would be composed of a painted concrete tilt-up wall panel and would be approximately 11.13 feet high with a roof that extends to 13.13 feet. The proposed project would not conflict with this development standard.
Streets and Intersections: Screening (including walls and fences) along all streets and boundaries shall have a height of not less than 36 inches nor more than 42 inches within 20 feet of the point of intersection of: • A vehicular accessway or driveway and a street; • A vehicular accessway or driveway and a sidewalk and • Two or more vehicular accessways, driveways or streets.	**Consistent**. The proposed project includes perimeter landscaping that would serve as a screen along all streets and boundaries. Vegetation within 20 feet of driveway and street intersections would be between 36 inches and 42 inches high. The proposed project would not conflict with this development standard.
Mechanical Equipment: Mechanical equipment placed on any roof such as, but not limited to, air conditioning, heating, ventilating ducts, and exhaust shall be screened from view from any abutting street or highway.	**Consistent.** Equipment located on the roof of the proposed building would be screened by the building parapet and would be out of the line of sight from the property line. The proposed project would not conflict with this development standard.

Table 4.1.A: Pacific Commercentre Planned Community Site Development Standards - Aesthetics Consistency Analysis

Applicable Site Development Standards	Consistency Analysis
Landscaping: Landscaping, consisting of evergreen or deciduous trees, shrubs, ground cover, or hardscape shall be installed and maintained subject to the following standards: • Boundary landscaping along public streets, other than arterial highways, is required to an average depth of 10 feet and a minimum depth of 5 feet. • **Separation:** Any landscaped area shall be separated from an adjacent vehicular area by a wall or curb at least 6 inches higher than the adjacent vehicular area or in some manner be protected from vehicular damage. • **Watering:** Permanent automatic watering facilities shall be provided for all landscaped areas. Site development plans shall incorporate provisions for a dual water system utilizing reclaimed wastewater for irrigation purposes, consistent with the requirements of the Irvine Ranch Water District. • **Maintenance:** All landscaping shall be maintained in a neat, clean and healthy condition. This shall include proper pruning, mowing of lawns, weeding, removal of litter, fertilizing, replacement of plants when necessary, and the regular watering of all plantings.	**Consistent.** The proposed project includes boundary landscaping that would be an average depth of 10 feet and a minimum depth of 5 feet along public streets. Landscaped areas would be separated by a curb at least 6 inches or higher from adjacent vehicular areas. Landscaped areas would be watered using permanent automatic watering facilities and would be maintained in a neat, clean, and healthy condition. The proposed project would not conflict with this development standard.

General Plan. The City of Lake Forest General Plan is intended to guide future growth and development within the City. The General Plan Land Use Element and Recreation and Resources Element contain specific goals and policies related to aesthetics and scenic quality. As shown in Table 4.1.B, below, and discussed above, the proposed project would be consistent with applicable General Plan goals and policies related to aesthetics and scenic quality. Therefore, the proposed project would be consistent with the City's General Plan as it relates to aesthetics and scenic quality.

Table 4.1.B: General Plan Aesthetics Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Goal LU-2 Compatible Development: A community where new development blends harmoniously into the existing neighborhood fabric.	
Policy LU-2.1 Physical Characteristic Compatibility: Ensure that new development fits within the existing community setting and is compatible with surrounding land uses and public infrastructure availability.	**Consistent.** The proposed industrial building is located within the Pacific Commercentre Planned Community. The Pacific Commercentre Planned Community was developed as a master planned industrial business park with local streets providing internal circulation. The buildings in the Planned Community include a mix of warehouse, distribution, manufacturing, research and development and offices. The proposed industrial building is consistent with the type, scale, and intensity of the existing industrial development in the Pacific Commercentre Planned Community. The proposed project includes the replacement of an existing 2-story concrete tilt-up industrial building with a new 2-story concrete tilt-up industrial building. The subject site is adjacent to the Meadows Residential Community to the northeast/east. The project site is not connected to the Meadows Residential Community by any streets or walkways. Furthermore, a landscape buffer separates the Meadows Residential Community and the industrial area. The proposed project includes the installation of additional landscaping and mature trees along the northeastern corner of the project site, adjacent to the Meadows Community. This new landscaping will further reduce the visibility of the industrial site as viewed from the Meadows Community. Furthermore, the building was designed so that the truck dock and loading area of the proposed building is oriented to the southeast (not facing the residential properties), is located over 200 feet away from the nearest residential property line, and would not be readily visible from the residences. As such, the new proposed building is compatible with the surrounding land uses. As detailed in Sections 4.13 Noise, 4.1 Aesthetics, and 4.3 Air Quality, the proposed project would not result in excessive noise, smoke, dust, light or glare that would impact the nearby residences.
Policy LU-2.4 Scale and Character: Ensure that the scale and character of new development is appropriate to the setting and intended use.	
Policy LU-2.5 Visual Compatibility: Require new development projects achieve visual compatibility with surrounding development through building, site, or design techniques, such as landscaping and architectural design, to achieve visual compatibility.	
Policy LU-2.7 Interface with Residential Areas: Promote compatibility of adjacent land uses along the interface of different residential density and non-residential intensity categories by paying special attention to buffers and transitional areas.	
Action LU-2a: As part of the City's development review process, ensure that commercial projects are designed to be compatible with residential uses, including appropriate building massing and scale and minimization of impacts related to the operation of the use. Review of employment-generating projects should ensure that the following design concepts are addressed in projects that abut residential areas: • Appropriate building scale and/or siting; • Site design and noise-attenuating features to avoid exposure to excessive noise due to long hours of operation or inappropriate location of accessory structures; • Site and structure design to avoid excessive glare or excessive impacts from light sources onto adjacent properties; and • Site design to avoid unnecessary loss of community and environmental resources (archaeological, historical, ecological, recreational, etc.).	
Action LU-2b: As part of the City's development review process, ensure that new developments are designed to minimize glare and light impacts onto adjacent properties.	

Table 4.1.B: General Plan Aesthetics Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
	The overall building treatment and façade is compatible with the existing architecture of the industrial buildings in the Pacific Commercentre Planned Community. The proposed building would be constructed of architecturally enhanced tilt-up concrete panels and would be painted different shades of gray with a blue accent. The building architecture utilizes scoring, color transitions, and windows to provide articulation to the facades of the building. The truck doors, which would be painted to match the building, would be located on the south elevation of the building, and would not be visible from the surrounding streets or residential properties. All lighting associated with the proposed project would be hooded or shielded to focus the light downward and prevent light spillage onto adjacent properties. The Applicant has provided a photometric plan that shows low illumination at the property lines adjacent to the light industrial areas and no illumination at the property line adjacent to the residential property. The building materials (e.g., concrete, glass, metal) and proposed uses are typical of those found in the surrounding areas and would not create unusual or isolated glare effects that would affect daytime visibility or views in the project vicinity. Consistent with the requirements of California's Building Energy Efficiency Standards (Energy Code), the proposed project would include a rooftop solar photovoltaic system. The rooftop of the proposed building would be flat and therefore, the photovoltaic panels are not anticipated to generate significant amounts of glare onto adjacent properties. As detailed in Table 4.1.A, the proposed project would be consistent with the permitted uses and development standards of the City's Zoning Code and the Pacific Commercentre Planned Community. Additionally, as detailed in the Biological Resources, Cultural Resources, Recreation, and Tribal Cultural Resources sections of this EIR, the proposed project would not result in an unnecessary loss of community and environmental resources (archaeological, historical, ecological, recreational, etc.). The proposed project would not conflict with these General Plan Policies or actions.

Table 4.1.B: General Plan Aesthetics Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Goal LU-3 Placemaking: A distinct community image and identity that promotes Lake Forest as a desirable place to live and do business.	
Policy LU-3.4 High-Quality Design: Promote high-quality design for all public and private development projects, including building form, site design, landscaping, lighting, signage, and other components which impact the visual quality of a project. **Policy LU-3.6 Architectural Styles:** Promote architectural styles that emphasize the established community identity while allowing for the introduction of other appealing architectural design strategies that are compatible with their surroundings.	**Consistent.** The proposed building would be similar in design, scale, and character to existing surrounding industrial uses. The proposed building would be constructed of architecturally enhanced tilt-up concrete panels and would be painted different shades of gray with a blue accent. The building architecture utilizes scoring, color transitions, and windows to provide articulation to long facades of the building. The truck doors, which would be painted to match the building, would be located on the south elevation of the building, and would not be visible from the surrounding streets, nor residential properties. The overall building treatment and façade will be compatible and consistent with the remainder of the existing, surrounding industrial park. The proposed project would not impact any existing parks, trails, or scenic vistas and would enhance streetscapes by providing a variety of trees, shrubs and ground cover and maintaining the existing landscaping around the perimeter of the project site. The proposed project would result in the redevelopment of an older and underutilized site with a new industrial building with improved quality and enhanced site and building design. The proposed project would not conflict with these General Plan Policies.
Goal LU-4 Streetscapes: A community with streetscapes that enhance the economic vitality and overall visual quality of the City, support the circulation network, and encourage pedestrian-scale streets and patterns of activity.	
Policy LU-4.3 Building Massing: Reduce the bulk and perceived size of large buildings by dividing their mass into smaller parts, stepping down to adjacent structures, recessing openings for doors/windows, and using pedestrian-scale features; single-plane massing is discouraged. **Policy LU-4.4 Building Footprint:** Require and enforce appropriate residential and nonresidential development standards, including adequate building setbacks, to ensure that a building's footprint does not negatively affect adjacent uses or the visual quality of the area.	**Consistent.** The proposed project would enhance streetscapes by providing a variety of trees, shrubs and ground cover and maintaining the existing landscaping around the perimeter of the project site. The proposed project would include an on-site accessible path of travel through the parking lot that would lead to a paved walkway along the north side of the building and would connect to an existing striped crosswalk across Enterprise Way. The proposed building would be constructed of architecturally enhanced tilt-up concrete panels and would be painted different shades of gray with a blue accent. The building's main entrances would be emphasized with vertical and horizontal bands, windows, and decorative light sconces. The building architecture utilizes scoring, color transitions, and windows to provide articulation to long facades of the building. The proposed building would be consistent

Table 4.1.B: General Plan Aesthetics Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
	with allowable building setbacks and, as detailed in Table 4.11.C, the proposed project would be consistent with the City's Zoning Code and permitted uses and developed standards of the Pacific Commercentre Planned Community. Additionally, the proposed project includes the installation of landscaping and mature trees along the northeastern corner of the proposed building and project site to reduce the visibility of the project site from adjacent residential uses and to improve the overall visual quality of the site. The proposed project would not conflict with these General Plan Policies.

Citywide Design Guidelines. The visual character and quality of the project site and surrounding area would be preserved and enhanced through the application of the Citywide Design Guidelines (Design Guidelines). The Citywide Design Guidelines contribute to the City's Vision by ensuring that new and renovated projects in the City are developed in context with the surrounding areas and designed in a high-quality manner which promotes a positive City Image. The proposed project has been designed in compliance with the Citywide Design Guidelines, including but not limited to the following guidelines related to aesthetics (refer to Figure 4.1-1):

- The building would be located over 150 feet from the closest property line to a single-family residence, and a 60-foot-wide (minimum) landscaped slope would buffer the industrial project from the adjacent single-family residential community (as required by the Transitions in Land Use section of the Design Guidelines).

- The building architecture would utilize scoring, color transitions, and windows to provide articulation to long facades of the building to create visual interest (as required by the Architecture and Building Design section of the Design Guidelines).

- The building architecture features low, medium, and high elevation elements (as required by the Architecture and Building Design section of the Design Guidelines).

- The main building entrance, which faces Enterprise Way street frontage, would be emphasized with vertical and horizontal bands, windows, and decorative light sconces. Building articulation would be provided at the entrance by changes in the façade planes and height variation in roof line. These architectural features make the main entrance easily identifiable and the architectural focal point of the building (as required by the Architecture and Building Design section of the Design Guidelines).

- The building has been designed with a built-in roof top well to screen the roof-top mechanical equipment (as required by the Architecture and Building Design section of the Design Guidelines).

- The vehicular entrances to the site would be flanked by landscaping that includes, trees, hedges and landscaped berms (as required by the Vehicular Access/Circulation/Parking section of the Design Guidelines).

- The project would maintain and/or enhance the existing perimeter landscaping around the entire site, which screens the parking areas (as required by the Parking Lot Landscaping section of the Design Guidelines).

The proposed project would require a Site Development Permit, which would provide the opportunity for the City to review the physical improvements to the project site, including the overall building scale, massing, and design to ensure compatibility and compliance with City requirements governing scenic quality. With the approval of a Site Development Permit, the proposed project would be consistent with the General Plan and zoning designations, and no General Plan Amendment, Specific Plan Amendment, or zone change would be required as part of project approval.

The visual character and quality of the project site and surrounding area would be preserved through the application of the architectural and landscape design guidelines outlined in the Citywide Design Guidelines. Furthermore, the proposed project would be consistent with other regulations governing scenic quality, including those outlined in the City of Lake Forest General Plan and the City's Municipal Code. Therefore, the proposed project would neither substantially degrade the visual character of the project site nor conflict with applicable zoning and other regulations governing scenic quality. The proposed project would have no impact related to conflicts with applicable zoning and other regulations governing scenic quality, and no mitigation is required.

Threshold 4.1.4: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact.

Construction. Construction activities would occur only between the hours of 7:00 a.m. and 8:00 p.m. Any construction-related illumination during evening and nighttime hours would be used for safety and security purposes only, would be downlit to minimize light spillage onto adjacent properties, and would occur only for the duration required for the temporary construction process. Because any necessary night lighting resulting from construction activities would be minimal, would not spill onto adjacent properties, and would be temporary, it would not substantially impact sensitive uses, substantially alter the character of surrounding uses, or interfere with the performance of off-site activities. In addition, construction activities are not anticipated to result in flat, shiny surfaces that would reflect sunlight or cause other natural glare. Minor glare from sunlight on construction equipment and vehicle windshields is not anticipated to impact visibility in the area because (1) relatively few construction vehicles and pieces of construction equipment would be used on the project site, and (2) the construction site would be fenced and shielded from pedestrian and vehicular views. In addition, construction vehicles would not be operating at night and thus would not create nighttime sources of light or glare. Therefore, construction of the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the

area, and light and glare impacts associated with construction would be less than significant. No mitigation is required.

Operation. The proposed project would provide parking lot lights consistent with the City's requirements for parking lot safety and accent lighting on the building. The type and location of these light sources would be similar to those that currently exist on site. All project lighting would be hooded or shielded to focus the light downward and prevent light spillage onto adjacent properties. All new lighting would comply with applicable regulations of the 2019 State Building Energy Efficiency Standards (Title 24). Additionally, new lighting would be required to comply with Sections 7.08.095 and 9.72.085 of the City of Lake Forest Municipal Code, which require that lighting be confined to the project site and that adjacent properties are protected from glare.

Existing sources of light and glare on the project site and in the project vicinity are typical of industrial areas and include vehicle headlights on nearby roadways, streetlights in the nearby vicinity, building façade and interior lighting, and pole-mounted lighting in the parking areas within the project site and adjacent developments. Lighting from existing distant development within Lake Forest also contributes to the background lighting in the project vicinity. Therefore, sources of light and glare associated with the proposed project would be consistent with and not contribute to a substantial increase in the existing surrounding uses during both daytime and nighttime hours.

A photometric plan has been prepared for the proposed project to evaluate the illumination levels of the proposed project at each of the project boundaries, which is included in Appendix B. As shown in the photometric plan, the proposed project would result in low illumination at the property lines adjacent to the light industrial areas and no illumination at the property line adjacent to the residential property. Furthermore, the proposed building materials (e.g., concrete, glass, metal) and uses of these materials are typical of those found in the surrounding areas and are not anticipated to create unusual or isolated glare effects that would affect daytime visibility or views in the project vicinity.

Consistent with the requirements of California's Building Energy Efficiency Standards (Energy Code), the proposed project would include a rooftop solar photovoltaic system. The rooftop of the proposed building would be flat and therefore, the photovoltaic panels are not anticipated to generate significant amounts of glare onto adjacent properties.

Overall, sources of light and glare associated with the proposed project would be consistent with the existing surrounding uses during both the daytime and nighttime hours. Furthermore, compliance with the applicable lighting standards set forth in Sections 7.08.095 and 9.72.085 of the City Municipal Code and General Plan and adherence to Title 24 requirements would ensure that the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

4.1.7 Cumulative Impacts

As defined in Section 15355 of the *State CEQA Guidelines*, cumulative impacts refer to the incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The cumulative study area for aesthetics is described in

Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it would be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have no impact on scenic vistas, no impact on scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway, and no impact related to conflicts with applicable zoning and other regulations governing scenic quality. Because the proposed project would have no impact on scenic vistas or scenic resources within a State Scenic Highway and would not conflict with applicable zoning and other regulations governing scenic quality, it would not contribute to a cumulatively considerable impact to scenic vistas, scenic resources within a State Scenic Highway, or conflicts with applicable zoning and other regulations governing scenic quality, and no mitigation is required.

As detailed in this section, construction and operation of the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Construction activities would be limited to daytime hours, construction-related illumination would be downlit, and construction activities would be temporary, ensuring that construction-related light and glare impacts would be less than significant. Once operational, all project lighting would be hooded or shielded and compliance with Title 24 and Sections 7.08.095 and 9.72.085 of the City of Lake Forest Municipal Code would ensure that project-related light and glare impacts would be less than significant. Development within the cumulative study area would also be required to comply with existing regulatory requirements related to light and glare including Title 24 and the City's Municipal Code to reduce potential impacts associated with light and glare and if significant light and glare impacts are anticipated, appropriate mitigation measures would be implemented as part of the CEQA environmental review process. Therefore, the proposed project would not result in cumulatively considerable impacts related to light and glare. Cumulative impacts would be less than significant, and no mitigation is required.

4.1.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to aesthetics.

4.1.9 Regulatory Compliance Measures and Mitigation Measures

4.1.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to aesthetics.

4.1.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to aesthetics, and no mitigation is required.

4.1.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to aesthetics.

4.2 AGRICULTURE AND FORESTRY RESOURCES

This section evaluates the potential impacts to agriculture and forestry resources from implementation of the proposed project. This section is based in part on the following:

- California Department of Conservation (DOC) *Farmland Mapping and Monitoring Program* (FMMP) (DOC 2024);
- California Department of Conservation (DOC), Division of Land Resources Protection, *Farmland Mapping and Monitoring Program* (DOC 2020);
- Orange County Agricultural Commissioner/Sealer of Weights and Measures Office (OC Public Works 2024);
- *Orange County General Plan Resources Element* (County of Orange 2005); and
- *City of Lake Forest General Plan Update Existing Conditions Report* (City of Lake Forest, October 2018).

4.2.1 Scoping Process

The Notice of Preparation (NOP) for the proposed project was published in March 2024, and the public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft Environmental Impact Report (EIR). No comments related to agriculture or forestry were received during the public scoping period.

4.2.2 Methodology

Evaluating the potential for project-related activities to impact agricultural and forestry resources relied on information provided in documents and maps obtained from a variety of sources, including the DOC FMMP, the City of Lake Forest General Plan, and the City of Lake Forest Zoning Ordinance.

4.2.3 Existing Environmental Setting

The proposed project is located in Lake Forest, Orange County (County), California. This section discusses the status of agricultural resources in Orange County, Lake Forest, and on the project site.

4.2.3.1 Orange County

Agricultural Resources. Orange County is well suited for agricultural production due to its Mediterranean climate and soil fertility and was once a rural area supported primarily by an agricultural economy. During the mid-1940s, agricultural uses in Orange County began to decline as landowners began to convert agricultural land to urban development. Urban areas continue to encroach on agricultural lands in the County and there is continued pressure to convert agricultural land to urban uses. Additionally, the cost of irrigation water, agricultural land tax rates, labor costs, and damage from vandalism have increased production costs, making it more difficult to maintain a successful agricultural operation in the County (County of Orange 2005).

The most recent agricultural land conversion data available for Orange County is for the 2018–2020 period and was obtained through the DOC FMMP (DOC 2024). Land converted in this period is shown in Table 4.2.A.

Table 4.2.A: Orange County Agricultural Land Conversion 2018–2020

Land Use Category	Total Acreage Inventoried		2018–2020 Acreage Changes		
	2018	2020	Acres Lost (-)	Acres Gained (+)	Net Acreage Changed
Prime Farmland	2,281	1,843	464	26	-438
Farmland of Statewide Importance	359	352	15	8	-7
Unique Farmland	2,400	2,222	186	8	-178
Farmland of Local Importance	0	0	0	0	0
Important Farmland Subtotal	**5,040**	**4,417**	**665**	**42**	**-623**
Grazing Land	36,303	36,350	436	483	47
Agricultural Land Subtotal (Important Farmland + Grazing Land)	**41,343**	**40,767**	**1,101**	**525**	**-576**
Urban and Built-Up Land	293,864	293,862	736	734	-2
Other Land	173,242	173,817	435	1,010	575
Water Areas	3,076	3,079	1	4	3
Total Area Inventoried	**511,525**	**511,525**	**2,273**	**2,273**	**0**

Source: California Department of Conservation, Division of Land Resources Protection, Farmland Mapping and Monitoring Program. Table A-24, Orange County 2018–2020 Land Use Conversion (DOC 2020).

In summary, for the 2-year period from 2018 to 2020, the total amount of Important Farmland inventoried decreased by 623 acres, and the total amount of agricultural land that was inventoried in the County decreased by 576 acres.

Table 4.2.B[1] shows the value of agricultural production in 2017 versus 2023 and provides a percent of change between these years.

Table 4.2.B: Orange County Agricultural Production Value 2017 versus 2023

Agricultural Category	2017 Value	2023 Value	Percent Change
Livestock	$2,094,000	$2,621,000	25.2%
Nursery	$61,670,000	$36,355,000	-41.0%
Tree and Berry	$33,935,000	$14,510,000	-57.2%
Vegetable and Field	$15,538,000	$22,218,000	43.0%
Total	**$113,237,000**	**$75,704,000**	**-33.1%**

Source: Orange County Agricultural Commissioner's Office, OC Environmental Resources *Orange County Crop Report* (OC Public Works 2024). Website: https://ocerac.ocpublicworks.com/service-areas/oc-environmental-resources/oc-agricultural-commissionersealer-weights-measures-25 (accessed December 31, 2024).

[1] The 2023 Orange County Agricultural Production Value data are from the most current year available from the Orange County Agricultural Commissioner's Office.

Livestock and vegetable and field crops experienced an increase in value, while nursery and tree and berry crops experienced a decrease in value. The total agricultural production value in Orange County decreased by 33.1 percent between 2017 and 2023.

Forestry Resources. The Orange County General Plan Land Use Element identifies major forests and wilderness regional parks as part of the Open Space Reserve Designation. Notable forested and wilderness areas in the County include the Cleveland National Forest, which is the largest single open space feature in the County spanning 55,000 plus forest acres, Aliso and Wood Canyons Wilderness Park, Caspers Wilderness Park, O'Neill Regional Park, and Whiting Ranch Wilderness Park (County of Orange 2005). Forested areas in the County primarily consist of protected open space areas. Commercial forestry is not a major industry within the County.

4.2.3.2 City of Lake Forest

Agricultural Resources. Lake Forest has a development history similar to that of the County. In the early 20th century, Lake Forest, known at the time as El Toro, was an unincorporated agricultural community. After World War II, the area began to urbanize, and agricultural uses were eventually replaced with residential, commercial, and industrial uses (City of Lake Forest 2018). Today, Lake Forest is primarily urban with limited areas of land under agricultural production. The City of Lake Forest 2040 General Plan Update Existing Conditions Report presents existing "on the ground" land uses for individual parcels in the City from data that has been gathered by the Orange County Assessor's Office. According to the data, the City currently contains 18 parcels that are occupied by agricultural uses (general agricultural uses, horse ranches, nurseries, and other agriculture), totaling 192 acres. The City of Lake Forest 2040 General Plan does not include any agricultural land use designations. Chapter 9.72 of the Lake Forest Municipal Code discusses non-residential zoning districts in the City of Lake Forest, including zoning designation A1 – Agricultural District. According to 2016 data from the Southern California Association of Governments (SCAG),[2] there are 83 parcels in the City zoned as A1, totaling approximately 455 acres. However, most of the parcels zoned A1 are non-agricultural uses, such as utility structures, churches, cemeteries, and a school.

Given that agricultural uses in Lake Forest are limited to a total of 192 acres of land, which represents 1.8 percent of the City's total land area of 10,694 acres, the agricultural production value is not readily available. Therefore, the agricultural production value of Lake Forest is not included as part of this existing conditions discussion.

Forestry Resources. Whiting Ranch Wilderness Park is located within Lake Forest and consists of approximately 2,500 acres, portions of which include riparian and oak woodland canyons. However, the City of Lake Forest does not have any areas designated in its General Plan as forest land or timberland for production or resource management.

[2] Zoning information for the City of Lake Forest was acquired by using SCAG's 2016 Land Use Information for Orange County dataset, developed for the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The dataset is parcel-based and reviewed by local jurisdiction staff during the SCAG's Local Input Process.

4.2.3.3 Project Site

The project site is located within Lake Forest and is approximately 8.83 acres in size (Assessor's Parcel Number [APN] 610-401-06). Historically, the project site remained mostly vacant and undeveloped from 1930 until 1999 with the exception of the northeastern portion of the project site, which appears to have been utilized for orchards from approximately 1938 to 1952. The existing office/industrial building was developed in 1999 and has been occupied by the following tenants: Matsushita Avionics Systems (2000–2005) and Panasonic Avionics Corporation (2006–2021). The existing building is currently vacant.

According to the DOC FMMP, the project site is designated as Urban and Built-Up Land. The project site is not under a Williamson Act contract or a Farmland Security Zone (FSZ) contract. The project site currently has a Lake Forest General Plan land use designation of Light Industrial. The project site is located within the Pacific Commercentre Planned Community and has a zoning designation of LI – Light Industrial. The project site does not have any areas designated for agricultural uses, forest land or timberland production, or resource management.

4.2.4 Regulatory Setting

Federal, State, and local regulations and programs related to agriculture and forestry resources that are applicable to the proposed project are described below.

4.2.4.1 Federal Regulations

There are no federal regulations that apply to the proposed project with respect to agriculture or forestry resources.

4.2.4.2 State Regulations

California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP). In 1982, the DOC began coordinating with the United States Department of Agriculture (USDA) Soil Conservation Service in the preparation and completion of Important Farmland mapping for California through the establishment of the FMMP. The FMMP created a greater level of mapping compared to the USDA Soil Conservation Service by modifying the federal criteria for use in California and incorporating irrigation criteria for farmland significance. The primary purpose of the FMMP is to monitor the conversion of California's agricultural lands. The DOC Division of Land Resource Protection works with landowners, local governments, and researchers to conserve California's farmland and open space resources based on information provided in the FMMP.

The DOC FMMP produces maps and statistical data used for analyzing impacts on agricultural resources. Agricultural land is categorized according to soil quality and irrigation status. The maps are updated every 2 years through review of aerial photographs, a computer mapping system, public review, and field reconnaissance. The latest statewide data available are from 2018. The FMMP categories are defined as follows:

- **Prime Farmland:** This land category has the best combination of physical and chemical features for sustaining long-term agricultural production. This land has the soil quality, growing season,

and moisture supply needed to produce crops with sustained high yields. The land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

- **Farmland of Statewide Importance:** This land category is similar to Prime Farmland but with minor shortcomings (e.g., greater slopes or less ability to store soil moisture). The land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

- **Unique Farmland:** This land category consists of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards. The land must have been cropped at some time during the 4 years prior to the mapping date.

- **Farmland of Local Importance:** This land category is important to the local agricultural economy as determined by each county's Board of Supervisors and a local advisory committee.

- **Grazing Land**: This land category is occupied with vegetation suited to grazing livestock. This land category was developed in cooperation with the California Cattleman's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit is 40 acres.

- **Urban and Built-Up Land:** This land category is occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

- **Other Land:** This land category consists of land that is not included in any other mapping category. Common examples include low-density rural developments, brush, timber wetland, riparian area not suitable for livestock grazing, and water bodies smaller than 40 acres. Vacant and non-agricultural lands surrounded on all sides by urban development that are greater than 40 acres are mapped as Other Land.

The DOC FMMP considers Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance collectively as Important Farmland.

Williamson Act and Farm Land Security Act. The California Land Conservation Act, better known as the Williamson Act, has been the State's most important agricultural land protection program since its enactment in 1965. Fundamentally, the Williamson Act is a State policy administered by local governments. Local governments are not mandated to administer the act, but those that do have some latitude to tailor the program to suit local goals and objectives.

Williamson Act contracts have a minimum term of 10 years, with renewal occurring automatically each year (local governments can establish initial contract terms for longer periods of time). The contracts run with the land and are binding on all successors in interest of the landowner. Only land

located within an agricultural preserve is eligible for Williamson Act contracts. An agricultural preserve defines the boundary of an area within which a city or county would enter into contracts with landowners. The boundary is designated by resolution of the board of supervisors or city council having jurisdiction. The rules of each agricultural preserve specify the uses allowed. Generally, any commercial agricultural uses would be permitted within any agricultural preserve. In addition, local governments may identify compatible uses allowed with a use permit.

In August 1998, Senate Bill (SB) 1182 established the FSZ provisions of the Williamson Act. An FSZ is created within an agricultural preserve by County Board of Supervisors' approval and at the request of a landowner or group of landowners. FSZ contracts offer landowners greater property tax reductions in return for an initial contract term of 20 years, with renewal occurring automatically each year. Land restricted by an FSZ contract is valued for property assessment purposes at 65 percent of its Williamson Act valuation, or 65 percent of its Proposition 13 valuation, whichever is lower. New special taxes for urban-related services must be levied at an unspecified reduced rate unless the tax directly benefits the land or living improvements. Cities and special districts that provide non-agricultural services are generally prohibited from annexing land enrolled under an FSZ contract. Similarly, school districts are prohibited from taking FSZ lands for school facilities.

Z'Berg-Nejedly Forest Practice Act. The Z'Berg-Nejedly Forest Practice Act (Forest Practice Act) identifies operating methods and procedures that seek to protect fish, wildlife, forests, and streams within timber harvesting areas. The Forest Practice Act is intended to achieve "maximum sustained production of high-quality timber products…while giving consideration to values relating to recreation, watershed, wildlife, range and forage, fisheries, regional economic vitality, employment and aesthetic enjoyment." The regulations created by the Forest Practice Act define factors such as the size and location of harvest areas, include measures to prevent unreasonable damage to residual trees, and address the protection of riparian areas, water courses and lakes, wildlife, and habitat areas.

Z'Berg-Warren-Keene-Collier Forest Taxation Reform Act. According to the Z'Berg-Warren-Keene-Collier Forest Taxation Reform Act enacted in 1976, counties must provide for the zoning of land used for growing and harvesting timber as Timberland Production Zones (TPZs). TPZs were established to preserve and protect timberland from conversion to other uses and avoid land use conflicts.

Timberland Productivity Act. The Timberland Productivity Act represents the Legislature's declared intent "to fully realize the productive potential of the forest resources and timberlands of the state." This act imposes mandatory restrictions on parcels zoned as timberland production. Such parcels "shall be zoned so as to restrict their use to growing and harvesting timber and to compatible uses." In exchange, property owners are required to pay property taxes on the land based solely on its value for timber harvest, and not for its development potential, as is the case with qualifying agricultural and open space lands under the Williamson Act. Government Code Section 51104(g) of the Timberland Productivity Act defines "timberland production zone" as an area that has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses. Compatible uses are defined under Section 51104(h) and include management for watershed; management for habitat or

hunting and fishing; access roads and staging areas for timber harvesting; gas, electric, water, or communication transmission facilities; grazing; or a residence or other structure necessary for timber management.

4.2.4.3 Regional Regulations

There are no regional regulations that are applicable to the proposed project with respect to agriculture or forestry.

4.2.4.4 Local Regulations

City of Lake Forest General Plan 2040. The City of Lake Forest General Plan contains goals, policies, and plans intended to guide growth and development of the City. The current General Plan consists of the following elements:

- Economic Development Element
- Health and Wellness Element
- Housing Element (2021–2029)
- Land Use and Design Element
- Mobility Element
- Public Facilities Element
- Public Safety Element
- Recreation and Resources Element

The current General Plan does not contain goals, policies, or plans related to the conservation of agricultural or forestry resources. The General Plan Land Use Element does not identify any agricultural or forestry land uses within the City's jurisdiction.

City of Lake Forest Municipal Code. The City's Municipal Code does not have any codes that pertain to agricultural conservation, right-to-farm policies, or forestry resources. However, guidelines and provisions related to agricultural development are addressed in Chapter 9.72, A1 – Agricultural District:

- **A1 – Agricultural District** allows for agriculture, outdoor recreational uses, and low-intensity uses that predominantly have open space characteristics. This designation is also intended to be used as an interim zone in those areas the General Plan may designate for more intensive urban uses in the future.

4.2.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to agriculture and forestry resources if it would:

Threshold 4.2.1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;

Threshold 4.2.2: Conflict with existing zoning for agricultural use, or a Williamson Act contract;

Threshold 4.2.3: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g));

Threshold 4.2.4: Result in the loss of forest land or conversion of forest land to non-forest use; or

Threshold 4.2.5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

4.2.6 Project Impacts

Threshold 4.2.1: Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project site is currently fully developed and is located in an industrial business complex surrounded by industrial and office uses. The project site is not being used for agricultural production and is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on maps prepared pursuant to the FMMP of the DOC. The FMMP of the DOC has categorized the project site as Urban or Built Out Land. The surrounding area is characterized by commercial, industrial, and residential uses. The proposed project would not convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or any other type of farmland to a non-agricultural use. Therefore, the proposed project would have no impact on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and no mitigation is required.

Threshold 4.2.2: Would the project conflict with existing zoning or agricultural use, or a Williamson Act contract?

No Impact. The project site is currently zoned Light Industrial (LI) in the Pacific Commercentre Planned Community, which allows for a variety of light industrial uses such as offices, retail, manufacturing, and warehouse uses. An LI zoning designation does not allow for agricultural production, and the project site is not protected by, or eligible for, a Williamson Act contract. Implementation of the proposed project would not conflict with existing zoning for agricultural use, nor would it conflict with a Williamson Act contract. No impact would occur, and no mitigation is required.

Threshold 4.2.3: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. The project site currently has a zoning designation of Light Industrial (LI) in the Pacific Commercentre Planned Community, which allows for a variety of light industrial uses. The project site is not zoned as forest land (as defined in Public Resources Code [PRC] Section 12220(g)), timberland (as defined by PRC Section 4526), or Timberland Production (as defined by Government Code Section 51104(g)). Therefore, implementation of the proposed project would not conflict with existing zoning for, or cause a rezoning of forest land. No impact would occur, and no mitigation is required.

Threshold 4.2.4: Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project site is currently fully developed and is located in an area that supports industrial, commercial, and residential developments. The project site is not occupied by forest land. Therefore, implementation of the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use. No impact would occur, and no mitigation is required.

Threshold 4.2.5: Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The project site currently has a zoning designation of Light Industrial (LI) in the Pacific Commercentre Planned Community, which allows for a variety of industrial uses. The surrounding area is characterized by light industrial, commercial, and residential uses. Because the project site is already developed and is not located in the vicinity of any existing agricultural land or land zoned for agricultural uses, the proposed project would not contribute to environmental changes that could result in conversion of farmland to non-agricultural use or the conversion of forest land to non-forest use. Therefore, no impacts to farmland or forest land would occur with implementation of the proposed project, and no mitigation is required.

4.2.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts refer to the incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The cumulative study area for agricultural and forestry resources is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project

would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have no impact on agricultural and forestry resources. Because the proposed project would have no impact on agricultural and forestry resources, it would not contribute to a cumulatively considerable impact on agricultural and forestry resources. Therefore, there would be no cumulatively significant impact on agricultural and forestry resources, and no mitigation is required.

4.2.8 Level of Significance Prior to Mitigation

The proposed project would result in no impacts related to agriculture and forestry resources.

4.2.9 Regulatory Compliance Measures and Mitigation Measures

4.2.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to agriculture and forestry resources.

4.2.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to agriculture and forestry resources, and no mitigation is required.

4.2.10 Level of Significance after Mitigation

The proposed project would result in no impacts related to agriculture and forestry resources.

4.3 AIR QUALITY

This section evaluates the potential impacts to air quality conditions from implementation of the proposed project. This section is based in part on the following:

- *Air Quality, Greenhouse Gas, and Energy Impact Report* (Air Quality/GHG/Energy Analysis) (LSA 2025a) (provided in Appendix C); and

- *Health Risk Assessment* (LSA 2025b) (provided in Appendix C), both prepared for the proposed project and included in this Draft Environmental Impact Report (EIR).

4.3.1 Scoping Process

The Notice of Preparation (NOP) was published in March 2024 for the proposed project, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. Eighty-one (81) comment letters included comments related to air quality. These comments raised concerns about additional air pollution from the proposed project specifically related to increased truck activity and traffic, potential air quality impacts to sensitive populations, and the need for additional air quality analysis, mitigation measures, emission reduction strategies, and pollution hotspot identification.

4.3.2 Methodology

The Air Quality/GHG/Energy Analysis used the California Emissions Estimator Model (CalEEMod), Version 2022.1, to quantify criteria pollutant emissions for both construction and operation of the proposed project.

CalEEMod provides a platform to calculate both construction emissions and operational emissions from a project. It calculates both the daily maximum and annual average for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions. The model also provides default values for water and energy use. Specifically, the model performs the following calculations.

- Short-term construction emissions associated with demolition, site preparation, grading, building, architectural coating (painting), and paving from off-road construction equipment; on-road mobile equipment associated with workers, vendors, delivery, and hauling; fugitive dust associated with grading, demolition, truck loading, and roads; and volatile emissions of volatile organic compounds (VOCs) from architectural coating and paving.

- Operational emissions, such as on-road mobile vehicle traffic generated by the land uses, fugitive dust associated with roads, volatile emissions of reactive organic gases (ROGs) from architectural coatings, off-road emissions from landscaping equipment, volatile emissions of ROGs from consumer products and cleaning supplies, natural gas usage in the buildings, electricity usage in the buildings, water usage by the land uses, and solid waste disposal by the land uses.

In addition, CalEEMod contains default values and existing regulation methodologies to use in each specific local air quality district region. Appropriate statewide default values can be utilized if regional default values are not defined. This analysis utilized project-specific inputs and relevant model default factors for the Orange County area, which is within the South Coast Air Quality Management District (SCAQMD) jurisdiction for the emissions inventory, consistent with SCAQMD requirements.

The *Health Risk Assessment* (HRA) used a dispersion model to translate an emission rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using the California Air Resources Board (CARB) exposure methodology with the air dispersion modeling performed using the United States Environmental Protection Agency (USEPA) dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data.

4.3.3 Existing Environmental Setting

The City is part of the South Coast Air Basin (Basin) and is under the jurisdiction of SCAQMD. Background information about air pollutants and health effects, climate, meteorological conditions, and regional air quality conditions in the Basin and local air quality conditions in the vicinity of the City are provided below.

4.3.3.1 Air Pollutants and Health Effects

Both State and federal governments have established health-based ambient air quality standards (California Ambient Air Quality Standards [CAAQS] and National Ambient Air Quality Standards [NAAQS], respectively) for six criteria air pollutants:[1] carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter (PM). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Long-term exposure to elevated levels of criteria pollutants may result in adverse health effects. However, emission thresholds established by an air district are used to manage total regional emissions within an air basin based on the air basin's attainment status for criteria pollutants. These emission thresholds were established for individual projects that would contribute to regional emissions and pollutant concentrations and could adversely affect or delay the projected attainment target year for certain criteria pollutants.

Because of the conservative nature of the thresholds and the basin-wide context of individual project emissions, there is no known direct correlation between a single project and localized air quality-related health effects. One individual project that generates emissions exceeding a threshold

[1] Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as ozone precursors like nitrogen oxides (NO_X) and VOCs.

Occupants of facilities such as schools, daycare centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered to be more sensitive than the general public to air pollutants because these population groups have increased susceptibility to respiratory disease. Persons engaged in strenuous outdoor work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions, compared to commercial and industrial areas, because people generally spend longer periods of time at their residences, with greater associated exposure to ambient air quality conditions. Recreational uses are also considered sensitive compared to commercial and industrial uses due to greater exposure to ambient air quality conditions associated with exercise.

Ozone. Rather than being directly emitted, ozone (or smog) is formed by photochemical reactions between NO_X and VOCs. Ozone is a pungent, colorless gas. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. Ozone levels peak during the summer and early fall months.

Carbon Monoxide. CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. CO passes through the lungs into the bloodstream, where it interferes with the transfer of oxygen to body tissues.

Particulate Matter. PM is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles are those that are 10 microns or less in diameter (PM_{10}). Fine, suspended particulate matter with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$), is not readily filtered out by the lungs. Nitrates, sulfates, dust, and combustion particulates are major components of PM_{10} and $PM_{2.5}$. These small particles can be directly emitted into the atmosphere as byproducts of fuel combustion, through abrasion (e.g., tire or brake lining wear), or through fugitive dust (e.g., wind or mechanical erosion of soil). They can also be formed in the atmosphere through chemical reactions. Particulates may transport carcinogens and other toxic compounds that adhere to the particle surfaces and can enter the human body through the lungs.

Nitrogen Dioxide. NO_2 is a reddish-brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Aside from its contribution to ozone formation, NO_2 also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO_2 may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels. NO_2 decreases lung function and may reduce resistance to infection.

Sulfur Dioxide. SO_2 is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels in the region. SO_2

irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

Lead. Leaded gasoline (phased out in the United States beginning in 1973), paint (on older houses and cars), smelters (metal refineries), and the manufacture of lead storage batteries have been the primary sources of lead released into the atmosphere. Lead has multiple adverse neurotoxic health effects, and children are at special risk. Some lead-containing chemicals cause cancer in animals. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. Ambient lead concentrations are only monitored on an as-warranted, site-specific basis in California. On October 15, 2008, the USEPA strengthened the NAAQS for lead by lowering it from 1.5 to 0.15 micrograms per cubic meter ($\mu g/m^3$). The USEPA revised the monitoring requirements for lead in December 2010. These requirements focus on airports and large urban areas, resulting in an increase in 76 monitors nationally.

Volatile Organic Compounds. VOCs (also known as ROGs and reactive organic compounds [ROCs]) are formed from the combustion of fuels and the evaporation of organic solvents. VOCs are not defined as criteria pollutants; however, because VOCs accumulate in the atmosphere more quickly during the winter, when sunlight is limited and photochemical reactions are slower, they are a prime component of the photochemical smog reaction. There are no attainment designations for VOCs.

Toxic Air Contaminants. In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated by the USEPA and the CARB. Some examples of TACs include benzene, butadiene, formaldehyde, and hydrogen sulfide. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants.

TACs do not have ambient air quality standards, but are regulated by the USEPA, CARB, and the SCAQMD. In 1998, the CARB identified particulate matter from diesel-fueled engines as a TAC. The CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.[2] High-volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (e.g., distribution centers and truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high-volume transit centers, and schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure.

Unlike TACs emitted from industrial and other stationary sources noted above, most diesel particulate matter is emitted from mobile sources—primarily "off-road" sources such as construction and mining equipment, agricultural equipment, and truck-mounted refrigeration units, as well as "on-road" sources such as trucks and buses traveling on freeways and local roadways.

[2] California Air Resources Board (CARB). 2000. Stationary Source Division and Mobile Source Control Division. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October.

Although not specifically monitored, recent studies indicate that exposure to diesel particulate matter may contribute significantly to a cancer risk (a risk of approximately 500 to 700 in 1,000,000) that is greater than all other measured TACs combined.[3] The technology for reducing diesel particulate matter emissions from heavy-duty trucks is well established, and both State and federal agencies are moving aggressively to regulate engines and emission control systems to reduce and remediate diesel emissions. The CARB anticipated that by 2020, average statewide diesel particulate matter concentrations will decrease by 85 percent from levels in 2000 with full implementation of the CARB's Diesel Risk Reduction Plan,[4] meaning that the statewide health risk from diesel particulate matter is expected to decrease from 540 cancer cases in 1,000,000 to 21.5 cancer cases in 1,000,000. The CARB 2000 Diesel Risk Reduction Plan is still the most recent version and has not been updated.

Table 4.3.A summarizes the sources and health effects of air pollutants discussed in this section.

Table 4.3.A: Sources and Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	● Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust ● Natural events, such as decomposition of organic matter	● Reduced tolerance for exercise ● Impairment of mental function ● Impairment of fetal development ● Death at high levels of exposure ● Aggravation of some heart diseases (angina)
Nitrogen Dioxide (NO_2)	● Motor vehicle exhaust ● High temperature stationary combustion ● Atmospheric reactions	● Aggravation of respiratory illness ● Reduced visibility ● Reduced plant growth ● Formation of acid rain
Ozone (O_3)	● Atmospheric reaction of organic gases with nitrogen oxides in sunlight	● Aggravation of respiratory and cardiovascular diseases ● Irritation of eyes ● Impairment of cardiopulmonary function ● Plant leaf injury
Lead (Pb)	● Contaminated soil	● Impairment of blood functions and nerve construction ● Behavioral and hearing problems in children
Suspended Particulate Matter ($PM_{2.5}$ and PM_{10})	● Stationary combustion of solid fuels ● Construction activities ● Industrial processes ● Atmospheric chemical reactions	● Reduced lung function ● Aggravation of the effects of gaseous pollutants ● Aggravation of respiratory and cardiorespiratory diseases ● Increased cough and chest discomfort ● Soiling ● Reduced visibility
Sulfur Dioxide (SO_2)	● Combustion of sulfur-containing fossil fuels ● Smelting of sulfur-bearing metal ores Industrial processes	● Aggravation of respiratory diseases (asthma, emphysema) ● Reduced lung function ● Irritation of eyes ● Reduced visibility ● Plant injury ● Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board (2015).

[3] CARB. 2000. Stationary Source Division and Mobile Source Control Division. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* October.

[4] Ibid.

4.3.3.2 National and State Ambient Air Quality Standards

Both State and federal governments have established health-based ambient air quality standards for criteria air pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

Both the USEPA and the CARB have established ambient air quality standards for the following common pollutants: CO, O_3, NO_2, SO_2, Pb, and suspended particulate matter. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. These ambient air quality standards are levels of contaminants that avoid specific adverse health effects associated with each pollutant.

Federal standards include both primary and secondary standards. Primary standards establish limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, and damage to animals, crops, vegetation, and buildings.[5] State and federal standards for the criteria air pollutants are listed in Table 4.3.B.

4.3.3.3 Existing Climate and Air Quality

The following provides a discussion of the climate, regional, and local air quality in Lake Forest.

Climate and Meteorology. Air quality in the planning area is not only affected by various emission sources (e.g., mobile and industry), but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The combination of topography, low mixing height, abundant sunshine, and emissions from the second-largest urban area in the United States gives the Basin some of the worst air pollution in the nation.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60 degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. Based on data provided by the Western Regional Climate Center, there are no climatological stations located in Lake Forest. Other nearby stations are located in Laguna Beach, Newport Beach, Tustin, and Santa Ana. Based on the nearby stations, the climatological station closest to the site is the Laguna Beach Station.[6] The monthly average maximum temperature recorded at this station ranged from 65.1°F in January to 78.1°F in August, with an annual average maximum of 71.2°F. The monthly average minimum temperature recorded at this station ranged from 43.0°F in January to 59.6°F in August, with an annual average minimum of 51.0°F. These levels are representative of the project area.

[5] United States Environmental Protection Agency (USEPA). 2017. Criteria Air Pollutants. October. Website: www.epa.gov/criteria-air-pollutants (accessed June 2025).

[6] Western Regional Climate Center. n.d. Recent Climate in the West. Website: http://www.wrcc.dri.edu, (accessed June 2025).

Table 4.3.B: Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]		Federal Standards[b]		
		Concentration[c]	Method[d]	Primary[c,e]	Secondary[c,f]	Method[g]
Ozone (O_3)[h]	1-Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM_{10})[i]	24-Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		–		
Fine Particulate Matter ($PM_{2.5}$)[i]	24-Hour	-		35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	9.0 µg/m³	15.0 µg/m3	
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)	–	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m³)		–	–	
Nitrogen Dioxide (NO_2)[j]	Annual Arithmetic Mean	0.03 ppm (57 µg/m³)	Gas Phase Chemi-luminescence	53 ppb (100 µg/m³)	Same as Primary Standard	Gas Phase Chemi-luminescence
	1-Hour	0.18 ppm (339 µg/m³)		100 ppb (188 µg/m³)	-	
Lead (Pb)[l,m]	30-Day Average	1.5 µg/m³	Atomic Absorption	–	–	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m³ (for certain areas)[l]	Same as Primary Standard	
	Rolling 3-Month Average[i]	–		0.15 µg/m³		
Sulfur Dioxide (SO_2)[k]	24-Hour	0.04 ppm (105 µg/m³)	Ultraviolet Fluorescence	0.14 ppm (for certain areas)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3-Hour	–		–	0.5 ppm (1300 µg/m³)	
	1-Hour	0.25 ppm (655 µg/m³)		75 ppb (196 µg/m³)[k]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[k]	–	
Visibility-Reducing Particles[l]	8-Hour	See footnote n	Beta Attenuation and Transmittance through Filter Tape.	No Federal Standards		
Sulfates	24-Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[j]	24-Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Source: California Air Resources Board (2024) (Website: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf).

Table notes are provided on the following page.

[a] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California Ambient Air Quality Standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, 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 one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact USEPA for further clarification and current national policies.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon 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] Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

[e] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[f] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[g] Reference method as described by the USEPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the USEPA.

[h] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. In February 2024, the national annual $PM_{2.5}$ primary standard was lowered from 12 µg/m³ to 9.0 µg/m³; the secondary annual standard remained at 15 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 PM_{10} standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[j] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (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.

[k] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national 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 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[l] The CARB has identified lead and vinyl chloride as 'toxic air contaminants' 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.

[m] 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 one 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.

[n] In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

°C = degrees Celsius
µg/m³ = micrograms per cubic meter
CARB = California Air Resources Board
mg/m³ = milligrams per cubic meter
ppb = parts per billion
ppm = parts per million
USEPA = United States Environmental Protection Agency

The majority of annual rainfall in the Basin occurs between November and March. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. Average monthly rainfall at the Laguna Beach Station varies from 0.03 inch in July to 2.77 inches in February, with an annual total of 12.52 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid-afternoon to late afternoon on hot summer days when the air appears to clear up suddenly. Winter inversions frequently break by midmorning.

Winds in the project area blow predominantly from the south-southwest, with relatively low velocities. Wind speeds in the project area average about 5 miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion, limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry, north or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly on shore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and NO_X because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and brighter sunshine combine to cause a reaction between hydrocarbons and NO_x to form photochemical smog. Smog is a general term for naturally occurring fog that has become mixed with smoke or pollution. In this context it is better described as a form of air pollution produced by the photochemical reaction of sunlight with pollutants that have been released into the atmosphere, especially by automotive emissions.

Attainment Status. The CARB is required to designate areas of the State as attainment, nonattainment, or unclassified for all State standards. An *attainment* designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A *nonattainment* designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An *unclassified* designation signifies that data do not support either an attainment or nonattainment status. The California Clean Air Act (CCAA) divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The USEPA designates areas for O_3, CO, and NO_2 as they do not meet the primary standards, cannot be classified, or better than national standards. For SO_2, areas are designated as does not meet the primary standards, does not meet the secondary standards, cannot be classified, or better than national standards. In February 2024, the USEPA issued a final revised standard for $PM_{2.5}$ to lower the primary standard from 12 µg/m^3 to 9 µg/m^3. The USEPA will issue final area designations in February 2026.

Table 4.3.C provides a summary of the attainment status for the Basin with respect to NAAQS and CAAQS.

Table 4.3.C: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Nonattainment	Extreme Nonattainment
O_3 8-hour	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	N/A	Attainment/Unclassified
Lead	Attainment	Attainment[1]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: SCAQMD (2018).
[1] Except in Los Angeles County.
CO = carbon monoxide
N/A = not applicable
NO_2 = nitrogen dioxide
O_3 = ozone
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District
SO_2 = sulfur dioxide

Air Quality Monitoring Results. Air quality monitoring stations are located throughout the nation and are maintained by the local air pollution control district and State air quality regulating agencies. The SCAQMD, together with the CARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring stations closest to the project site are located at 26081 Via Pera in Mission Viejo and 1630 West Pampas Lane in Anaheim.

Pollutant monitoring results for years 2021 to 2023 at the Mission Viejo and Anaheim ambient air quality monitoring stations, shown in Table 4.3.D, indicate that air quality in the area has generally been good. As indicated in the monitoring results, the federal PM_{10} standard had no exceedances in the 3-year period. The State PM_{10} standard had no exceedances in 2021 and 2022 and an unknown number of exceedances in 2023. Similarly, the $PM_{2.5}$ federal standard had no exceedances in 2021 and 2022 and an unknown number of exceedances in 2023. The 1-hour ozone State standard was exceeded two times in 2021, one time in 2022, and an unknown number of times in 2023. The 8-hour ozone State standard was exceeded eight times in 2021, six times in 2022, and an unknown number of times in 2023. The 8-hour ozone federal standard was exceeded eight times in 2021, five times in 2022, and two times in 2023. In addition, the CO and NO_2 standards were not exceeded in this area during the 3-year period. SO_2 is not monitored in the project area.

Table 4.3.D: Ambient Air Quality at the Nearby Monitoring Stations

Pollutant	Standard	2021	2022	2023
Carbon Monoxide (CO)[1]				
Maximum 1-hour concentration (ppm)		1.0	1.2	2.5
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8-hour concentration (ppm)		0.8	1.0	1.6
Number of days exceeded:	State: > 9 ppm	0	0	0
	Federal: > 9 ppm	0	0	0
Ozone (O_3)[1]				
Maximum 1-hour concentration (ppm)		0.105	0.110	0.089
Number of days exceeded:	State: > 0.09 ppm	2	1	ND
Maximum 8-hour concentration (ppm)		0.081	0.088	0.076
Number of days exceeded:	State: > 0.07 ppm	8	6	ND
	Federal: > 0.07 ppm	8	5	2
Coarse Particulates (PM_{10})[1]				
Maximum 24-hour concentration (µg/m³)		35.2	31.0	146.0
Number of days exceeded:	State: > 50 µg/m³	0	0	ND
	Federal: > 150 µg/m³	0	0	0
Annual arithmetic average concentration (µg/m³)		16.2	12.7	ND
Exceeded for the year:	State: > 20 µg/m³	No	No	ND
	Federal: > 50 µg/m³	No	No	ND
Fine Particulates ($PM_{2.5}$)[1]				
Maximum 24-hour concentration (µg/m³)		32.6	22.6	50.7
Number of days exceeded:	Federal: > 35 µg/m³	0	0	ND
Annual arithmetic average concentration (µg/m³)		9.3	ND	9.5
Exceeded for the year:	State: > 12 µg/m³	No	ND	No
	Federal: > 15 µg/m³	No	ND	No
Nitrogen Dioxide (NO_2)[2]				
Maximum 1-hour concentration (ppm)		0.067	0.053	0.051
Number of days exceeded:	State: > 0.250 ppm	0	0	ND
Annual arithmetic average concentration (ppm)		0.012	0.011	0.010
Exceeded for the year:	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2)				
Maximum 1-hour concentration (ppm)		ND	ND	ND
Number of days exceeded:	State: > 0.25 ppm	ND	ND	ND
Maximum 24-hour concentration (ppm)		ND	ND	ND
Number of days exceeded:	State: > 0.04 ppm	ND	ND	ND
	Federal: > 0.14 ppm	ND	ND	ND
Annual arithmetic average concentration (ppm)		ND	ND	ND
Exceeded for the year:	Federal: > 0.030 ppm	ND	ND	ND

Sources: CARB (2024) and USEPA (2024).

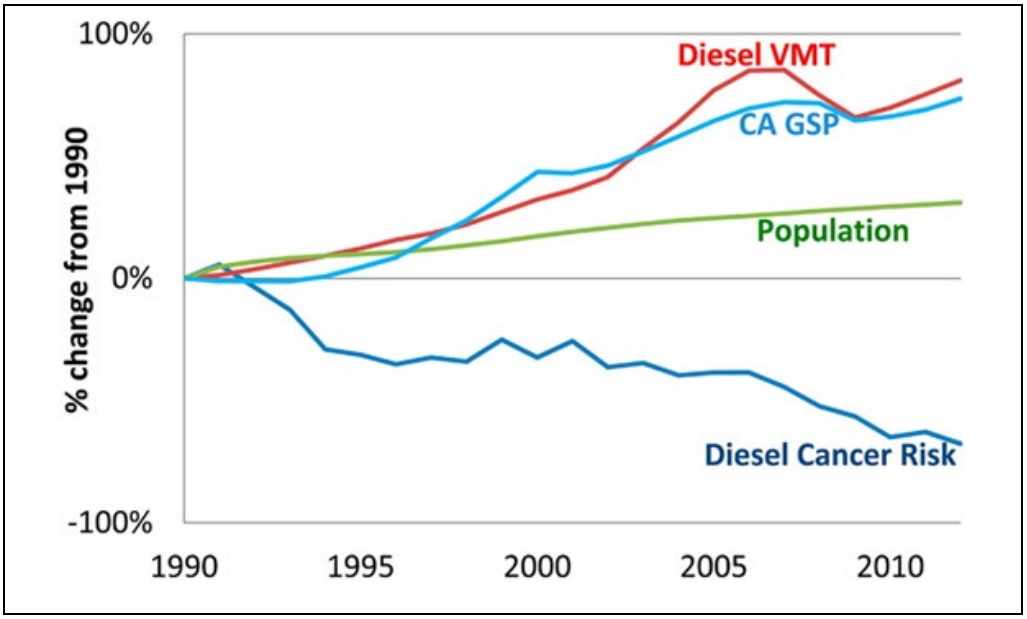
[1] Data from 2021–2022 was taken from the Mission Viejo Monitoring Station and data from 2023 was taken from the Anaheim Monitoring Station.

[2] Data was taken from the Anaheim Monitoring Station.

µg/m³ = micrograms per cubic meter
CARB = California Air Resources Board
ND = No data. There were insufficient (or no) data to determine the value.
ppm = parts per million
USEPA = United States Environmental Protection Agency

Toxic Air Contaminant Trends. In 1984, the CARB adopted regulations to reduce TAC emissions from mobile and stationary sources, as well as consumer products. A CARB study showed that ambient concentrations and emissions of the seven TACs responsible for the most cancer risk from airborne exposure declined by 76 percent between 1990 and 2012.[7] Concentrations of diesel particulate matter, a key TAC, declined by 68 percent between 1990 and 2012, despite a 31 percent increase in State population and an 81 percent increase in diesel vehicle miles traveled (VMT), as shown on Figure 4.3-1, below. The study also found that the significant reductions in cancer risk to California residents from the implementation of air toxics controls are likely to continue.

Figure 4.3-1: California Population, Gross State Product (GSP), Diesel Cancer Risk, and Diesel Vehicle Miles Traveled (VMT) Regulatory Context



Source: Ambient and Emission Trends of Toxic Air Contaminants in California (Propper, Ralph, et al. 2015).

The USEPA and the CARB regulate direct emissions from motor vehicles. The SCAQMD is the regional agency primarily responsible for regulating air pollution emissions from stationary sources (e.g., factories) and indirect sources (e.g., traffic associated with new development), as well as monitoring ambient pollutant concentrations.

4.3.4 Regulatory Setting

Federal, State, and local regulations and programs related to air quality that are applicable to the proposed project are described below.

[7] Propper, Ralph, Patrick Wong, Son Bui, Jeff Austin, William Vance, Álvaro Alvarado, Bart Croes, and Dongmin Luo. 2015. Ambient and Emission Trends of Toxic Air Contaminants in California. *American Chemical Society: Environmental Science & Technology*. Website: pubs.acs.org/doi/full/10.1021/acs.est.5b02766 (accessed June 2025).

4.3.4.1 Federal Regulations

Federal Clean Air Act. The 1970 Federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and also set deadlines for their attainment. The Federal Clean Air Act Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required of areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

4.3.4.2 State Regulations

California Clean Air Act. In 1988, the California Clean Air Act (CCAA) required that all air quality districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for carbon monoxide (CO), ozone (O_3), sulfur dioxide (SO_2), and nitrogen dioxide (NO_2) by the earliest practical date. The California Clean Air Act provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

California Air Resources Board. The California Air Resources Board (CARB) is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Assembly Bill 2588 Air Toxics "Hot Spots" Information and Assessment Act. Under Assembly Bill (AB) 2588, stationary sources of air pollutants are required to report the types and quantities of certain substances that their facilities routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, determine health risks, and notify nearby residents of significant risks.

4.3.4.3 Regional Regulations

South Coast Air Quality Management District. The South Coast Air Quality Management District (SCAQMD) has jurisdiction over most air quality matters in the South Coast Air Basin (Basin). This area includes all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin and is tasked with implementing certain programs and regulations required by the CAA and the CCAA. The SCAQMD prepares plans to attain CAAQS and National Ambient Air Quality Standards (NAAQS). The SCAQMD is directly responsible for reducing emissions from stationary (area and point) sources. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures though educational programs or fines, when necessary.

The proposed project would be subject to the following SCAQMD rules and regulations:

- **Regulation IV – Prohibitions:** This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air pollutant emissions, fuel contaminants, start-up/ shutdown exemptions, and breakdown events.

    - **Rule 402 – Nuisance:** This rule restricts the discharge of any contaminant in quantities that cause or have a natural ability to cause injury, damage, nuisance, or annoyance to businesses, property, or the public.

    - **Rule 403 – Fugitive Dust:** This rule requires the prevention, reduction, or mitigation of fugitive dust emissions from a project site. Rule 403 restricts visible fugitive dust to a project property line, restricts the net PM_{10} emissions to less than 50 micrograms per cubic meter ($\mu g/m^3$) and restricts the tracking out of bulk materials onto public roads. Additionally, Rule 403 requires an Applicant to utilize one or more of the best available control measures (identified in the tables within the rule). Control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers, and/or ceasing all activities. Finally, Rule 403 requires that a contingency plan be prepared if so determined by the United States Environmental Protection Agency (USEPA). In addition, SCAQMD Rule 403(e), Additional Requirements for Large Operations, includes requirements to provide Large Operation Notification Form 403 N, appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control training class in the South Coast Air Basin.

- **Regulation XI – Source Specific Standards:** Regulation XI sets emissions standards for different sources.

    - **Rule 1113 – Architectural Coatings:** This rule limits the amount of VOCs from architectural coatings and solvents, which lowers the emissions of odorous compounds.

- **Rule 2305 – Warehouse Indirect Source Rule (ISR):** The purpose of this rule is to reduce local and regional emissions of nitrogen oxides and particulate matter, and to facilitate local and regional emission reductions associated with warehouses and the mobile sources attracted to warehouses in order to assist in meeting State and federal air quality standards for ozone and fine particulate matter. This rule applies to owners and operators of warehouses with at least 100,000 square feet (sq ft) of indoor floor space in a single building. The warehouse rule is a menu-based points system requiring warehouse operators to annually earn a specified number of points. These points can be earned by completing actions from a menu that can include acquiring and using natural gas, Near-Zero Emissions and/or Zero- Emissions on-road trucks, zero-emission cargo handling equipment, solar panels or zero-emission charging and fueling infrastructure, or other options. The SCAQMD expects this rule to reduce emissions from warehouse uses by 10–15 percent. On September 11, 2024, the USEPA approved Rule 2305 to reduce pollution from warehouses, as a State implementation plan (SIP) revision.

The SCAQMD is responsible for demonstrating regional compliance with ambient air quality standards but has limited indirect involvement in reducing emissions from fugitive, mobile, and natural sources. To that end, the SCAQMD works cooperatively with the CARB, the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and other federal and State government agencies. It has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs) to meet CAAQS and NAAQS. SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. Every 3 years, SCAQMD prepares a new AQMP, updating the previous plan and 20-year horizon.[8]

The Final 2022 AQMP is the currently adopted AQMP. Key elements of the Final 2022 AQMP include the following:

- Calculating and taking credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation);
- A strategy with fair-share emission reductions at the federal, State, and local levels;
- Investment in strategies and technologies meeting multiple air quality objectives;
- Seeking new partnerships and significant funding for incentives to accelerate deployment of zero-emission and near-zero emission technologies;
- Enhanced socioeconomic assessment, including an expanded environmental justice analysis;
- Attainment of the 24-hour $PM_{2.5}$ standard in 2019 with no additional measures;
- Attainment of the annual $PM_{2.5}$ standard by 2025 with implementation of a portion of the O_3 strategy; and
- Attainment of the 1-hour O_3 standard by 2022 with no reliance on "black box" future technology (CAA Section 182(e)(5) measures).

The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of 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 CAA measures to achieve the 2015 8-hour ozone standard, which is the most current ozone standard.

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

[8] SCAQMD. 2022. *Final 2022 Air Quality Management Plan*. December 2.

development, and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With regard to air quality planning, SCAG prepares the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), which address regional development and growth forecasts and form the basis for the land use and transportation control portions of the AQMP and are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. The RTP, RTIP, and AQMP are based on projections originating within local jurisdictions.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan (RCP) provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the SCAQMD. The RCP is a framework for decision-making for local governments, assisting them in meeting federal and State mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes. Policies within the RCP include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

SCAG adopted the 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (Connect SoCal) on April 4, 2024. However, the CARB has not officially approved the 2024–2050 RTP/SCS. Therefore, the 2020–2045 RTP/SCS[9] is the approved version by the CARB. The 2024–2050 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2024–2050 RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding and takes into account operations and maintenance costs, to ensure reliability, longevity, and cost effectiveness. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in the 2024–2050 RTP/SCS, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels).

4.3.4.4 Local Regulations

City of Lake Forest General Plan. The City of Lake Forest addresses air quality in the Recreation and Resources Element of its General Plan.[10] The Recreation and Resources Element includes goals and policies that work to create a community with optimal air quality for its residents. The following policies from the Recreation and Resources Element are applicable to the proposed project:

[9] *Southern California Association of Governments (SCAG). 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy, RTP/SCS Demographics and Growth Forecast Technical Report.* Adopted April 4, 2024. Website: https://scag.ca.gov/sites/main/files/file-attachments/23-2987-tr-demographics-growth-forecast-final-040424.pdf?1712261839 (accessed February 2025).

[10] City of Lake Forest. 2020. *General Plan, Lake Forest 2040*. June. Website: https://www.lakeforestca.gov/sites/default/files/lake-forest/departments/Lake%20Forest%20General%20Plan%20(excluding %20Housing %20Element)_20211005121255885 2.pdf (accessed June 2025).

Goal RR-4 Air Quality and Greenhouse Gas Emissions: A community with optimal air quality for its residents.

Policy RR-4.7 Mitigation: Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

Action RR-4a: Review all new industrial and commercial development projects for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

Action RR-4b: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.

2. Potential exposure of sensitive receptors to toxic air contaminants.

3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.

4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Action RR-4n: Future development projects implemented under the General Plan will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions shall be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures.

1. Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet USEPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. This DPF will reduce diesel particulate matter and NOx emissions during construction activities.

2. Require a minimum of 50 percent of construction debris be diverted for recycling.

3. Require building materials to contain a minimum 10 percent recycled content.

4. Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

Action RR-4o: Future development projects implemented under the General Plan will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of their project.

1. Develop a project-specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.

2. Provide onsite solar/renewable energy in excess of regulatory requirements.

3. Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.

4. Require dripless irrigation and irrigation sensor units that prevent watering during rain storms.

5. Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

4.3.5 Thresholds of Significance

4.3.5.1 CEQA Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to air quality if it would:

Threshold 4.3.1: Conflict with or obstruct implementation of the applicable air quality plan;

Threshold 4.3.2: 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;

Threshold 4.3.3: Expose sensitive receptors to substantial pollutant concentrations; or

Threshold 4.3.4: Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

4.3.5.2 Regional Emissions Thresholds

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the South Coast Air Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Table 4.3.E lists the CEQA significance thresholds for construction and operational emissions established for the Basin. Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which SCAQMD developed and that apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

Table 4.3.E: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOCs	NO_x	CO	PM_{10}	$PM_{2.5}$	SO_x
Construction	75	100	550	150	55	150
Operations	55	55	550	150	55	150

Source: SCAQMD. Air Quality Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf (accessed August 2024).

CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

4.3.5.3 Localized Impacts

The SCAQMD published its *Final Localized Significance Threshold Methodology* in July 2008, recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.[11] This guidance was used to analyze potential localized air quality impacts associated with construction of the proposed project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emission source, the ambient air quality in the

[11] SCAQMD. 2008a. *Final Localized Significance Threshold Methodology.* July.

source receptor area, and the distance to the project. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality.

LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is the nearby Saddleback Valley (SRA 19). SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter source-receptor distances for projects that are 5 acres in size or less. If the project exceeds the 5-acre LST threshold, then additional dispersion modeling analysis would be required. The closest sensitive receptors to the project site are residential uses including single-family homes, which are located adjacent to the east property line at approximately 82 feet from the project site's eastern boundary. Based on the anticipated construction equipment and based on the grading and ground-disturbing activities assumed in CalEEMod, it is assumed that the maximum daily disturbed acreage during construction of the proposed project would be 4.0 acres.[12] For the operational threshold, the maximum daily LST, which is based on a 5-acre project site, would be used. Table 4.3.F lists the emissions thresholds that apply during project construction and operation.

Table 4.3.F: South Coast Air Quality Management District Localized Significance Thresholds

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Construction	175.0	1,534.0	10.0	6.7
Operations	197.0	1,801.0	3.0	2.0

Source: SCAQMD (2008).
CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District

4.3.5.4 Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project site are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 parts per million (ppm)
- California State 8-hour CO standard of 9 ppm

[12] SCAQMD. n.d. *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf (accessed June 2025).

4.3.5.5 Health Risk Thresholds

Both the State and federal governments have established health-based ambient air quality standards for seven air pollutants. For other air pollutants without defined significance standards, the definition of substantial pollutant concentrations varies. For TACs, "substantial" is taken to mean that the individual health risk exceeds a threshold considered to be a prudent risk management level.

The following limits for maximum individual cancer risk (MICR) and noncancer acute and chronic Hazard Index (HI) from project emissions of TACs are considered appropriate for use in determining the health risk for projects in the Basin:

- **MICR:** MICR is the estimated probability of a maximally exposed individual (MEI) contracting cancer as a result of exposure to TACs over a period of 30 years for adults and 9 years for children in residential locations and over a period of 25 years for workers. The MICR calculations include multipathway consideration, when applicable.

  The cumulative increase in MICR that is the sum of the calculated MICR values for all TACs would be considered significant if it would result in an increased MICR greater than 10 in 1 million (1×10^{-5}) at any receptor location.

- **Chronic HI:** Chronic HI is the ratio of the estimated long-term level of exposure to a TAC for a potential MEI to its chronic reference exposure level. The chronic HI calculations include multipathway consideration, when applicable.

  The proposed project would be considered significant if the cumulative increase in total chronic HI for any target organ system would exceed 1.0 at any receptor location.

- **Acute HI:** Acute HI is the ratio of the estimated maximum 1-hour concentration of a TAC for a potential MEI to its acute reference exposure level.

  The proposed project would be considered significant if the cumulative increase in total acute HI for any target organ system would exceed 1.0 at any receptor location.

The SCAQMD *CEQA Air Quality Handbook*[13] states that emissions of TACs are considered significant if an HRA shows an increased risk of greater than 10 in 1 million. Based on guidance from SCAQMD in the document *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis,*[14] for the purposes of this analysis, the threshold of 10 in 1 million was used as the cancer risk threshold for the proposed project.

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13 SCAQMD. 1993. *CEQA Air Quality Handbook.* Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed June 2025).

14 SCAQMD. 2003. *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*. August.

4.3.6 Project Impacts

Please refer to Section 4.3.9 for a full text description of the regulatory compliance and/or mitigation measures referenced in the analysis below.

Threshold 4.3.1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. An AQMP consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the information provided in air quality management plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of a project under consideration at a stage early enough to ensure that air quality concerns are addressed. Because air quality management plans are based on development projections from land use designations depicted and described in local General Plans, only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review.

The SCAQMD's 2022 AQMP is based on regional growth projections developed by SCAG. The proposed project would include 165,803 sq ft of industrial uses. The proposed project would not house more than 1,000 persons, occupy more than 40 acres of land, or encompass more than 650,000 sq ft of floor area. Thus, the proposed project would not be defined as a regionally significant project under CEQA, and therefore, it does not meet SCAG's Intergovernmental Review criteria.

The City's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD 2022 AQMP. Pursuant to the methodology provided in the SCAQMD *CEQA Air Quality Handbook*, consistency with the 2022 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standard violation or cause a new violation, and (2) is consistent with the growth assumptions in the 2022 AQMP. The proposed project's consistency review is presented as follows:

1. The proposed project would result in short-term construction and long-term operational pollutant emissions. However, as demonstrated in threshold 4.3.2 in Table 4.3.J and Table 4.3.K, the proposed project would not exceed the significance criteria for daily VOC, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$ emissions. Therefore, construction and operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. Therefore, the proposed project would not result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standards violation.

2. The SCAQMD *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, the proposed project is not defined as a significant project pursuant to the SCAQMD *CEQA Air Quality Handbook*. In addition, the

proposed project would not require a change to the General Plan land use designation or the current zoning and would be consistent with the City's General Plan and Zoning Ordinance.

The projections in the AQMP for achieving air quality goals are based, in part, on assumptions in SCAG's RTP/SCS regarding population, housing, and growth trends, as well as assumptions and projections of local planning agencies to determine control strategies for regional compliance status. According to SCAG's 2020–2045 RTP/SCS, the City's household and employment are forecasted to increase by approximately 3,100 households and 6,400 jobs, respectively, between 2016 and 2045[15]. Moreover, according to SCAG's 2024–2050 RTP/SCS, the City's households and employment are forecasted to increase by approximately 2,600 households and 1,200 jobs, respectively, between 2019 and 2050.[16] The City's General Plan does not specify or anticipate when complete buildout would occur because long-range demographic and economic trends are speculative. The designation within the General Plan of a site for a certain use does not necessarily mean that the site would be developed with that use during the planning period because most development depends on property owner initiative.

Once operational, the proposed project would not result in direct population growth because the proposed project is not a residential use or does not include a residential component; and therefore, would not add new residents at the project site. The proposed 165,803 sq ft industrial building would generate approximately 187 new jobs in Lake Forest. Based on the SCAG 2020–2045 RTP/SCS Demographics and Growth Forecast Technical Report data in Table 13 and Table 14, this represents approximately 3 percent[17] of the job growth anticipated in Lake Forest by 2045 and less than 1 percent[18] of the job growth anticipated in Orange County for 2045. Similarly, according to the SCAG 2024–2050 RTP/SCS Growth Forecast Technical Report data summarized in Table 4.14.A and Table 4.14.B, this represents approximately 17 percent[19] of the job growth anticipated in Lake Forest by 2035 and less than 1 percent[20] of the job growth anticipated in Orange County by 2035. Given that approximately 1,800 and 64,100 people are

15 Southern California Association of Governments (SCAG). 2020. 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy. Demographics and Growth Forecast, Technical Report, Table 14. Adopted September 3, 2020.

16 Southern California Association of Governments (SCAG). 2024. 2024–2050 Regional Transportation Plan/ Sustainable Communities Strategy. Demographics and Growth Forecast, Technical Report, Table 13. Adopted April 4, 2024.

17 The anticipated change in employment in Lake Forest from 2016 to 2045 is 6,400 jobs (48,900-42,500 = 6,400). The proposed project would generate approximately 187 jobs, which accounts for 17 percent of the anticipated job growth (187/6,400 = 0.029 x 100 = 2.9 percent, round up to 3 percent).

18 The anticipated change in employment in Orange County from 2016 to 2045 is 270,000 jobs (1,980,000-1,710,000 = 270,000). The proposed project would generate approximately 187 jobs, which accounts for 0.069 percent of the anticipated job growth (187/270,000 = 0.00069 x 100 = 0.069 percent).

19 The anticipated change in employment in Lake Forest from 2019 to 2035 is 1,100 jobs (45,800-44,700 = 1,100). The proposed project would generate approximately 187 jobs, which accounts for 17 percent of the anticipated job growth (187/1,100 = 0.17 x 100 = 17 percent).

20 The anticipated change in employment in Orange County from 2019 to 2035 is 137,000 jobs (1,942,000-1,805,000 = 137,000). The proposed project would generate approximately 187 jobs, which accounts for 0.14 percent of the anticipated job growth (187/137,000 = 0.0014 x 100 = 0.14 percent).

currently unemployed[21] in Lake Forest and Orange County, respectively, it is logical to assume that the majority of these positions would be filled by existing City or County residents. Therefore, growth projections of the proposed project would be within the parameters of expected overall growth in the City. Therefore, the proposed project would not result in growth in the area or in Lake Forest beyond that which was planned for by SCAG.

Based on the consistency analysis presented above, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. Impacts associated with conflicts with the applicable air quality plan would be less than significant, and no mitigation is required.

Threshold 4.3.2: 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?

Less Than Significant with Mitigation Incorporated. The Basin is currently designated as nonattainment for the federal and State standards for O_3 and $PM_{2.5}$. In addition, the Basin is in nonattainment for the federal PM_{10} standard. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, building, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, ROG, directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and TACs such as diesel exhaust particulate matter.

Project construction activities would include demolition, grading, site preparation, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site.

[21] Civilians over the age of 16 who are not working but are able, available, and actively looking for work according to the California Employment Development Department (EDD).

Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SCAQMD has established Rule 403: Fugitive Dust, which would require the Applicant to implement measures that would reduce the amount of particulate matter generated during the construction period.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, VOCs and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod. As discussed in Chapter 3.0, Project Description, construction of the proposed project would tentatively commence in January 2026 and is expected to be completed in approximately 13 months, which was included in CalEEMod. Construction of the proposed project would require the net export of approximately 900 cy of material, which was included in CalEEMod. The proposed project would require the use of concrete industrial saws, excavators, impactors, stackers, jaw crushers, bull dozers, tractors, loaders, backhoes, graders, scrapers, forklifts, cranes, generator sets, welders, concrete ride on trowel machine, cement and mortar mixers, paving equipment, and air compressors, which was also included in CalEEMod. Equipment tier engine and number of equipment pieces was provided by the project Applicant, which was included in CalEEMod. In addition, this analysis assumes that the proposed project would comply with SCAQMD Rule 403 measures. Number of worker trips, vendor, and hauling trips during construction were also provided by the project applicant and were included in CalEEMod. All other construction details are not yet known; therefore, default assumptions (e.g., off-road emission factors and construction trip lengths) from CalEEMod were used.

Table 4.3.G lists the tentative project construction schedule based on a 13-month construction duration. Table 4.3.H lists the potential construction equipment to be used during project construction under each phase of construction. Construction-related emissions are presented in Table 4.3.I. CalEEMod output sheets are included as an appendix to the Air Quality/GHG/Energy Analysis.[22]

[22] LSA. 2025a. *Air Quality, Greenhouse Gas, and Energy Impact Report*.

Table 4.3.G: Tentative Project Construction Schedule

Phase Number	Phase Name	Phase Start Date	Phase End Date	Number of Days/Week	Number of Days
1	Demolition	1/5/2026	2/19/2026	5	34
2	Site Preparation	2/9/2026	3/6/2026	5	20
3	Grading	2/23/2026	6/24/2026	5	88
4	Building Construction	3/9/2026	12/7/2026	5	196
5	Paving	11/2/2026	12/15/2026	5	32
6	Architectural Coating	12/7/2026	1/21/2027	5	34

Source: Compiled by LSA, based on information provided by the Applicant (June 2025).

Table 4.3.H: Diesel Construction Equipment Utilized by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	1	8	33	0.73
	Excavators	3	8	36	0.38
	Other Construction Equipment	3	8	367	0.4
Site Preparation	Rubber Tired Dozers	1	8	325	0.4
	Tractors/Loaders/Backhoes	4	8	84	0.37
Grading	Excavators	4	8	175	0.38
	Graders	1	8	185	0.41
	Rubber Tired Dozers	2	8	367	0.4
	Tractors/Loaders/Backhoes	3	8	125	0.37
	Scrapers	3	8	500	0.48
Building Construction	Cranes	1	7	367	0.29
	Forklifts	3	8	367	0.2
	Generator Sets	1	8	82	0.74
	Tractors/Loaders/Backhoes	3	7	84	0.37
	Welders	1	8	14	0.45
	Other Construction Equipment	5	10	88	0.42
Paving	Pavers	1	8	81	0.42
	Paving Equipment	2	6	86	0.36
	Rollers	2	6	36	0.38
	Tractors/Loaders/Backhoes	1	8	84	0.37
	Cement and Mortar Mixers	2	6	10	0.56
Architectural Coating	Air Compressors	2	6	37	0.48
	Tractors/Loaders/Backhoes	3	7	84	0.37

Source: Compiled by LSA, based on information provided by the Applicant (June 2025).
CalEEMod = California Emissions Estimator Model

Table 4.3.I: Project Construction Emissions

Project Construction	Maximum Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition	0.7	8.3	26.2	<0.1	4.5	1.0
Site Preparation	1.1	24.1	28.2	<0.1	3.4	2.0
Grading	3.6	84.5	102.6	0.1	9.4	5.2
Building Construction	1.3	34.2	40.9	0.1	1.6	1.1
Paving	0.7	11.3	9.8	<0.1	0.8	0.5
Architectural Coating	24.0	9.6	7.8	<0.1	0.7	0.5
Maximum (lbs/day)	**26.0**	**118.7**	**143.6**	**0.2**	**12.8**	**7.2**
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Exceeds?	**No**	**Yes**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).
Note: Maximum emissions of VOC occurred during the overlapping building construction, paving, and architectural coating phases. The maximum emissions of CO and NO_X occurred during the overlapping of grading and building construction phases. Maximum emissions of PM_{10} and $PM_{2.5}$ occurred during the overlapping of site preparation and grading phases.
Note: The South Coast Air Basin is classified as non-attainment for ozone under both the State and federal standards. Ozone is not directly emitted by any one source but rather forms in the atmosphere through reactions with other pollutants including NOx and VOCs.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in Table 4.3.I, construction emissions associated with the project would not exceed the SCAQMD thresholds for VOCs, CO, sulfur oxides (SO_X), $PM_{2.5}$, or PM_{10} emissions. However, maximum daily NO_X emissions during the overlapping of grading and building construction phases would exceed the significance criteria. Therefore, the proposed project would result in a potentially significant impact for criteria pollutants during construction. As such, implementation of mitigation that would require Tier 4 Interim equipment or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the CARB would reduce NOx emissions by resulting in fewer emissions during the construction process. VDECS are an effective emissions control strategy verified by CARB (pursuant to the verification procedure laid out in Title 13, California Code of Regulations, sections 2700-2710) to reduce emissions from either PM or NOx, or both. If Tier 4 engines are not available, construction equipment will need to be equipped with the highest VDECS to mitigate emissions. Therefore, **Mitigation Measure (MM) AQ-1** would be required to reduce NO_X emissions to a less than significant level.

Table 4.3.J identifies the results of the analysis with implementation of **MM AQ-1**.

As shown in Table 4.3.J, with implementation of **MM AQ-1**, NO_X emissions associated with the proposed project would be below the SCAQMD significance thresholds. Therefore, with implementation of **MM AQ-1**, construction of the proposed project would not result in emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable federal or State ambient air quality standard. Impacts would be less than significant with implementation of **MM AQ-1**.

Table 4.3.J: Mitigated Project Construction Emissions

Project Construction	Maximum Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition	0.6	16.2	26.2	0.1	4.3	0.9
Site Preparation	0.4	7.8	14.7	<0.1	2.8	1.4
Grading	1.7	36.3	72.0	0.1	7.1	3.1
Building Construction	1.0	21.6	40.9	0.1	0.7	0.3
Paving	0.5	6.1	9.8	<0.1	0.3	0.1
Architectural Coating	23.3	5.5	7.8	<0.1	0.2	0.1
Maximum (lbs/day)	**24.8**	**57.9**	**112.6**	**0.2**	**9.9**	**4.5**
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).
Note: Maximum emissions of VOC occurred during the overlapping building construction, paving, and architectural coating phases. The maximum emissions of CO and NO_X occurred during the overlapping of grading and building construction phases. Maximum emissions of PM_{10} and $PM_{2.5}$ occurred during the overlapping of site preparation and grading phases.
Note: The South Coast Air Basin is classified as non-attainment for Ozone under both the State and federal standards. Ozone is not directly emitted by any one source but rather forms in the atmosphere through reactions with other pollutants including NOx and VOCs.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

Operational Air Quality Impacts. Long-term air pollutant emission impacts are those typically associated with mobile sources (e.g., vehicle trips and truck trips), energy sources (e.g., electricity), area sources (e.g., architectural coatings and the use of landscape maintenance equipment), and stationary sources (e.g., use of fire pump).

Mobile source emissions include VOC and NO_X emissions that contribute to the formation of ozone. Additionally, PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways.

Energy source emissions result from activities in buildings for which natural gas is used. However, the proposed building would be all electric and no natural gas use would be associated with the operation of the proposed building.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Stationary source emissions are associated with the use of the fire pump.

Consistent with the SCAQMD guidance for estimating emissions associated with land use development projects, CalEEMod was used to calculate the long-term operational emissions associated with the project. The proposed project would construct a 165,803 sq ft industrial building. Therefore, the proposed project analysis was conducted using land use codes *Unrefrigerated Warehouse- No Rail*, *Other Asphalt Surfaces,* and *Parking Lot*. The *Other Asphalt Surfaces* land use was used to represent the off-site improvements for the proposed project. Trip generation rates used in CalEEMod for the project were based on the project's trip generation

described in Section 4.17, Transportation and Traffic, which identifies that the proposed project would generate approximately 573 average daily trips, 458 passenger car trips, 38 two-axle truck trips, 21 three-axle truck trips, and 58 four-axle truck trips. As noted in Section 4.17, the trip generation rates are based trip generation rates are from the Institute of Transportation Engineers Trip Generation Manual, 11th Edition and the Warehouse Truck Trip Study Data Results and Usage from the SCAQMD. This analysis assumes that the four-axle truck trips would travel approximately 40 miles. To be conservative, separate CalEEMod analyses were prepared for the operational analysis for the proposed project – one CalEEMod run evaluated operational and vehicle trip emissions and another CalEEMod run evaluated four-axle truck (heavy heavy-duty trucks) trip emissions for the proposed project. Mobile source emissions from both model runs are summarized in Table 4.3.K below. Consistent with the project design plans, this CalEEMod analysis assumes no natural gas usage during construction and operation of the proposed project. The CalEEMod analysis includes the use of a 300 horsepower (hp) diesel fire pump, which is estimated to run for approximately 50 hours per year and the use of two 200 hp diesel powered cargo handling equipment units. In addition, the CalEEMod analysis assumes that the proposed project would be operational in 2027.

Table 4.3.K: Project Operational Emissions

Emission Type	Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Sources – Vehicles and Light Duty Trucks	1.6	1.6	18.0	0.1	5.1	1.3
Mobile Sources – Heavy Heavy-Duty Trucks	0.1	8.7	3.5	0.1	2.3	0.7
Area Sources	5.2	0.1	7.2	<0.1	<0.1	<0.1
Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
Off-Road Sources	0.7	5.1	3.3	<0.1	0.2	0.2
Stationary Sources	0.5	1.4	1.3	<0.1	0.1	0.1
Total Proposed Project Emissions	**8.1**	**16.9**	**33.3**	**0.2**	**7.7**	**2.3**
SCAQMD Thresholds	**55.0**	**55.0**	**550.0**	**150.0**	**150.0**	**55.0**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).
CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

Model results are shown in Table 4.3.K. CalEEMod output sheets are included as an appendix to the Air Quality/GHG/Energy Analysis.[23]

As shown in Table 4.3.K, emissions associated with the proposed project would not exceed the significance criteria for VOCs, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$ emissions; thus, the proposed project would not have a significant effect on regional air quality. Therefore, operation of the proposed

[23] LSA. 2025a. *Air Quality, Greenhouse Gas, and Energy Impact Report*.

project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under an applicable federal or State ambient air quality standard. Impacts would be less than significant, and no mitigation is required.

Long-Term Microscale (CO Hot Spot) Analysis. Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, CO disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Mission Viejo Station, the closest monitoring station to the project site, showed a highest recorded 1-hour concentration of 2.5 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.6 ppm (the State standard is 9 ppm) during the past 3 years (Table F). The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

As described in Section 4.17, Transportation and Traffic, the proposed project would generate 74 a.m. peak hour trips and 78 p.m. peak-hour trips. As the proposed project would not generate 100 or more a.m. or p.m. peak hour trips, the proposed project did not meet the criteria for an evaluation of study area intersection or roadway segment level of service (LOS). Therefore, it is assumed that the addition of the proposed project traffic would not create any significant adverse impacts to nearby intersections.

Therefore, given the extremely low level of CO concentrations in the project area, and lack of traffic impacts at any intersections, project-related vehicles are not expected to contribute significantly to result in the CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the project would not result in any project-related impacts on CO concentrations. Impacts would be less than significant, and no mitigation is required.

Threshold 4.3.3: Would the project expose sensitive receptors to substantial pollutant concentrations?

***Less Than Significant with Mitigation Incorporated*.** Construction of the project would require the use of diesel-fueled equipment, which could be a source of toxic air contaminants. Additionally, during project operation, diesel fueled trucks would operate on the project site.

The SCAQMD defines structures that house persons (e.g., children, the elderly, persons with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise) or places where persons gather (i.e., residences, schools, playgrounds, child-care centers, convalescent centers, retirement homes, and athletic fields) as sensitive receptors. Sensitive receptors are defined as people who have an increased sensitivity to air pollution or environmental contaminants. Although not sensitive receptors, this discussion includes an analysis of health impacts to nearby worker receptors (i.e., employees in nearby businesses) to ensure that people working close to the proposed project would not be exposed to substantial pollutant concentrations. The closest sensitive receptors to the project site are residential uses, including single-family homes, which are located adjacent to the east property line at approximately 82 feet from the project site's eastern boundary limit to the residential building facade. The closest worker receptor to the project site is located approximately 25 feet immediately north of the project site.

Health Risk on Nearby Sensitive Receptors. The following sections describe the potential impacts on sensitive receptors from construction and operation of the proposed project, which is based on the results of an HRA prepared for the project and provided in Appendix C. The HRA analysis and results are presented below. Model inputs, detailed construction and operational data, and other details are also included in the *Health Risk Assessment*.[24]

Construction Health Risk Assessment. A construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for the proposed project.

For the purposes of an HRA, short-term emissions are of concern for analyzing acute health impacts, and long-term emissions are of concern for analyzing chronic and carcinogenic health impacts. A screening-level multi-pathway assessment has been conducted. This technique was chosen as recommended in the OEHHA *Air Toxic Hot Spots Program Risk Assessment Guidelines*[25] and guidance from the SCAQMD.

This HRA has been conducted using three models: (1) CARB's California Emissions Factor Model, Version 2021 (EMFAC2021) for on-road vehicle emissions factors and percentages of fuel type within the overall vehicle fleet; (2) the USEPA's AERMOD air dispersion model to determine how the TACs would move through the atmosphere after release from sources both on site and on surrounding roadways; and (3) CARB's HARP2 model to translate the pollutant concentrations from AERMOD into individual health risks at any sensitive receptor locations surrounding the project site.

The OEHHA has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel particular matter (DPM) made people with allergies more susceptible to the materials to which they were allergic,

[24] LSA. 2025b. *Health Risk Assessment*.

[25] California Environmental Protection Agency Office of Environmental Health Hazard Assessment, 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed June 2025).

such as dust and pollen. Exposure to DPM also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM. The HRA analysis used PM_{10} emissions to represent DPM emissions, consistent with OEHHA guidance.

The conservative nature of this analysis is due primarily to the following three factors:

- The CARB-adopted diesel exhaust unit risk factor (URF) of 300 in 1 million per $\mu g/m^3$ is based on the upper 95th percentile of estimated risk for each of the epidemiological studies used to develop the URF. Therefore, the risk factor is already representative of the conservative risk posed by DPM.

- The risk estimates assume sensitive receptors would be subject to DPM 24 hours per day, 350 days per year. As a conservative measure, SCAQMD does not recognize indoor adjustments for residents. However, typical people spend the majority of their time indoors versus remaining outdoors 24 hours per day, 350 days per year.

- The exposure to DPM is assumed to be constant for the given period analyzed (i.e., 70 years). However, emissions from DPM are expected to substantially decrease in the future with the implementation of standard regulatory requirements and technological advancement to reduce DPM.

To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). The HRA analyis used PM_{10} emissions to represent DPM emissions, consistent with OEHHA guidance.[26] Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis. This refined assessment was conducted using the CARB exposure methodology with the air dispersion modeling performed using the USEPA dispersion model AERMOD. The model provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data. Details of these inputs are included in as an Appendix to the *Health Risk Assessment*.[27]

CARB's HARP2 model is a tool that assists with the programmatic requirements of the Air Toxics "Hot Spots" Program (Assembly Bill 2588). HARP2 was used to translate the TAC concentrations from AERMOD into long-term carcinogenic and chronic, and short-term acute health risk levels following the guidance in the SCAQMD and OEHHA risk assessment guidelines. These guidelines specify a minimum set of TAC pathways and HARP2 modeling options for the carcinogenic

[26] California Environmental Protection Agency Office of Environmental Health Hazard Assessment, 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed June 2025).

[27] LSA. 2025b. *Health Risk Assessment*.

assessment. To estimate chronic noncancer risks at residential receptors, the "RMP-Derived Method" risk-calculation option was used. Following the OEHHA guidance, an 8-hour chronic noncancer risk was calculated for residential receptors because the project would operate more than 8 hours per day and 5 days per week.

The dose-response relationship for a specific pollutant describes the association between exposure and the observed response (health effect). In other words, the relationship estimates how different levels of exposure to a pollutant change the likelihood and severity of health effects. The dose-response relationship (the response occurring with increasing doses) varies with each pollutant, individual sensitivity, and type of health effect. Combining the results of the emission characterization and dispersion modeling described above with the dose-response assessment gives an estimate of the increased health risk for an individual exposed to the maximum predicted long-term concentrations of TACs.

Discrete variants for daily breathing rates, exposure frequency, and exposure duration were default rates as presented in the OEHHA guidance document entitled *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*[28] and guidance from the SCAQMD.

Table 4.3.L, below, identifies the results of the analysis at the maximally exposed individual (MEI), who is a hypothetical individual who—because of realistically assumed proximity, activities, and living habits—would receive the highest exposure of a pollutant. Model snap shots of the sources are included in as an appendix to the *Health Risk Assessment*.[29]

Table 4.3.L: Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential MEI	41.14	0.054	0.000
Worker MEI	0.70	0.054	0.000
SCAQMD Significance Threshold	**10 in 1 million**	**1.0**	**1.0**
Significant?	**Yes**	**No**	**No**

Source: Compiled by LSA (June 2025).
MEI = maximally exposed individual
SCAQMD = South Coast Air Quality Management District

As shown in Table 4.3.L, the maximum cancer risk for the residential MEI would be 41.14 in 1 million, which would exceed the SCAQMD cancer risk threshold of 10 in 1 million. The worker MEI would be 0.70 in 1 million, which would not exceed the SCAQMD cancer risk threshold of 10 in 1 million. The total chronic HI would be 0.054 for the residential MEI and for the worker MEI, which is below the threshold of 1.0. In addition, the total acute HI would be nominal (0.000), which would

[28] California Environmental Protection Agency Office of Environmental Health Hazard Assessment, 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed June 2025).

[29] Ibid.

also not exceed the threshold of 1.0. Because the residential MEI would exceed the SCAQMD cancer risk threshold, a mitigation measure to reduce toxic air contaminants would be required. Tier 4 Interim equipment or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the CARB would reduce construction PM_{10} emissions by resulting in fewer emissions during the construction process. Long term exposure to PM_{10} emissions is associated with an increased risk of lung cancer. Therefore, reducing PM_{10} emissions to the extent feasible would help lower the cancer risk associated with the construction emissions from the proposed project. Therefore, implementation of **MM AQ-1** would be required to reduce the cancer risks to off-site receptors from construction.

As shown in Table 4.3.M, with the implementation of **MM AQ-1** the maximum cancer risk for the residential receptor MEI would be reduced from 41.14 in 1 million to 5.12 in 1 million, which is below the SCAQMD cancer risk threshold of 10 in 1 million. Therefore, with implementation of **MM AQ-1**, construction of the proposed project would not cause an exceedance of the SCAQMD health risk thresholds and would not result in the exposure of nearby sensitive receptors to substantial pollutant concentrations. Impacts resulting from the exposure of sensitive receptors to substantial pollutant concentrations during construction would be less than significant with implementation of **MM AQ-1**.

Table 4.3.M: Mitigated Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential MEI	5.12	0.007	0.000
Worker MEI	0.09	0.007	0.000
SCAQMD Significance Threshold	**10 in 1 million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).
MEI = maximally exposed individual
SCAQMD = South Coast Air Quality Management District

Operational Health Risk Assessment. An operational HRA was conducted to determine the potential health risk to people living and working near the project site associated from the exhaust of diesel-powered trucks and equipment during proposed project operation. The carcinogenic and chronic health risks from the proposed project are shown in Table 4.3.N. The residential risk conservatively incorporates both the risk for a child living in a nearby residence for 9 years (the standard period of time for child risk) and an adult living in a nearby residence for 30 years (considered a conservative period of time for an individual to live in any one residence). An exposure period of 25 years was assumed for worker receptors.

Table 4.3.N: Health Risks from Project Operation to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential MEI	3.06	0.001	<0.001
Worker MEI	0.85	0.003	<0.001
SCAQMD Significance Threshold	**10.0 in 1 million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).
MEI = maximally exposed individual
SCAQMD = South Coast Air Quality Management District

As shown in Table 4.3.N, the maximum cancer risk for the residential MEI would be 3.06 in 1 million, which would not exceed the SCAQMD cancer risk threshold of 10 in 1 million. The worker MEI would be 0.85 in 1 million, which would also not exceed the threshold. The total chronic HI would be 0.001 for the residential MEI and 0.003 for the worker MEI, which is below the threshold of 1.0. In addition, the total acute HI would be less than 0.001, which would also not exceed the threshold of 1.0. As these results show, all health risk levels to nearby receptors from operation-related emissions of TACs would be well below the SCAQMD's health risk thresholds. Therefore, operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations during project operations. Impacts would be less than significant, and no mitigation is required.

Localized Significance Analysis. The SCAQMD's numeric regional mass daily emission thresholds are based in part on Section 180 I of the CAA. It should be noted that the numeric regional mass daily emission thresholds have not changed since their adoption as part of the *CEQA Air Quality Handbook* published by SCAQMD in 1993 (over 20 years ago). The numeric regional mass daily emission thresholds are also intended to provide a means of consistency in significance determination within the environmental review process.

Notwithstanding, simply exceeding the SCAQMD's numeric regional mass daily emission thresholds does not constitute a particular health impact to an individual nearby. The reason for this is that the mass daily emission thresholds are in lbs/day emitted into the air, whereas health effects are determined based on the concentration of a pollutant in the air at a particular location (e.g., ppm by volume of air or µg/m^3 of air). CAAQS and NAAQS were developed to protect the most susceptible population groups from adverse health effects and were established in terms of ppm or µg/m^3 for the applicable emissions.

For this reason, the SCAQMD developed a methodology to assist lead agencies in analyzing localized air quality impacts from a proposed project as they relate to CO, NO_X, $PM_{2.5}$, and PM_{10}. This methodology is collectively referred to as the LST as described in Section 4.3.5.3. Localized Impacts. LSTs differ from the numeric regional mass daily emission thresholds in that LSTs are based on (1) the amount of emissions generated from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS, and (2) the ambient concentrations of the pollutant and the relative distance to the nearest sensitive receptor (the

SCAQMD performed air dispersion modeling to determine what amount of emissions generated a particular concentration at a particular distance).

This air quality analysis evaluated the proposed project localized impact to air quality for emissions of CO, NO_X, $PM_{2.5}$, and PM_{10} by estimating the proposed project's on-site emissions using CalEEMod and comparing the resulting pollutant concentrations at surrounding sensitive receptors to the CAAQS. As shown in Tables 4.3.O and 4.3.P, which are provided below, the proposed project emissions would not be expected to exceed the most stringent applicable NAAQS or CAAQS for CO, NO_X, $PM_{2.5}$, and PM_{10}. It should be noted that the AAQS are developed and represent levels at which the most susceptible persons (children and the elderly) are protected. In other words, the AAQS are purposefully set low to protect children, the elderly, and those with existing respiratory problems.

The SCAQMD has acknowledged that for criteria pollutants, it would be extremely difficult, if not impossible, to quantify health impacts for various reasons, including modeling limitations as well as where in the atmosphere air pollutants interact and form.

Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with particulate matter include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Because of the relatively small amount of emissions from the proposed project relative to regional-wide emissions, it would be speculative to assess whether or the extent to which the proposed project would contribute to adverse health effects. Even though SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, SCAQMD has not provided methodology, and modeling does not currently exist, to assess the specific correlation between mass emissions generated, cumulative increases from individual projects, and the effect on health or even to determine how exceeding the regional thresholds by small amounts would affect the number of days the region is in nonattainment. Similarly, CARB methodology has reported that a $PM_{2.5}$ methodology is not suited for small projects and may yield unreliable results. For these reasons, mass emissions are not correlated with concentrations of emissions or how many additional individuals in the air basin would be affected by the health effects cited above. In contrast, for extremely large regional projects (unlike the proposed project), the SCAQMD has only been able to correlate potential health outcomes for very large emissions sources. As part of its rulemaking activity, the SCAQMD determined that, specifically 6,620 lbs/day of NO_X and 89,180 lbs/day of VOCs were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to O_3.

The proposed project does not generate anywhere near 6,620 lbs/day of NO_X or 89,190 lbs/day of VOC emissions. As shown in Table 4.3.K above, the proposed project would generate approximately 16.9 lbs/day of NO_X during operation (less than 1 percent of 6,620 lbs/day) and approximately 8.1 lbs/day of VOC emissions during operations (less than 1 percent of 89,190 lbs/day). Therefore, the proposed project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level.

Notwithstanding, as previously noted, this air quality analysis does include a site-specific localized impact analysis that correlates potential health impacts from the proposed project on a local level to immediately adjacent land uses. Current scientific, technological, and modeling limitations do not allow for the relation of expected adverse air quality impacts to likely specific health consequences.

Localized impact results from the proposed project are presented below.

Construction Localized Significance Analysis. Project construction and operation emissions were compared to the LST screening tables in SRA 19, based on an 82-foot (25-meter) source-receptor distance and a disturbed acreage of 4.0 acres for construction and 5.0 acres for operation.

Table 4.3.O indicates the estimated on-site construction emissions. As shown in Table 4.3.O, on-site construction emissions would not exceed the LST thresholds for the closest receptor. Therefore, construction of the proposed project would not result in a locally significant air quality impact.

Table 4.3.O: Project Localized Construction Emissions (lbs/day)

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
Proposed Project On-Site Emissions	84.3	101.8	9.2	5.1
Localized Significance Threshold	175.0	1,534.0	10.0	6.7
Exceeds Threshold?	**No**	**No**	**Yes**	**No**

Source: Compiled by LSA (June 2025).
Note: Source Receptor Area 19, based on a 4.0-acre construction disturbance daily area, at a distance of 82 feet from the project boundary.
CO= carbon monoxide
lbs/day = pounds per day
NO_x= nitrogen oxides
$PM_{2.5}$= particulate matter less than 2.5 microns in size
PM_{10}= particulate matter less than 10 microns in size

Operational Localized Significance Analysis. The localized significance thresholds only apply to emissions from on-site sources to off-site receptors; however, the CalEEMod outputs do not separate the on-site emissions from stationary sources and the off-site emissions from mobile sources. For a worst-case scenario assessment, the emissions detailed in Table 4.3.P assume all area, off-road (two 200 hp diesel powered cargo handling equipment used on-site for operation), stationary, and energy source emissions would occur on site, and 5 percent of the project-related new mobile sources, which is an estimate of the amount of project-related on-site vehicle and truck travel, would occur on site. Considering the total trip length included in CalEEMod, the 5 percent assumption is conservative. Table 4.3.P shows that the localized operational emissions would not exceed the LSTs at the closest receptor. The results of the LST analysis show that the proposed project would not result in an exceedance of the SCAQMD LST thresholds during project operation. Therefore, the proposed operational activity would not result in a locally significant air quality impact. Impacts would be less than significant, and no mitigation is required.

Table 4.3.P: Project Localized Operational Emissions (lbs/day)

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
Proposed Project On-Site Emissions	7.0	12.9	0.7	0.4
Localized Significance Threshold	197.0	1,801.0	3.0	2.0
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).
Note: Source Receptor Area 19, based on a 5.0-acre operational daily area, at a distance of 82 feet from the project boundary.
CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
$PM_{2.5}$= particulate matter less than 2.5 microns in size
PM_{10}= particulate matter less than 10 microns in size

Threshold 4.3.4: Would the project result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?

Less Than Significant Impact. During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. Additionally, noxious odors would be confined to the immediate vicinity of the construction equipment and are unlikely to be detected off-site or affect a substantial number of people. Nuisance odors from land uses in the Basin are regulated under SCAQMD Rule 402, Nuisance, which states:

> A person shall not 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. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Examples of odor-generating projects are wastewater treatment plants, compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed project would include 165,803 sq ft of industrial uses. Compliance with SCAQMD Regulation XI and Rule 2305 would further limit doses and exposures, reducing potential odors related to gasoline vapors to a level that is not significant. In addition, the proposed project would be designed to ensure that the majority of the uses would be situated away from sensitive receptors and the public right of way. In addition, idling of trucks would be limited by the CARB's In-Use Off-Road Diesel Vehicles regulation, which limits idling to 5 minutes or less. Minimizing idling time reduces vehicle exhaust emissions and any resulting odors.[30] Any odors in general would be confined mainly to the project site and would readily dissipate. Therefore, the proposed uses are not anticipated to emit any objectionable odors. The proposed project would also

[30] CARB. 2025. *In-use off-Road Diesel Vehicle Regulation*. Website: https://ww2.arb.ca.gov/capp-resource-center/heavy-duty-diesel-vehicle-idling-information (accessed June 2025).

include trash enclosures, which would reduce any potential for odors from project-related waste. Therefore, the proposed project would not result in other emissions (such as those leading to odors) affecting a substantial number of people. Impacts would be less than significant, and no mitigation is required.

4.3.7 Cumulative Impacts

As defined in Section 15355 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area. The cumulative study area for air quality is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1. As stated previously, the SCAQMD air quality significance thresholds consider the emission levels for which a project's individual emissions would be cumulatively considerable. Therefore, if a project falls below the SCAQMD significance threshold, its contribution would also not be cumulatively considerable. Nevertheless, because the Western Realco Project 1 and Project 2 are reasonably foreseeable projects that would be located in the immediate vicinity of the project site and for the purposes of this analysis are assumed to have construction schedules that overlap with the proposed project, a quantitative evaluation of the combined air quality and health risk impacts of constructing and operating the proposed project and the Western Realco Projects has been prepared and is presented in this section. The Western Realco Projects 1 and 2 analysis is based on the project-specific *Air Quality, Greenhouse Gas, and Energy Impact Report: Western Realco Enterprise Way Industrial Project*, prepared by LSA on May 2025.[31]

4.3.7.1 Western Realco Projects

The Western Realco Projects are comprised of two projects (Western Realco Project 1 and Western Realco Project 2). Western Realco Project 1 (26110 Enterprise, 26140 Enterprise, and 26160 Enterprise Way) consists of an 8.42-acre project site located north of the IPT Enterprise Business Center LLC Project site along Bake Parkway. Western Realco Project 1 includes the demolition of three existing office buildings (a total of 150,000 sq ft) and the reconstruction of two new industrial buildings with a total of 156,800 sq ft (one 54,000 sq ft building and one 102,800 sq ft building). The two buildings would have a total of 59,800 sq ft of warehouse use, 79,000 sq ft of manufacturing use, and 18,000 sq ft of office space. Western Realco Project 2 (26250 Enterprise Way) consists of a 4.54-acre project site located immediately west of the IPT Enterprise Business Center LLC Project site in the intersection between Enterprise Way and Dimension Drive. Western Realco Project 2 includes the demolition of a 76,978 sq ft two-story office building and construction of a 77,000 sq ft single-story building. The building would have 69,000 sq ft of warehouse use and 8,000 sq ft of office space.

[31] LSA. 2025. *Air Quality, Greenhouse Gas, and Energy Impact Report for the Western Realco Enterprise Way Industrial Project*. June.

Cumulative impacts associated with the proposed project along with the Western Realco Projects are further analyzed below.

Cumulative Construction Emissions. Two separate model runs were conducted to evaluate the potential cumulative impacts from implementation of the proposed project at the same time as the two separate Western Realco Projects. One model run evaluated impacts associated with the Western Realco Project 1, and the other evaluated the impacts associated with the Western Realco Project 2.

Construction activities under Western Realco Project 1 would consist of demolition, site preparation, grading, building construction, paving, architectural coating, and utility trenching activities. Western Realco Project 1 would require the demolition approximately 150,000 sq ft of existing buildings, which was included in CalEEMod. Construction of Western Realco Project 1 would tentatively commence in the first quarter of 2026 and is expected to be completed in about 1 year, which was included in CalEEMod. Construction phase durations and schedule were provided by the project Applicant and included in CalEEMod. Western Realco Project 1 would not require the export or import of soil, which was also included in CalEEMod. In addition, Western Realco Project 1 would require the use of concrete industrial saws, excavators, impactors, bull dozers, tractors, loaders, backhoes, graders, scrapers, forklifts, cranes, generator sets, welders, cement and mortar mixers, paving equipment, and air compressors, which was included in CalEEMod. The number of equipment pieces was provided by the project Applicant, which was included in CalEEMod. This analysis assumes that Western Realco Project 1 would comply with SCAQMD Rule 403 and Rule 1113 measures. All other construction details are not yet known; therefore, default assumptions (e.g., worker and construction trips, off-road emission factors and construction trip lengths) from CalEEMod were used.

Construction activities under Western Realco Project 2 would consist of demolition, site preparation, grading, building construction, paving, architectural coating, and utility trenching activities. Western Realco Project 2 would require the demolition of approximately 76,978 sq ft of existing building, which was included in CalEEMod. Construction of Western Realco Project 2 would tentatively commence in the third quarter of 2026 and is expected to be completed in about 9 months, which was included in CalEEMod. Western Realco Project 2 would require the net import of approximately 1,167 cubic yards of material, which was also included in CalEEMod. Based on information from the project Applicant, Western Realco Project 2 is anticipated to require the use of concrete industrial saws, excavators, impactors, jaw crushers, bull dozers, tractors, loaders, backhoes, graders, scrapers, forklifts, cranes, generator sets, welders, cement and mortar mixers, paving equipment, and air compressors, which was included in CalEEMod. The number of equipment pieces was provided by the project Applicant, which was included in CalEEMod. This analysis assumes that Western Realco Project 2 would comply with SCAQMD Rule 403 and Rule 1113 measures. All other construction details are not yet known; therefore, default assumptions (e.g., worker and construction trips, off-road emission factors and construction trip lengths) from CalEEMod were used.

The total peak emissions from Western Realco Projects 1 and 2, along with the peak emissions from the proposed project were summed and compared to the SCAQMD regional thresholds. Cumulative construction emissions are summarized in Table 4.3.Q below. Table 4.3.Q identifies the estimated emissions with implementation of **MM AQ-1** for the proposed project along with the mitigated construction emissions for Western Realco Projects 1 and 2 as identified in the *Air Quality, Greenhouse Gas, and Energy Impact Report: Western Realco Enterprise Way Industrial Project.*[32] CalEEMod output sheets are included as an appendix to the Air Quality/GHG/Energy Analysis.[33]

Table 4.3.Q: Cumulative Construction Emissions

Construction Year	Total Regional Pollutant Emissions, lbs/day					
	VOC	NOx	CO	SOx	Total PM_{10}	Total $PM_{2.5}$
Western Realco Projects Estimated Emissions						
Project 1: 26110 Enterprise, 26140 Enterprise, and 26160 Enterprise Way with Tier 4 Final Mitigation						
2026	23.0	41.0	139.3	0.2	15.4	6.4
2027	23.0	40.9	111.8	0.2	2.2	0.8
Peak Daily Emissions	23.0	41.0	139.3	0.2	15.4	6.4
Project 2: 26250 Enterprise Way with Tier 4 Interim Mitigation						
2026	35.2	69.1	121.1	0.2	10.5	4.0
2027	13.6	78.6	98.0	0.2	3.1	1.8
Peak Daily Emissions	35.2	78.6	121.1	0.2	10.5	4.0
IPT Enterprise Business Center LLC Project - Proposed Project with MM AQ-1 (Tier 4 Interim)						
Peak Daily Emissions	24.4	57.9	112.6	0.1	9.8	4.5
Cumulative Peak Emissions (Western Realco Projects + proposed project)	**82.6**	**177.5**	**373.0**	**0.5**	**35.7**	**14.9**
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Emissions Exceed Threshold?	**Yes**	**Yes**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).
Note: The South Coast Air Basin is classified as non-attainment for Ozone under both the State and federal standards. Ozone is not directly emitted by any one source but rather forms in the atmosphere through reactions with other pollutants including NOx and VOCs.

CO = carbon monoxide
lbs/day = pounds per day
MM = mitigation measure
NOx = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
ROG = reactive organic gas
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides
VOC = volatile organic compounds

The results shown in Table 4.3.Q, indicate the cumulative emissions would not exceed the significance criteria for daily CO, SO_x, PM_{10} or $PM_{2.5}$. However, the maximum emissions for NO_x and VOC would exceed the significance criteria. VOCs are not defined as criteria pollutants; however,

[32] LSA. 2025. *Air Quality, Greenhouse Gas, and Energy Impact Report for the Western Realco Enterprise Way Industrial Project*. June.

[33] LSA. 2025a. *Air Quality, Greenhouse Gas, and Energy Impact Report.*

because VOCs are prime components of photochemical reactions that contribute to the formation of ozone, an exceedance in VOC emissions would result in the increase of ozone levels in the atmosphere. As such, implementation of the proposed project at the same time as Western Realco Projects 1 and 2 would be cumulatively considerable and a potentially significant impact associated with the net increase in criteria pollutants for which the project is in nonattainment under an applicable federal or State ambient air quality standard during construction.

The VOC emissions during construction are primarily a result of architectural coating emissions. All cumulative projects would be required to comply with SCAQMD Rule 1113, which requires that VOC emissions be reduced during painting by placing limits on the VOC content in various coating categories. Compliance with Rule 1113 architectural coatings would minimize VOC emissions during construction. Nevertheless, compliance with SCAQMD Rule 1113 would not reduce cumulative VOC emissions to below significance. Therefore, the proposed project is required to implement **MM AQ-2**, which requires the use of "Super-Compliant" low VOC paints for nonresidential interior and exterior surfaces and low VOC paint for parking lot surfaces. Super-Compliant low VOC paints have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD Rule 1113 and would therefore further reduce VOC emissions to ensure that emissions are below construction emission thresholds.

In addition, as shown in Table 4.3.Q, cumulative NO_X emissions would exceed the significance criteria. As described above, this cumulative analysis provides an evaluation of the combined air quality impacts of constructing the proposed project and Western Realco Projects 1 and 2 at the same time. The likelihood of all three projects being constructed at the same time represents a conservative assumption. In the event that the construction phases of the proposed project and Western Realco Projects 1 and 2 overlap, the proposed project would be required to implement **MM AQ-3** which would require the use of Tier 4 Final engines to further reduce the cumulative NO_X emissions to the extent feasible.

Based on the project-specific *Air Quality, Greenhouse Gas, and Energy Impact Report: Western Realco Enterprise Way Industrial Project*,[34] the cumulative analysis for Western Realco Projects 1 and 2 along with the IPT Enterprise Business Center LLC Project would have the potential to result in impacts of criteria pollutant emissions of NO_x and VOC during construction. Therefore, Western Realco Projects 1 and 2 would also be required to implement mitigation requiring the use of super compliant low VOC paints with no more than 10 grams per liter of VOC content to reduce cumulative VOC emissions to the extent feasible. In addition, in the event that the construction of the proposed project and phases of Western Realco Projects 1 and 2 overlap, Western Realco Projects 1 and 2 would also be required to implement mitigation requiring all construction equipment be equipped with Tier 4 Final engines or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type as certified by the CARB to reduce cumulative NO_X emissions. With implementation of these mitigation measures, the cumulative NO_X and VOC emissions would be reduced to a less than significant impact for Western Realco Projects 1

[34] LSA. 2025. *Air Quality, Greenhouse Gas, and Energy Impact Report for the IPT Enterprise Business Center LLC Project*. March.

and 2, as identified in the *Air Quality, Greenhouse Gas, and Energy Impact Report: Western Realco Enterprise Way Industrial Project*.[35]

Table 4.3.R identifies the estimated cumulative emissions with implementation of **MM AQ-2** and **MM AQ-3** for the proposed project, as identified above, and the mitigated emissions identified for Western Realco Projects 1 and 2 which require implementation of super compliant low VOC paints and Tier 4 Final Engines.

Table 4.3.R: Mitigated Cumulative Construction Emissions

Construction Year	Total Regional Pollutant Emissions, lbs/day					
	VOC	NOx	CO	SOx	Total PM_{10}	Total $PM_{2.5}$
Western Realco Projects Estimated Emissions						
Mitigated Project 1: 26110 Enterprise, 26140 Enterprise, and 26160 Enterprise Way						
2026	5.0	41.0	139.3	0.2	15.4	6.4
2027	5.0	40.9	111.8	0.2	2.2	0.8
Peak Daily Emissions	5.0	41.0	139.3	0.2	15.4	6.4
Mitigated Project 2: 26250 Enterprise Way						
2026	35.0	26.2	121.1	0.2	10.2	3.7
2027	13.3	35.6	98.0	0.2	1.7	0.6
Peak Daily Emissions	35.0	35.6	121.1	0.2	10.2	3.7
IPT Enterprise Business Center LCC Project - Proposed Project with MM AQ-1 and MM AQ-2						
Peak Daily Emissions	5.9	10.5	112.6	0.1	9.8	4.5
Cumulative Peak Emissions (Western Realco Projects + proposed project)	**45.9**	**87.1**	**373.0**	**0.5**	**35.4**	**14.6**
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Emissions Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).
Note: The South Coast Air Basin is classified as non-attainment for Ozone under both the State and federal standards. Ozone is not directly emitted by any one source but rather forms in the atmosphere through reactions with other pollutants including NOx and VOCs.

CO = carbon monoxide
lbs/day = pounds per day
MM = mitigation measure
NOx = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
ROG = reactive organic gas
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides
VOC = volatile organic compound

As shown in Table 4.3.R, with implementation of **MM AQ-2** and **MM AQ-3**, estimated cumulative NO_x and VOC emissions associated with the proposed project along with Western Realco Projects 1 and 2 (if constructed at the same time) would be below the SCAQMD significance threshold. Therefore, with implementation of **MM AQ-2** and **MM AQ-3**, cumulative construction emissions resulting from the implementation of the proposed project along with Western Realco Projects 1

[35] LSA. 2025. *Air Quality, Greenhouse Gas, and Energy Impact Report for the IPT Enterprise Business Center LLC Project*. June .

and 2 would not result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under an applicable federal or State ambient air quality standard.

Cumulative Operational Emissions. Long-term air pollutant emissions associated with operation of Western Realco Projects 1 and 2 include emissions from area, energy, and mobile sources, and are discussed below. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source. Emission estimates for Western Realco Projects 1 and 2 operations were calculated using CalEEMod.

Western Realco Project 1 would construct two industrial buildings totaling 156,800 sq ft, which would include a mix of office, manufacturing, and warehouse space. Therefore, the Western Realco Project 1 analysis was conducted using land use codes *Unrefrigerated Warehouse-No Rail*, *Manufacturing, General Office Building, Parking Lot,* and *Other Asphalt Surfaces*. Trip generation rates used in CalEEMod for Western Realco Project 1 were based on the project's Traffic Impact Analysis (TIA),[36] which identifies that Western Realco Project 1 would generate approximately 670 ADT, including 104 ADT for warehouse uses, 371 ADT for manufacturing uses, and 195 ADT for office uses. As noted in the TIA, the trip generation rates are from the Institute of Transportation Engineers Trip Generation Manual, 11th Edition, and the Warehouse Truck Trip Study Data Results and Usage from the SCAQMD. This analysis assumes that the four-axle truck trips associated with the warehouse and manufacturing uses would travel approximately 40 miles. To be conservative, separate CalEEMod analyses were prepared for the operational analysis for Western Realco Project 1. One CalEEMod run evaluated operational and vehicle trip emissions and another CalEEMod run evaluated four-axle truck trip emissions for Western Realco Project 1. In addition, consistent with the project design plans, this CalEEMod analysis incorporates selections to reflect no natural gas usage during construction and operation. In addition, this analysis assumes that Western Realco Project 1 would be operational in 2027, which is included in CalEEMod.

Western Realco Project 2 would construct a 77,000 sq ft industrial building. Therefore, the Western Realco Project 2 analysis was conducted using land use codes *Unrefrigerated Warehouse-No Rail* and *Parking Lot*. Trip generation rates used in CalEEMod for Western Realco Project 2 were based on the project's TIA,[37] which identifies that Western Realco Project 2 would generate approximately 204 ADT, including 87 ADT for office uses. As noted in the TIA, the trip generation rates are from the Institute of Transportation Engineers Trip Generation Manual, 11th Edition, and the Warehouse Truck Trip Study Data Results and Usage from the SCAQMD. This analysis assumes that the four-axle truck trips associated with the warehouse uses would travel approximately 40 miles. To be conservative, separate CalEEMod analyses were prepared for the operational analysis for Western Realco Project 2. One CalEEMod run evaluated operational and vehicle trip emissions and another CalEEMod run evaluated four-axle truck trip emissions for Western Realco Project 2. In addition, consistent with the project design plans, this CalEEMod analysis incorporates selections to reflect no natural gas usage during construction and operation of Western Realco Project 2. In addition, this analysis assumes that Western Realco Project 2 would be operational in 2027, which is included in

[36] LSA. 2025a. *Traffic Impact Analysis for the Western Realco Enterprise Way Industrial Project.* April.
[37] Ibid.

CalEEMod. Detailed input assumptions are included in the CalEEMod output sheets attached to the Air Quality/GHG/Energy Analysis.[38]

Operational Cumulative emissions are shown in Table 4.3.S.

Table 4.3.S: Cumulative Long Term Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Western Realco Projects						
Project 1: 26110 Enterprise, 26140 Enterprise, and 26160 Enterprise Way						
Mobile Sources – Vehicles and Light Duty Trucks	1.9	2.0	21.7	0.1	6.1	1.6
Mobile Sources – Heavy Heavy Duty Trucks	0.1	5.4	2.3	<0.1	1.3	0.4
Area Sources	4.9	0.1	6.8	<0.1	<0.1	<0.1
Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
Total Project 1 Emissions	**6.9**	**7.5**	**30.8**	**0.1**	**7.4**	**2.0**
Project 2: 26250 Enterprise Way						
Mobile Sources – Vehicles and Light Duty Trucks	0.6	0.5	6.5	<0.1	1.8	0.5
Mobile Sources – Heavy Heavy Duty Trucks	<0.1	3.2	1.3	<0.1	0.9	0.3
Area Sources	2.4	<0.1	3.3	<0.1	<0.1	<0.1
Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
Total Project 2 Emissions	**3.0**	**3.7**	**11.1**	**<0.1**	**2.7**	**0.8**
IPT Enterprise Business Center LLC Project - Proposed Project						
Total Proposed Project Emissions	**8.1**	**16.9**	**33.3**	**0.2**	**7.7**	**2.3**
Total Cumulative Emissions (Western Realco Projects + proposed project)	**18.0**	**28.1**	**75.2**	**0.3**	**17.8**	**5.1**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Emissions Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).

CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gas
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides
VOC = volatile organic compounds

The results shown in Table 4.3.S indicate the cumulative emissions associated with the proposed project and Western Realco Projects 1 and 2 would not exceed the project-level significance criteria for daily VOC, NO_x, PM_{10} or $PM_{2.5}$ emissions. Therefore, cumulative operational emissions would not result in a cumulatively considerable net increase of criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standards.

38 LSA. 2025a. *Air Quality, Greenhouse Gas, and Energy Impact Report*.

Moreover, future development under Western Realco Projects 1 and 2 may require further analysis in a project-specific environmental analysis consistent with environmental review requirements under CEQA, as applicable.

Health Risk on Nearby Sensitive Receptors. The following sections describe the potential cumulative impacts on sensitive and worker receptors resulting from construction and operational activities associated with the development of the proposed project combined with Western Realco Projects 1 and 2. As defined in the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area. The SCAQMD significance health risk thresholds consider the emission levels for which a project's individual emissions would be considerable. Each project's individual emissions would contribute to the total ambient air concentration. Therefore, if a project falls below the SCAQMD significance health risk thresholds, its contribution would not be cumulatively considerable.

Western Realco Projects 1 and 2 are a reasonably foreseeable projects that would be located in the immediate vicinity of the proposed project and for the purposes of this analysis are assumed to have construction schedules that overlap with the proposed project. Therefore, the City has requested a quantitative evaluation of the combined cumulative impacts associated with development of the proposed project and immediately adjacent proposed Western Realco Projects. The residential MEI for the cumulative analysis is an apartment building reserved for seniors located to the east of Project Site 1, within 125 feet from the project site's eastern boundary, as measured to the building façade. The nearest cumulative worker MEI is located immediately south of Western Realco Project Site 1.

The regional thresholds developed by the SCAQMD are based on individual projects. In the absence of cumulative thresholds and to be conservative, this analysis would compare the combined cumulative emissions (emissions from the proposed project and Western Realco Projects 1 and 2) against the project-based SCAQMD significance criteria to determine impacts. Cumulative impacts associated with the proposed project along with Western Realco Projects 1 and 2 are further analyzed below. ***Cumulative Construction Health Risk.*** A construction HRA was performed to estimate the potential cancer risk associated with construction of the proposed project along with Western Realco Projects 1 and 2 from equipment exhaust (including diesel particulate matter), a dispersion model was used to translate an emission rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). This assessment was conducted using the AERMOD air dispersion model, which provides a detailed estimate of exhaust concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and meteorological data from the Mission Viejo Station.

This analysis assumes buildout of the proposed project and Western Realco Projects 1 and 2. Therefore, a model run was conducted to evaluate the potential cumulative impacts of the buildout of the proposed project along with Western Realco Projects 1 and 2.

Table 4.3.T, below, identifies the results of the analysis at the MEI, and the risk level of proposed project combined with Western Realco Projects 1 and 2 at the cumulative MEI. Model snap shots of the sources are included as an appendix to the Health Risk Assessment.[39]

Table 4.3.T: Cumulative Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Western Realco Projects			
Project 1: 26110 Enterprise, 26140 Enterprise, and 26160 Enterprise Way			
Residential MEI	71.62	0.094	0.000
Worker MEI	1.69	0.120	0.000
Project 2: 26250 Enterprise Way			
Residential MEI	2.73	0.002	0.000
Worker MEI	0.096	0.004	0.000
IPT Enterprise Business Center LLC Project – Proposed Project			
Residential MEI	4.33	0.006	0.000
Worker MEI	0.196	0.015	0.000
Total Cumulative Health Risk (Western Realco Projects and the Proposed Project)			
Residential MEI	**78.68**	**0.102**	**0.000**
Worker MEI	**1.98**	**0.139**	**0.000**
SCAQMD Significance Threshold	**10 in 1 million**	**1.0**	**1.0**
Significant?	**Yes**	**No**	**No**

Source: Compiled by LSA (June 2025).
MEI = maximally exposed individual
MM = mitigation measure
SCAQMD = South Coast Air Quality Management District

As shown in Table 4.3.T, the construction related maximum cumulative cancer risk for the residential MEI would be 78.6 in 1 million, which would exceed the SCAQMD cancer risk threshold of 10 in 1 million. The worker MEI would be 1.98 in 1 million, which would not exceed the SCAQMD cancer risk threshold of 10 in 1 million. The total chronic HI would be 0.102 for the residential MEI and 0.139 for the worker MEI, which is below the threshold of 1.0. In addition, the total acute HI would be nominal (0.000), which would also not exceed the threshold of 1.0. As compared to the project-level emission thresholds recommended by SCAQMD, cumulative construction emissions resulting from the implementation of the proposed project along with the emissions from Western Realco Projects 1 and 2, would exceed SCAQMD thresholds. Therefore, implementation of **MM AQ-1** would be required to reduce construction cancer risk.

Furthermore, as identified on the project-specific *Health Risk Assessment: Western Realco Enterprise Way Industrial Project*,[40] the cumulative analysis for Western Realco Projects 1 and 2 along with the proposed project would exceed the SCAQMD the cumulative cancer risk threshold of 10 in 1 million during construction. Therefore, Western Realco Projects 1 would be required to implement mitigation requiring all construction equipment be equipped with Tier 4 Final engines or the most

39 LSA. 2025b. *Health Risk Assessment.*

40 LSA. 2025. *Health Risk Assessment for the IPT Enterprise Business Center LLC Project*. June.

effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type as certified by the CARB to reduce cumulative cancer risks. Western Realco Project 2 would be required to implement mitigation requiring all construction equipment be equipped with Tier 4 Interim engines or the most effective VDECS available for the engine type as certified by the CARB to reduce cumulative cancer risks. With implementation of these mitigation measure, the cumulative cancer risk would be reduced a less than significant impact for Western Realco Projects 1 and 2, as identified in the *Health Risk Assessment: Western Realco Enterprise Way Industrial Project*.[41]

Table 4.3.U identifies the estimated cumulative health risks with implementation of **MM AQ-1** for the proposed project and the mitigated emissions identified for Western Realco Projects 1 and 2.

Table 4.3.U: Mitigated Cumulative Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Western Realco Projects			
Mitigated Project 1: 26110 Enterprise, 26140 Enterprise, and 26160 Enterprise Way			
Residential MEI	3.94	0.005	0.000
Worker MEI	1.692	0.001	0.000
Mitigated Project 2: 26250 Enterprise Way			
Residential MEI	0.99	<0.001	0.000
Worker MEI	0.03	0.002	0.000
IPT Enterprise Business Center LLC Project – Proposed Project with MM AQ-1			
Residential MEI	0.54	<0.001	0.000
Worker MEI	0.02	0.002	0.000
Total Cumulative Health Risk (Western Realco Projects and the Proposed Project with MM AQ-1)			
Residential MEI	**5.47**	**0.005**	**0.000**
Worker MEI	**1.742**	**0.005**	**0.000**
SCAQMD Significance Threshold	**10 in 1 million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).
MEI = maximally exposed individual
SCAQMD = South Coast Air Quality Management District

As shown in Table 4.3.U, with the project's implementation of **MM AQ-1**, the construction related maximum cumulative cancer risk for the residential MEI would be 5.47 in 1 million, which would not exceed the SCAQMD cancer risk threshold of 10 in 1 million. As compared to the project-level emission thresholds recommended by SCAQMD, cumulative construction emissions resulting from the implementation of the proposed project with **MM AQ-1** along with the emissions from Western Realco Projects 1 and 2, would not exceed SCAQMD thresholds. Therefore, no significant health risk would occur from cumulative construction emissions with the project's implementation of **MM AQ-1**.

[41] LSA. 2025. *Health Risk Assessment for the IPT Enterprise Business Center LLC Project*. June.

Operational Health Risk. To determine the potential health risk associated with the exhaust of diesel-powered trucks and equipment to people living and working near the proposed project and Western Realco Projects 1 and 2, an operational HRA was conducted.

Trip generation rates used for Western Realco Project 1 were based on the project's Traffic Impact Analysis (TIA),[42] which identifies that Western Realco Project 1 would generate approximately 670 ADT, including 104 ADT for warehouse uses, 371 ADT for manufacturing uses, and 195 ADT for office uses. Trip generation rates used in CalEEMod for Western Realco Project 2 were based on the project's TIA,[43] which identifies that Western Realco Project 2 would generate approximately 204 ADT, including 87 ADT for office uses. This cumulative HRA assumed vehicles traveling on site would maneuver slowly, averaging approximately 5–15 mph, and that vehicles traveling on roadways would average 5–55 mph. This analysis also assumes that on-site truck idling would occur for approximately 15 minutes. In addition, to be conservative, this analysis assumes the use of emissions factors for the operational year of 2027.

The cumulative carcinogenic and chronic health risks from the proposed project along with Western Realco Projects 1 and 2 are shown in Table 4.3.V. The residential risk conservatively incorporates both the risk for a child living in a nearby residence for 9 years (the standard period of time for child risk) and an adult living in a nearby residence for 30 years (considered a conservative period of time for an individual to live in any one residence). An exposure period of 25 years was assumed for worker receptors. HRA model output sheets are included as an appendix to the Health Risk Assessment.[44]

Table 4.3.V: Cumulative Health Risks from Project Operation to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential MEI	4.43	0.002	<0.001
Worker MEI	2.16	0.007	<0.001
SCAQMD Significance Threshold	**10 in 1 million**	**1.0**	**1.0**
Significant?	**No**	**No**	**No**

Source: Compiled by LSA (June 2025).
MEI = maximally exposed individual
SCAQMD = South Coast Air Quality Management District

As shown in Table 4.3.V, the maximum cumulative cancer risk for the residential MEI would be 4.43 in 1 million, which would not exceed the SCAQMD cancer risk threshold of 10 in 1 million. The worker MEI would be 2.16 in 1 million, which would also not exceed the threshold. The total chronic hazard index would be 0.002 for the residential MEI and 0.007 for the worker MEI, which is below the threshold of 1.0. In addition, the total acute hazard index would be less than 0.001, which would also not exceed the threshold of 1.0. As these results show, all health risk levels to nearby receptors

42 LSA. 2025a. *Traffic Impact Analysis for the Western Realco Enterprise Way Industrial Project.* April.
43 Ibid.
44 LSA. 2025b. *Health Risk Assessment.*

from cumulative operation-related emissions of TACs would be well below the SCAQMD's HRA thresholds. No significant health risk would occur from cumulative operational emissions and no mitigation is required.

4.3.8 Level of Significance Prior to Mitigation

Prior to mitigation, the proposed project would have potentially significant impacts related to NO_x during construction. When combined with Western Realco Projects 1 and 2, the proposed project would result in a potentially significant cumulative impact related to VOC during construction of the proposed project along with Western Realco Projects 1 and 2 (if constructed at the same time). Additionally, the proposed project would have potentially significant impacts to nearby sensitive receptors during construction prior to mitigation.

4.3.9 Regulatory Compliance Measures and Mitigation Measures

4.3.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to air quality.

4.3.9.2 Mitigation Measures

The following mitigation measures are required to reduce potentially significant impacts related to air quality to a less than significant level:

MM AQ-1 **Tier 4 Interim Construction Equipment.** Prior to issuance of a building permit, the project Applicant shall submit construction plans to the City of Lake Forest verifying that all construction equipment used during construction of the project shall be equipped with Tier 4 Interim engines or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement as certified by the California Air Resources Board (CARB). [45] During construction activities, the equipment shall be properly maintained and tuned in accordance with manufacturer specifications.

MM AQ-2 **Volatile Organic Compounds.** Prior to issuance of a grading permit, the Project Applicant shall submit construction plans to the City of Lake Forest that state that the project shall utilize "Super-Compliant" low volatile organic compounds (VOC) paints for nonresidential interior and exterior surfaces and low VOC paint for parking lot surfaces. Super-Compliant low VOC paints have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC.

[45] CARB. 2015. Verified Diesel Emission Control Strategy (VDECS). Website: https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/faq/vdecsfaq.pdf (accessed June 2025)

MM AQ-3 **Tier 4 Final Construction Equipment.** Prior to issuance of a building permit, the project Applicant shall consult with the City on the status of Western Realco Projects 1 and 2. If in this consultation, the City identifies that the construction schedule of Western Realco Projects 1 and 2, and the IPT Enterprise Business Center LLC Project (proposed project) will be under construction at the same time, the proposed project shall equip all construction equipment during the overlapping period with Tier 4 Final engines or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the California Air Resources Board. The equipment shall be properly maintained and tuned in accordance with manufacturer specifications. The project Applicant shall submit construction plans to the City of Lake Forest denoting the projected equipment Tier rating that will be used during the construction period.

4.3.10 Level of Significance after Mitigation

Potentially significant impacts would be reduced to a less than significant level after mitigation. Therefore, with implementation of **MM AQ-1, MM AQ-2,** and **MM AQ-3**, the proposed project would not result in any significant impacts related to air quality.

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4.4 BIOLOGICAL RESOURCES

This section evaluates the potential impacts to biological resources from implementation of the proposed project. This section is based in part on the following:

Biological Resources Report for the Proposed Project Located at 26200 Enterprise Way, Lake Forest, Orange County, California (Biological Resources Report) (ELMT Consulting 2021) (provided in Appendix D).

4.4.1 Scoping Process

The Notice of Preparation (NOP) for the proposed project was published in March 2024, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. Two comment letters included comments related to biological resources. These comments raised concerns about the potential for the proposed project to cause habitat destruction and disrupt wildlife.

4.4.2 Methodology

The analysis of potential impacts to biological resources is based on the site-specific biological resources impact analysis completed for the proposed project. An additional field survey of the project site and surrounding areas was conducted on December 20, 2024, by an LSA biologist to document existing site conditions and the potential presence of sensitive biological resources. There have been no changes to existing site conditions since the Biological Resources Report was prepared in 2021 and the conclusions of the report remain valid for the following analysis.

The biological impact analysis included a literature review, records search, and general field investigation/habitat assessment, which are described in more detail below. In determining the level of significance, this analysis assumes that the construction and operation of the proposed project would comply with relevant federal and State laws and regulations, as well as applicable City General Plan policies.

4.4.2.1 Literature Review and Records Search

Prior to conducting the field investigation, a literature review and records search were conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the California Department of Fish and Wildlife's (CDFW) QuickView Tool in the Biogeographic Information and Observation System (BIOS), the California Natural Diversity Database's (CNDDB) Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, the Calflora Database, a compendia of special-status species published by the CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred within the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1985–2020);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey;
- USFWS National Wetland Inventory;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profiles.

The literature review provided a baseline from which to inventory the biological resources potentially occurring within the project site. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project site. An updated CNDDB data search was completed on August 14, 2024, which is included in Appendix D of this Draft EIR. Since the completion of the 2021 Biological Resources Report, the listing status has changed for western spadefoot and western pond turtle. No additional species have been identified or removed from the data search results.

4.4.2.2 Habitat Assessment/Field Investigation

Following the literature review, on May 21, 2021, an ELMT Consulting biologist inventoried and evaluated the condition of the habitat within the project site. Plant communities and land cover types identified on aerial photographs during the literature review were verified by walking transects throughout the project site, where accessible. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that could support the movement of wildlife through the area, which were then walked during the field investigation.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Plant species observed during the field investigation were identified by visual characteristics and morphology in the field. Unusual and less familiar plant species were photographed during the field investigation and identified in the laboratory using taxonomical guides. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities and land cover types, and presence of potential jurisdictional drainage and/or wetland features were noted.

As stated above, an additional field survey of the project site and surrounding areas was conducted on December 20, 2024, by an LSA biologist, to confirm there have been no changes to existing site conditions since the Biological Resources Report was prepared in 2021.

4.4.3 Existing Environmental Setting

The project site is located within the El Toro quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within an unsectioned portion of Township 6 South, Range 8 West. The project site is located at an approximate elevation of 700 feet above mean sea level and is generally flat with no areas of significant topographic relief.

4.4.3.1 Site Soils

Based on the NRCS USDA Web Soil Survey, the project site is underlain by Cropley clay (2 to 9 percent slopes), Cieneba sandy loam (30 to 75 percent slopes), Myford sandy loam (2 to 9 percent slopes), Capistrano sandy loam (2 to 9 percent slopes), and Sorrento loam (2 to 9 percent slopes). Soils on-site have been mechanically disturbed and heavily compacted from previous site development. As a result, no native soils occur on site.

4.4.3.2 Vegetation

The vegetation communities within the project area consist of either hardscape or landscaping. Landscaping generally consists of non-native, ornamental landscape shrubs and trees typically used in industrial/office parks in the project area. There are no native plant communities or natural communities of special concern on site. The site supports one land-cover type that is classified as developed.

4.4.3.3 Special-Status Plants

According to the CNDDB and CNPS, as of August 14, 2024, eighteen (18) special-status plant species have been recorded in the El Toro quadrangle. No special-status plant species were observed on site during the habitat assessment completed for the Biological Resources Report (ELMT Consulting 2021).

According to the CNDDB, four (4) special-status plant communities have been reported in the *El Toro*, *California* USGS 7.5-minute quadrangle: Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Scrub, and Southern Sycamore Alder Riparian Woodland. No special-status plant communities were observed on site during the field investigation completed for the Biological Resources Report (ELMT Consulting 2021).

4.4.3.4 Wildlife

No hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) are located on the project site. Therefore, no fish or amphibians occur on site.

The project site provides limited foraging and refuge habitat for reptile species adapted to a significant degree of human disturbance. Common side-blotched lizard (*Uta stansburiana elegans*) was observed on site during the field investigation completed for the Biological Resources Report. Additional reptile species adapted to significant disturbance that may occur on site include San Diego alligator lizard

(*Elgaria multicarinata webbii*) and Great Basin fence lizard (*Sceloporus occidentalis longipes*). Due to the surrounding development, the high level of on-site disturbances, and the elimination of native habitats on-site, no special-status reptilian species are expected to occur within the project site.

The project site and surrounding area provides minimal foraging and nesting habitat for a variety of bird species adapted to a significant degree of human disturbance and urban environments. Bird species detected during the field investigation completed for the Biological Resources Report include black phoebe (*Sayornis nigricans*), bushtit (*Psaltriparus minimus*), house finch (*Passer domesticus*), and northern mockingbird (*Mimus polyglottos*).

The project site provides limited foraging and cover habitat for a limited variety of mammal species adapted to a significant degree of human disturbance and urban environments. No mammalian species were detected during the field investigation completed for the Biological Resources Report. Mammalian species that may be expected to occur on site include Botta's pocket gopher (*Thomomys bottae*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*).

No active nests or birds displaying nesting behavior were observed during the field survey completed for the Biological Resources Report, which was conducted during the breeding season. Although developed, the landscaped areas on the project site have the potential to provide minimal foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that are adapted to urban environments.

4.4.3.5 Special-Status Animals

According to the CNDDB, as of August 14, 2024, fifty-eight (58) special-status wildlife species have been reported in the El Toro quadrangle. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a low potential to support foraging and stop-over habitat for Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), and California gull (*Larus californicus*) within the landscaped trees on site. All remaining special-status wildlife species are presumed to be absent from the project site due to lack of quality habitat.

4.4.3.6 Delineation of Jurisdictional Waters

A query of the USFWS National Wetland Inventory determined that no riverine or other freshwater resources are mapped within the boundaries of the project site. Additionally, no discernible drainage courses, inundated areas, or wetland features that would be considered jurisdictional by the United States Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), or the CDFW were observed within the limits of the project site during the field survey completed for the Biological Resources Report.

4.4.4 Regulatory Setting

Federal, State, and local regulations and programs related to biological resources that are applicable to the proposed project are described below.

4.4.4.1 Federal Regulations

Federal Endangered Species Act of 1973. The federal Endangered Species Act (ESA) defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the ESA, it is unlawful to "take" any listed species.

"Take" is defined in Section 3(18) of ESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification that result in injury to, or death of species, as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with the USFWS to ensure the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. Section 9(a)(2)(b) of the ESA addresses the protections afforded to listed plants.

The take of federally listed species can be authorized under Section 10(a) of the ESA, with development of a Habitat Conservation Plan (HCP) or as part of a Section 7 consultation between the USFWS and another federal agency if the project is subject to federal action (e.g., a Section 404 Permit). Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking that were considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan. In certain instances, such as for the California gnatcatcher, take of a Threatened species can be authorized by special rule (i.e., 4[d]).

Migratory Bird Treaty Act. The federal Migratory Bird Treaty Act (MBTA) governs take, possession, import, export, transport, selling, purchasing, or bartering of migratory birds and their eggs, parts, and nests, except as authorized under a valid permit. Section 704 of the MBTA states that the Secretary of the Interior is authorized and directed to determine if, and by what means, the take of migratory birds should be allowed and to adopt suitable regulations permitting and governing take while ensuring that take is compatible with protection of the species. Most bird species are protected under the MBTA.

In addition, under the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy any bird or the nests or eggs of any bird species except as otherwise provided in the California Fish and Game Code and regulations. This code also specifically protects raptors, including owls, and the CDFW considers a disturbance that results in nest abandonment or loss of reproductive effort as take. Disturbances of active nesting territories should be avoided during the nesting season.

Section 404 of the Clean Water Act. The USACE regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that

meet specific criteria. USACE's regulatory jurisdiction, pursuant to Section 404 of the Clean Water Act (CWA) and current regulatory definitions, is founded on a direct intermittent or perennial hydrological surface connection between the water body in question and waters subject to interstate commerce during typical years. The USACE typically regulates as non-wetland waters of the United States any body of water displaying an ordinary high water mark (OHWM). To be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic must meet a specific set of mandatory wetland criteria. Based on the decision of *Sackett v. Environmental Protection Agency* on May 25, 2023, the Supreme Court ruled that the CWA extends only to wetlands that have a continuous surface connection with "waters" of the United States (i.e., with a relatively permanent body of water connected to any interstate waters, any waters connected to commerce, and any traditionally navigable waters). The United States Environmental Protection Agency (EPA) and United States Department of the Army issued a final conforming rule on September 8, 2023, to amend the final "Revised Definition of 'Waters of the United States'" rule. The discharge of dredged or fill material (temporarily or permanently) into waters of the United States (including wetlands) requires authorization from the USACE pursuant to Section 404 of the CWA.

4.4.4.2 State Regulations

California Endangered Species Act. The CDFW, via policies formulated by the California Fish and Game Commission (Commission), regulates species of plants and animals that are in danger of, or threatened with, extinction. The Commission has established a list of Endangered, Threatened, and candidate species that are regulated by the CDFW. Endangered species are native species or subspecies of plants and animals that are in serious danger of becoming extinct throughout all or a significant portion of their range. Threatened species are those species that, although not presently threatened with extinction, are likely to become Endangered species in the foreseeable future in the absence of special protection and management efforts. Candidate species are those species the Commission has formally noticed as being under review for addition to either the list of Endangered or Threatened species or a species proposed for listing.

California Environmental Quality Act. The California Environmental Quality Act (CEQA) requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Furthermore, pursuant to *State CEQA Guidelines* Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for State listing. For plants, CDFW recognizes that plants on Lists 1A, 1B, or 2 of the CNPS Inventory of Rare and Endangered Plants in California may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants on CNPS List 3 or 4.

California Natural Diversity Database. The CDFW administers the California Natural Diversity Database (CNDDB), which maintains lists of special-interest plants, animals, and natural communities that occur within California. These particular natural communities, or habitat types, are designated as sensitive because of their rarity (e.g., very localized distribution, few scattered occurrences) and/or because of some threat (e.g., development, off-road vehicles) to this specific habitat type. The

purpose of these listings is solely informational; there is no regulatory protection of these communities afforded by the CNDDB listings.

Sections 1600–1603 of the California Fish and Game Code. Pursuant to Division 2, Chapter 6, Sections 1600–1603 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a stream (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or manmade reservoirs." CDFW also defines a stream as "a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators."

It is important to note that the California Fish and Game Code defines fish and wildlife to include all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities, including the habitat upon which they depend for continued viability (Fish and Game Code Division 5, Chapter 1, Section 45, and Division 2, Chapter 1, Section 711.2(a), respectively).

Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

Fish and Game Code Section 3503. Sections 3503, 3503.5, and 3513 protect native birds. Mitigation for avoidance of impacts to nesting birds are typically necessary to comply with these sections of the California Fish and Game Code in CEQA and other permitting documents. Specifically, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests, or eggs.

Fish and Game Code Sections 3511, 4700, 5050, and 5551. Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code designate 37 fully protected species and prohibit the take or possession at any time of such species with certain limited exceptions.

California Native Plant Society. The California Native Plant Society (CNPS) is a nonprofit organization whose purpose is to promote the preservation of native California plants. The CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California. The list serves as the candidate list for listing as Threatened and Endangered by the CDFW.

Native Plant Protection Act. Sections 1900–1913 of the California Fish and Game Code, the Native Plant Protection Act (NPPA), direct the CDFW to carry out the Legislature's intent to "… preserve, protect and enhance endangered or rare native plants of this state." The NPPA gives the California

Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take.

Section 401 of the Clean Water Act. Section 401 of the Clean Water Act (CWA) requires any applicant for a Section 404 permit to obtain certification from the State that the discharge (and the operation of the facility being constructed) will comply with the applicable effluent limitation and water quality standards. In California, this 401 certification is obtained from the RWQCB. The USACE, by law, cannot issue a Section 404 permit until a 401 certification is issued or waived. Areas subject to RWQCB jurisdiction typically coincide with those of the USACE (i.e., waters of the United States, including any wetlands). The RWQCB also asserts authority over waters of the State under waste discharge requirements pursuant to the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act), but this mechanism is typically not invoked in cases where the USACE asserts permitting authority pursuant to the CWA.

4.4.4.3 Regional Regulations

Orange County Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) Central and Coastal Subregions. Assembly Bill (AB) 2172 authorizes the CDFW to enter agreements with any person or local, State, or federal agencies for preparing and implementing NCCPs and for preparing guidelines for developing and implementing NCCPs. The purpose of the NCCP program is to provide regional or area-wide protection for species and natural communities and to promote perpetuation of natural wildlife diversity while allowing compatible and appropriate development and growth. The focus of the NCCP program represents a dramatic shift from "individual species" to "habitat" preservation. A Habitat Conservation Plan (HCP) is the federal counterpart to the NCCP. An HCP must meet ESA requirements and like the NCCP, it allows projects and activities to occur in endangered species' habitats by incorporating HCP-prescribed measures to avoid, minimize, or compensate for adverse effects on natural communities and endangered species.

Orange County's NCCP/HCP was approved in 1996 under the State of California's NCCP program. It encompasses a total area of 208,000 acres, split into Coastal and Central subregions. Of the 208,000 acres, 37,380 are within the Reserve System. The reserves contain special linkages, existing use areas, and other open space areas. The primary goal of the NCCP/HCP is to protect and preserve coastal sage scrub (CSS) in the Reserve System, as well as associated habitats and species. This includes three (3) "Target Species," an additional thirty-six (36) "Identified Species," and four (4) habitat types. The NCCP/HCP specifies that the populations of the Target Species shall be subject to long-term monitoring and that these taxa shall be treated as if they were listed under the CESA and the ESA. The City of Lake Forest is a signatory to the NCCP/HCP. The project site is located within the Central/Coastal Subregion of Orange County, California, but the project applicant is a non-participating landowner.

4.4.4.4 Local Regulations

City of Lake Forest General Plan 2040. The Recreation and Resources Element of the City's General Plan includes various goals and policies related to biological resources. Goals and policies applicable to the proposed project include:

Goal RR-5 Biological Resources: A community that harmoniously coexists with existing plant and animal life.

Policy RR-5.7 Development: Require that all new development identify potential impacts to existing biological resources and provide mitigation measures as necessary pursuant to CEQA in order to protect these resources from negative externalities.

Action RR-5b: Require new development, as well as infrastructure projects, long-range planning projects, and other projects, to comply with the requirements of the Orange County Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) to ensure that potentially significant impacts to special-status species and sensitive resources are adequately addressed.

Action RR-5c: Require new development which has the potential to result in water quality impacts to the City's creeks and the local groundwater basin to implement all feasible mitigation measures to reduce impacts.

City of Lake Forest Municipal Code. From April 1 through October 31 of each year, the City of Lake Forest Municipal Code (Section 6.20.025) prohibits any person from pruning, cutting branches from, topping, or cutting down any eucalyptus tree on public property within Lake Forest or to transport on its streets or highways any logs, branches, or trunk of any eucalyptus tree, unless a eucalyptus tree cutting permit has been obtained from the City.

4.4.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to biological resources if it would:

Threshold 4.4.1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

Threshold 4.4.2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

Threshold 4.4.3: Have a substantial adverse effect on state or federally protected wetlands(including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

Threshold 4.4.4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

Threshold 4.4.5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

Threshold 4.4.6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.4.6 Project Impacts

Please refer to Section 4.4.9 for a full text description of the regulatory compliance and/or mitigation measures referenced in the analysis below.

Threshold 4.4.1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact. The biological survey found no evidence of listed, candidate, non-listed sensitive, or special-status plant or wildlife species on the site and these species are not expected to occur on site due to lack of suitable habitat. Additionally, there are no native plant communities or natural communities of special concern on site. The entire project site is developed and supports an existing office/industrial building and supporting infrastructure (i.e., parking lot, landscaped medians). Despite the disturbed condition of the project site and the lack of vegetation communities, the project site does have existing landscaping that could provide suitable habitat for nesting birds. Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or their eggs). To comply with the MBTA and California Fish and Game Code and avoid impacts to nesting birds from implementation of the proposed project, a pre-construction nesting bird survey would be required prior to removal of any landscaped vegetation, as detailed in **Regulatory Compliance Measure (RCM) BIO-1**.

As shown on Figure 3-2, Project Location, the project site is bound by existing residential and industrial developments, and roads to the immediate north, east, west, and south that already restrict wildlife movement in the project vicinity. The wildlife species that occur within the project site and nearby vicinity are adapted to the existing urban-wildland interface. The project site does not correspond to essential connectivity areas, natural landscape blocks or potential riparian connections as documented in the *California Essential Habitat Connectivity Project Report*.[1] Potential noise, vibration, light, dust, or human disturbance associated with project activities would only temporarily deter wildlife from using areas in the immediate vicinity. These indirect effects could temporarily alter migration behaviors, territories, or foraging habitats in adjacent areas. However, because these are

[1] Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration.

temporary effects, it is likely that any wildlife already living and/or moving in close proximity to the project site would temporarily alter their normal functions during active construction activities, and then re-establish those functions once temporary construction activities have ceased, such as during dawn and dusk. Project activities would not place any permanent barriers within any known wildlife movement corridors or interfere with habitat connectivity.

With implementation of **RCM BIO-1**, the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Impacts would be less than significant and no mitigation is required.

Threshold 4.4.2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. According to the Biological Resources Report completed for the proposed project (ELMT Consulting 2021), no riparian habitat is present at the project site. According to the CNDDB, 4 special-status plant communities have been reported in the vicinity of the project site within the USGS *El Toro, California* 7.5-minute quadrangle: Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Scrub, and Southern Sycamore Alder Riparian Woodland. However, none of these special-status plant communities were observed on site during the field investigation. Therefore, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. No impact would occur, and no mitigation is required.

Threshold 4.4.3: Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. According to the National Wetlands Inventory Wetlands Mapper, there are no State or federally protected wetlands on or around the project site. No discernible drainage courses, inundated areas, or wetland features that would be considered jurisdictional by the USACE, RWQCB, or CDFW were observed within the limits of the project site during field investigations. Therefore, implementation of the proposed project would not have a substantial adverse effect on State or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. No impact would occur, and no mitigation is required.

Threshold 4.4.4: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact. Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific

opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project site and adjacent areas are entirely developed. Furthermore, there are no riparian corridors, creeks, or useful patches of habitat within or connecting the project site to any identified wildlife corridors or linkages. Therefore, the proposed project would not interfere with the movement of any wildlife species or with established wildlife corridors. While no active nests or birds displaying nesting behavior were observed during the field investigation, which were conducted during the breeding season, the landscaped areas on the project site have the potential to provide minimal foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that are adapted to urban environments. However, **RCM BIO-1** includes measures to prevent potential impacts to nesting birds during construction activities. With implementation of **RCM BIO-1**, the proposed project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites, and impacts would be less than significant. No mitigation is required.

Threshold 4.4.5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The City of Lake Forest Municipal Code Chapter 6.20, Regulations Pertaining to Conversion, Maintenance and Removal of Eucalyptus Trees, requires a permit to prune and transport eucalyptus trees during the restricted period (April 1 through October 31). There are no eucalyptus trees on the project site. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources. No impact would occur, and no mitigation is required.

Threshold 4.4.6: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The project site is located within the boundaries of the Central/Coastal Subregion NCCP/HCP; however, it is not located within the Reserve System or any identified special linkages. The closest portion of the Reserve System is located approximately 1 mile northwest of the project site and is separated from the project site by existing development. Since the proposed project would be limited to existing developed areas and would not impact any native plant communities (i.e., coastal sage scrub, riparian plant communities), implementation of the proposed project would be consistent with the rules and regulations of the NCCP/HCP. Therefore, the proposed project would not impact an adopted Natural Community Conservation Plan, Habitat Conservation Plan, or other approved local, regional, or State habitat conservation plan, and no mitigation is required.

4.4.7 Cumulative Impacts

As defined in Section 15355 of the *State CEQA Guidelines*, cumulative impacts refer to the incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The cumulative study area for biological resources is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have no impact on sensitive wildlife species (aside from nesting birds), plant communities, habitat fragmentation, jurisdictional waters, wildlife movements, wildlife migratory wildlife corridors, wildlife nursery sites, habitat conservation plans, or local ordinances or regulations protecting biological resources. Because the proposed project would have no impact on the biological resources listed above, it would not contribute to a cumulatively considerable impact on these biological resources. Therefore, there would be no cumulatively significant impact on these biological resources, and no mitigation is required.

As detailed in this section, during construction activities, the proposed project could have a significant impact on nesting birds if construction takes place during the nesting season and if there is a bird nest found in any of the existing vegetation. All projects within the cumulative study area would be required to comply with the MBTA and the California Fish and Game Code to address potential impacts to nesting birds. In this way, potential impacts on nesting birds would be evaluated and mitigated to a less than significant level by each cumulative project. Since all projects within the cumulative study area would be required to implement appropriate regulatory compliance measures to avoid impacts to nesting birds, implementation of the proposed project, when evaluated in combination with the development of projects listed in Table 4.A, would not contribute to a cumulatively considerable impact on biological resources, and, in particular, nesting birds. Therefore, there would be no cumulatively significant impact on biological resources, and no mitigation is required.

4.4.8 Level of Significance Prior to Mitigation

Potential adverse impacts to nesting birds would be significant prior to implementation of regulatory compliance measures. The proposed project would not impact any native plant communities, sensitive species, riparian habitat, or jurisdictional areas, and would not conflict with any local policies or ordinances or the provisions of the NCCP/HCP.

4.4.9 Regulatory Compliance Measures and Mitigation Measures

4.4.9.1 Regulatory Compliance Measures

The following regulatory compliance measure is required to reduce potentially significant impacts related to biological resources to a less than significant level:

RCM BIO-1 **Nesting Bird Clearance Survey.** If construction/ground disturbing activities, including demolition, occurs between February 1 and August 31, a Qualified Biologist shall conduct a pre-construction clearance survey for nesting birds within 3 days of the start of any construction, vegetation clearing, or grading activities (including disking and demolition) to ensure that no nesting birds are disturbed during construction. The Qualified Biologist shall be retained by the Construction Contractor. The Qualified Biologist conducting the clearance survey shall document a negative survey with a brief letter report indicating that no impacts to active avian nests would occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. In general, the no-disturbance buffer shall be a minimum of 50 feet for passerines and 250 feet for raptors. However, a species' sensitivity to disturbance can vary among species, the level of noise or construction disturbance, and the line of sight between the nest and the disturbance. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel shall be instructed on the sensitivity of nest areas. A biological monitor, with experience in monitoring active nests, shall be present to delineate the boundaries of the buffer area and to monitor daily all active nests to observe the efficacy of the no-disturbance buffers and to document any new nesting occurrences to ensure that nesting behavior is not adversely affected by the construction activity. Adversely affected nesting behavior, as determined by the biological monitor, includes, but is not limited to, disrupting reproductive behavior, nest abandonment, and/or prolonged absences of parents while incubating eggs. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction, vegetation clearing, or grading activities (including disking and demolition) within the buffer area can occur. Field memorandums shall be prepared by the biological monitor within 24 hours of each day of monitoring and shall be submitted to the City of Lake Forest to document compliance with the applicable resource protection measures.

4.4.9.2 Mitigation Measures

The proposed project would not result in significant impacts to biological resources, and no mitigation is required.

4.4.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to biological resources.

4.5 CULTURAL RESOURCES

This section evaluates the potential impacts to cultural resources from implementation of the proposed project. This section is based in part on the following:

- *Cultural Resources Assessment* (BCR Consulting 2021); and
- *City of Lake Forest General Plan Recreation and Resources Element* (City of Lake Forest 2020).

4.5.1 Scoping Process

The Notice of Preparation (NOP) for the proposed project was published in March 2024, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. One comment letter included comments related to cultural resources. This comment pertains to concerns about the possibility of buried archaeological resources in the project area, stating that this potential necessitates, at a minimum, monitoring by qualified archaeologists and culturally related Native Americans during ground disturbance within undisturbed soil areas.

4.5.2 Methodology

The analysis of potential impacts to cultural resources is based on the site-specific cultural resources impact analysis completed for the proposed project. There have been no changes to existing site conditions since the cultural resources assessment was prepared in 2021, and the conclusions of the report remain valid for the following analysis.

The cultural resource assessment included a literature and records search, a search of the Native American Heritage Commission's (NAHC) Sacred Lands File (SLF), a Paleontological Overview, and an intensive cultural resource pedestrian survey.

The archaeological records search, which was conducted by the South Central Coastal Information Center (SCCIC), included a review of all recorded historic and prehistoric cultural resources, as well as a review of known cultural resources, and survey and excavation reports generated from projects completed within 1 mile of the project site.

The literature review included the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), and documents and inventories from the California Office of Historic Preservation including the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Built Environment Resources Directory (BERD).

The archaeological pedestrian field survey was conducted by walking parallel transects spaced approximately 15 meters apart across 100 percent of the accessible portions of the project site that contained visible sediment. All sediment exposures were carefully inspected for evidence of cultural resources, and photographs were taken at various points within the project site boundaries.

4.5.3 Existing Environmental Setting

4.5.3.1 Natural Setting

The project site is located in the western flank of the small peninsular range known as the Santa Ana Mountains. Local sediments are dominated by sedimentary deposits of the Upper Cretaceous, Tertiary, and Quaternary periods, obscured beneath an intermittent veneer of recent alluvium. Local rainfall ranges from 5 to 15 inches annually, and runoff flows in a southwesterly direction towards Serrano Creek. Chaparral, coastal sage scrub, and riparian vegetation communities dominate regional flora (BCR Consulting LLC 2021).

4.5.3.2 Cultural Setting

In Southern California, the historic era is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present) (BCR Consulting LLC 2021).

Spanish Period. The first European to pass through the area was thought to be a Spaniard called Father Francisco Garces. Having become familiar with the area, Garces acted as a guide to Juan Bautista de Anza, who had been commissioned to lead a group across the desert from a Spanish outpost in Arizona to set up quarters at the Mission San Gabriel in 1771 near what today is Pasadena. Garces was followed by Alta California Governor Pedro Fages, who briefly explored the region in 1772 (BCR Consulting LLC 2021).

Mexican Period. In 1821, Mexico overthrew Spanish rule and the missions began to decline. By 1833, the Mexican government passed the Secularization Act, and the missions, reorganized as parish churches, lost their vast land holdings, and released their neophytes (BCR Consulting LLC 2021).

American Period. The American Period, 1848–Present, began with the Treaty of Guadalupe Hidalgo. In 1850, California was accepted into the Union of the United States primarily due to the population increase created by the Gold Rush of 1849. The cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. However, beginning about 1855, the demand for beef began to decline due to imports of sheep from New Mexico and cattle from the Mississippi and Missouri Valleys. When the beef market collapsed, many California ranchers lost their ranchos through foreclosure. A series of disastrous floods in 1861–1862, followed by a significant drought further diminished the economic impact of local ranching. This decline combined with ubiquitous agricultural and real estate developments of the late 19th century, set the stage for diversified economic pursuits that have continued to proliferate to this day (BCR Consulting LLC 2021).

4.5.3.3 Project Site History

There is an existing 144,906-square-foot (sq ft), two-story tilt-up office/industrial building on the 8.83-acre project site, which was built in 1999 and was previously used as an office, manufacturing, and research testing facility by Panasonic Avionics. The project site also consists of surface parking and

associated landscaping. Panasonic Avionics is no longer using the building for its operations and the building is currently vacant.

According to the data obtained from the SCCIC records search, 25 previous cultural resource studies were completed within a 0.5-mile radius of the project site, resulting in the recording of 13 cultural resources within this 0.5-mile radius. Of the 25 previous cultural resources studies, 8 assessed the project site for cultural resources, and 1 cultural resource (a prehistoric lithic scatter) was previously recorded within the project site's boundaries. The cultural resource site was systematically excavated in 1988, and was subject to subsequent construction excavation, which removed the knoll, reducing the elevation from 720 to 700 feet above mean sea level (amsl). The final archaeological site visit prior to the current study indicated that the knoll was no longer present due to development of the site in 1994 (BCR Consulting LLC 2021).

4.5.4 Regulatory Setting

Federal, State, and local regulations and programs related to cultural resources that are applicable to the proposed project are described below.

4.5.4.1 Federal Regulations

The National Historic Preservation Act of 1966 (NHPA). The NHPA requires that the federal government list significant historic resources on the National Register. Federal agencies must consult the National Register when planning to undertake or grant approval through permits for a project. Prior to the issuance of any license or implementation of any project, the federal agency must consider the effects of a project or license on any historical buildings, sites, structures, or objects that are included on, or eligible for inclusion on, the National Register (16 United States Code [USC] Section 470(f)). This typically includes consultation with the federal agency responsible for the undertaking; the State Historic Preservation Officer (SHPO); local Native American groups and individuals; local and State historical societies and organizations; and relevant archival sources, including the appropriate facility of the California Historical Resources Information System (CHRIS).

4.5.4.2 State Regulations

California Register of Historical Resources (Public Resources Code [PRC] Section 5020 et seq.). The California Register is used in the consideration of historical resources relative to significance for purposes of the California Environmental Quality Act (CEQA). The California Register includes California State Historical Landmarks; eligible Points of Historical Interest; and resources listed, or formally determined eligible for listing, in the National Register. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory, may be eligible for listing in the California Register and are presumed to be significant resources for purposes of CEQA, unless a preponderance of evidence indicates otherwise.

Generally, a resource is considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register, consisting of the following:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

2. It is associated with the lives of persons important to local, California, or national history;

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or

4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

California Environmental Quality Act (CEQA). A "historical resource" includes, but is not limited to, any object, building, site, area, place, record, or manuscript that is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. CEQA mandates that lead agencies consider a resource "historically significant" if it meets the criteria for listing in the California Register, as described above. These criteria mimic those utilized to determine eligibility for the National Register.

Integrity is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Historical resources eligible for listing in the California Register must meet one of the criteria of significance described above and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.

Historical resources other than potential Native American burials may be accidentally discovered during project construction.[1] This guideline recommends that immediate evaluation defined by qualified archaeologists be included in mitigation measures. This guideline also recommends that if the find is determined to be a historical resource, then contingency funding and time allotments sufficient to allow for implementation of mitigation or avoidance measures be made available.

California Public Resources Code (PRC) Section 5097.5. The PRC protects archaeological, paleontological, and historical sites and recognizes cultural and paleontological resources as nonrenewable, therefore granting them protection under the PRC and CEQA. Specifically, PRC Section 5097.5 provides for the protection of cultural resources and prohibits the removal, destruction, injury, or defacement of archaeological features on any lands under the jurisdiction of State or local authorities.

Assembly Bill 52 (AB 52). Pursuant to AB 52,[2] Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects. The City provided notice of this proposed project to the tribes that had previously requested such notice, and consulted with California Native American tribes that requested consultation in response to the notice, pursuant to AB 52. Details regarding government-to-

[1] Public Resources Code Section 21083.2 and *State CEQA Guidelines* Section 15064.5(f).

[2] Public Resources Code Section 21080.3.1.

government consultation between the City and California Native American tribes are discussed in Section 4.18, Tribal Cultural Resources, of this EIR.

California Health and Safety Code. The California Health and Safety Code Section 7050.5 states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the Coroner's authority. If the human remains are of Native American origin, the County of Orange (County) Coroner must notify the NAHC within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

4.5.4.3 Regional Regulations

There are no regional regulations that apply to the proposed project with respect to cultural resources.

4.5.4.4 Local Regulations

City of Lake Forest General Plan 2040. The Recreation and Resources Element of the City's General Plan includes various goals and policies related to cultural resources. Goals, policies, and actions applicable to the proposed project include:

Goal RR-3 Cultural Resources: A community that values its history and preserves its cultural features to bolster community identity and protect sensitive resources.

Policy RR-3.1 Preservation: Protect areas containing significant historic, archaeological, and paleontologic resources, as defined by the California Public Resources Code.

Policy RR-3.3 Development: Ensure that human remains are treated with sensitivity and dignity, and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.

Policy RR-3.4 Tribal Consultation: Consult with Native American tribes that may be impacted by proposed development, as necessary, and in accordance with state, local, and tribal intergovernmental consultation requirements.

Action RR-3a: City staff shall require applicants for future proposed ground disturbing projects to provide a technical cultural resources assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified archaeologist meeting Secretary of the Interior Standards and certified by the County of Orange. If resources are known or reasonably anticipated the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provide a treatment plan for potential resources that includes data to be collected, requires

professional identification, other special studies as appropriate, requires curation at an accredited museum such as the John D. Cooper Center operated by the County of Orange for artifacts meeting significance criteria, requires a comprehensive final mitigation compliance report including a catalog of specimens with museum numbers and an appendix containing a letter from the museum stating that they are in possession of the materials.

Action RR-3b: Require all new development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Director of Community Development shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Community Development Director; and

- If human remains are discovered during any ground disturbing activity, work shall stop until the Director of Community Development and the Orange County Coroner have been contacted. If the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants shall be consulted; and work may only resume when appropriate measures have been taken and approved by the Community Development Director.

4.5.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to cultural resources if it would:

Threshold 4.5.1: Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5;

Threshold 4.5.2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; or

Threshold 4.5.3: Disturb any human remains, including those interred outside of formal cemeteries.

4.5.6 Project Impacts

Please refer to Section 4.5.9 for a full text description of the regulatory compliance and/or mitigation measures referenced in the analysis below.

Threshold 4.5.1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less Than Significant Impact. The term "historical resource" is defined by Section 15064.5 of the *State CEQA Guidelines* as follows:

> (1) A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (California Register) (Pub. Res. Code §5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et seq.).
>
> (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
>
> (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 4852) including the following:
>
> A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
>
> B. Is associated with the lives of persons important in our past.
>
> C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possess high artistic values.
>
> D. Has yielded, or may be likely to yield, information important in prehistory or history.

A "substantial adverse change" to a historical resource, according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

As discussed in Section 4.5.3.3, on June 16, 2021, a records search to identify previously recorded prehistoric and historic cultural resources and cultural resource surveys within 0.5 mile of the project area was conducted at the SCCIC of the California Historical Resources Information System at California State University, Fullerton. According to the SCCIC records search, one previously recorded cultural resource (a prehistoric lithic scatter) was discovered on the project site. However, according to previous studies, the knoll where the cultural resource was identified was systematically excavated in 1988 and removed by subsequent development/construction excavation in 1994 (BCR Consulting LLC 2021). Furthermore, through site development, the project site has been subject to over excavation and compaction that has disturbed sediments beyond depths at which encountering buried cultural resources is likely.

The project site is occupied by a modern building and parking lot. The existing building was developed in 1999. Since the building is less than 50 years old, it is not considered to be of historical significance.

There are no known archaeological resources on the project site that would qualify as "historical resources" as defined by CEQA. Furthermore, the existing structures at the project site do not qualify as an "historical resource" as defined by CEQA. However, in the unlikely event that a previously undocumented historical or unique archaeological resources are encountered during construction, the provisions specified in California Code of Regulations, Title 14, Chapter 3, Section 15064.5(f) would be followed. Therefore, the proposed project would result in less than significant impacts associated with a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the *State CEQA Guidelines*, and no mitigation is required.

Threshold 4.5.2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant Impact. A "substantial adverse change" to a historical resource, according to PRC Section 5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired." As discussed under Threshold 4.5.1 and in Section 4.5.3.3, on June 16, 2021, a records search to identify previously recorded prehistoric and historic cultural resources and cultural resource surveys within 0.5 mile of the project area was conducted at the SCCIC of the California Historical Resources Information System at California State University, Fullerton. According to the SCCIC records search, one previously recorded cultural resource was discovered on the project site (P-30-1062). P-30-1062 was a prehistoric lithic scatter. However, according to previous studies, the site was destroyed in 1994 (BCR Consulting LLC 2021).

An archaeological pedestrian field survey of the project site was conducted on May 13, 2021. During the field survey, archaeologists did not discover any cultural resources (including prehistoric or historic archaeological sites or historic-period buildings) within the project site. The project site is occupied by a modern building and parking lot and has been subject to over excavation and compaction that has disturbed sediments beyond depths at which buried cultural resources are likely. Based on these results, the *Cultural Resources Assessment* determined that encountering buried cultural resources during project construction is unlikely and that no additional cultural resources work or monitoring is necessary during proposed activities associated with the development of the project site. In the unlikely event that archaeological resources are discovered at any time during

construction, those activities would be halted in the vicinity of the find until the find can be assessed for significance by a qualified archaeologist as required by the PRC and City of Lake Forest General Plan 2040 Action RR-3b (see **Regulatory Compliance Measure [RCM] CUL-1** provided in Section 4.5.9). With implementation of **RCM CUL-1** potential impacts to previously undiscovered archaeological resources would be less than significant.

At the completion of project construction, the proposed project would not result in further disturbance of native soils on the project site and, therefore, project operations would have no potential to impact previously undiscovered archaeological resources.

Therefore, with implementation of **RCM CUL-1**, construction and operation of the proposed project would not result in a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the *State CEQA Guidelines*. Impacts would be less than significant, and no mitigation is required.

Threshold 4.5.3: Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. No human remains are documented/known to be on the project site. Furthermore, the project site has been previously disturbed including over excavation and compaction during development of the existing building. Therefore, the likelihood of discovering unknown human remains during construction of the proposed project is extremely low. In the unlikely event that human remains are discovered during construction activities, the Construction Contractor would be required to implement **RCM CUL-2**, which requires compliance with the State's Health and Safety Code for the treatment of human remains. With implementation of **RCM CUL-2** potential impacts to previously undiscovered human remains would be less than significant.

At the completion of project construction, the proposed project would not result in further disturbance of native soils on the project site and, therefore, project operations would have no potential to impact previously undiscovered human remains.

Therefore, with implementation of **RCM CUL-2**, construction and operation of the proposed project would have a less than significant impact on undiscovered human remains and no mitigation is required.

4.5.7 Cumulative Impacts

As defined in Section 15355 of the *State CEQA Guidelines*, cumulative impacts refer to the incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The cumulative study area for cultural resources is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would

result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have no impact on historical resources. Because the proposed project would have no impact on historical resources, it would not contribute to a cumulatively considerable impact on historical resources. Therefore, there would be no cumulatively significant impact on historical resources, and no mitigation is required.

As detailed in this section, there are no archaeological resources or human remains known to occur on the project site. In the unlikely event that previously undiscovered archaeological resources or human remains are discovered during construction activities, the proposed project would be required to implement **RCM CUL-1** and **RCM CUL-2,** which would ensure potential impacts to previously undiscovered archaeological resources and/or human remains would be less than significant. Additionally, all discretionary private development and public works projects within the cumulative study area would be required to comply with CEQA and implement applicable regulatory compliance and mitigation measures. In this way, potential impacts on cultural resources would be evaluated and mitigated by each individual private development or public works project. Since all projects within the cumulative study area would be required to implement appropriate regulatory compliance measures and mitigation measures, implementation of the proposed project, when evaluated in combination with the development of projects listed in Table 4.A, would not contribute to a cumulatively considerable impact on cultural resources. Therefore, there would be no cumulatively significant impact on cultural resources, and no mitigation is required.

4.5.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to cultural resources.

4.5.9 Regulatory Compliance Measures and Mitigation Measures

4.5.9.1 Regulatory Compliance Measures

The following regulatory compliance measures are required to reduce potentially significant impacts related to unknown archaeological resources and human remains to a less than significant level:

RCM CUL-1 **Unknown Archaeological Resources.** In the event that archaeological resources are discovered during excavation, grading, or construction activities, work shall cease within 100 feet of the find until a qualified archaeologist from the Orange County List of Qualified Archaeologists has evaluated the find in accordance with federal, State, and local guidelines to determine whether the find constitutes a "unique archaeological resource," as defined in Section 21083.2(g) of the California Public Resources Code (PRC). Personnel of the proposed project shall not collect or move any archaeological materials and associated materials. Construction activity may continue unimpeded beyond 100 feet from the find on other portions of the project site. The found deposits shall be treated in accordance with federal, State, and local guidelines, including those set forth in PRC Section 21083.2. Prior to issuance of a grading permit, the Director of Community

Development, or designee, shall ensure that this regulatory compliance measure is documented on the grading plans.

RCM CUL-2 **Human Remains.** If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated grave goods in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment. Prior to issuance of a grading permit, the Director of Community Development, or designee, shall ensure that this regulatory compliance measure is documented on the grading plans.

4.5.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to cultural resources, and no mitigation is required.

4.5.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to cultural resources.

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4.6 ENERGY

This section evaluates the potential impacts to energy from implementation of the proposed project. This section is based in part on the following:

- *Air Quality, Greenhouse Gas, and Energy Impact Report* (Air Quality/GHG/Energy Analysis) (LSA 2025a) (provided in Appendix C).

4.6.1 Scoping Process

The Notice of Preparation (NOP) was published in March 2024 for the proposed project, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. No comments related to energy were received during the public scoping period.

4.6.2 Methodology

The energy use analysis in this section is based on information from the California Emissions Estimator Model (CalEEMod) version 2022.1 modeling results in the Air Quality/GHG/Energy Analysis, included in Appendix C of this EIR. Operational fuel consumption (diesel fuel and gasoline) from vehicle trips was based on the trip generation estimates provided in Section 4.17, Transportation and Traffic, vehicle emission factors from CalEEMod, and fuel efficiencies from the California Air Resources Board's (CARB) EMFAC2021 model for the operational year of 2026. Estimates of fuel consumption (diesel fuel and gasoline) from construction trucks and construction worker vehicles were based on trip estimates from CalEEMod and fuel efficiencies from the CARB's EMFAC2021 model.

The analysis focuses on the four sources of energy that are relevant to the proposed project: electricity, natural gas, the equipment fuel necessary for project construction, and vehicle fuel necessary for project operations. To assist in the analysis and provide context, the amount of electricity, natural gas, construction fuel, and fuel use from operations are quantified and compared to that consumed in Orange County as a whole. The electricity/natural gas use of the proposed project is analyzed as a whole on an annual basis.

4.6.3 Existing Environmental Setting

4.6.3.1 Electricity

Electricity is a manmade resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).

According to the most recent data available, in 2023, California's electricity was generated primarily by natural gas (43.7 percent), renewable sources (56.1 percent), nuclear (8.2 percent), large hydroelectric (12.6 percent), coal (<1.0 percent), and other and unspecified sources. Total

electric generation in California in 2023 was 281,140 gigawatt-hours (GWh), down 2.1 percent from the 2022 total generation of 287,220 GWh.[1]

The project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000-square-mile (sq mi) area of Central, Coastal, and Southern California.[2] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2022 was 85,870 GWh (31,604 GWh for the residential sector and 54,266 GWh for the non-residential sector). Total electricity consumption in Orange County in 2022 was 20,243.7 GWh (20,243,721,856 kilowatt-hours [kWh]).[3]

4.6.3.2 Natural Gas

Natural gas is a non-renewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[4]

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000 sq mi service area throughout Central and Southern California, from Visalia to the Mexican border.[5] According to the CEC, total natural gas consumption in the SoCalGas service area in 2022 was 5.03 billion therms (944 million therms for the commercial sector and 1.6 billon therms for the industry sector). Total natural gas consumption in Orange County in 2022 was 572.4 million therms (572,454,744 therms).[6]

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1 California Energy Commission (CEC). 2023. *2023 Total System Electric Generation*. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2023-total-system-electric-generation#:~:text=In%202023%2C%20total%20generation%20for,percent%20in%202022.%20California's%20wide (accessed June 2025).

2 Southern California Edison (SCE). 2020. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed June 2025).

3 CEC. 2020a. Electricity Consumption by County and Entity. Websites: http://www.ecdms.energy.ca.gov/elecbycounty.aspx and http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed June 2025).

4 CEC. 2021b. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed June 2025).

5 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: https://www3.socalgas.com/about-us/company-profile (accessed June 2025).

6 CEC. 2020b. Gas Consumption by County and Entity. Websites: http://www.ecdms.energy.ca.gov/gasbycounty.aspx and http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed June 2025).

4.6.3.3 Petroleum/Transportation Energy

Petroleum is also a non-renewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil, gasoline, and diesel.

The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles [SUVs]) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.8 mpg in 2022.[7] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. The act, which originally mandated a national fuel economy standard of 35 mpg by year 2020,[8] applies to cars and light trucks of Model Years 2011 through 2020. In March 2020, the United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks, further detailed below.

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and SUVs. According to the most recent data available, total gasoline consumption in California was 316,425 thousand barrels or 1,597.6 trillion British Thermal Units (BTU) in 2022.[9] Of the total gasoline consumption, 299,304 thousand barrels or 1,511.2 trillion BTU were consumed for transportation.[10] Based on fuel consumption obtained from CARB's EMFAC2021, approximately 157.5 million gallons of diesel and approximately 1,176.8 million gallons of gasoline will be consumed from vehicle trips in Orange County in 2025.

4.6.4 Regulatory Setting

Federal, State, and local regulations and programs related to energy that are applicable to the proposed project are described below.

4.6.4.1 Federal Regulations

On the federal level, the United States Department of Transportation (USDOT), the United States Department of Energy, and the USEPA are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for

7 United States Department of Transportation (USDOT). 2024. "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed June 2025).

8 United States Department of Energy. 2007. "Energy Independence & Security Act of 2007." Website: https://www.afdc.energy.gov/laws/eisa (accessed June 2025).

9 A British Thermal Unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

10 United States Department of Energy, Energy Information Administration (EIA). 2021. California State Profile and Energy Estimates. Table F3: Motor gasoline consumption, price, and expenditure estimates, 2021. Website: eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed June 2025).

automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements.

Energy Policy Act of 2005. The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provides incentives to reduce current demand on these resources. For example, under this act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Corporate Average Fuel Economy (CAFE) Standards. On March 31, 2022, the National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 to 2050.

4.6.4.2 State Regulations

On the State level, the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) are two agencies with authority over different aspects of energy. The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies and serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

The CEC is the State's primary energy policy and planning agency. The CEC forecasts future energy needs, promotes energy efficiency, supports energy research, develops renewable energy resources, and plans for/directs state response to energy emergencies.

Assembly Bill 1575, Warren-Alquist Act. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted Assembly Bill (AB) 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) 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 (PRC) Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require Environmental Impact Reports (EIRs) to include, where relevant, mitigation measures (MMs) proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal,

including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

Senate Bill 1389, Energy: Planning and Forecasting. In 2002, the State Legislature passed Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles (ZEVs) and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted report includes the *2023 Integrated Energy Policy Report.*[11] The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

Renewable Portfolio Standard. SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the State's electricity come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[12]

California Energy Code. Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards in Part 6 of Title 24 of the California Code of Regulations (CCR), known as the Energy Code. The CEC first adopted the Building Energy Efficiency Standards for Residential and Non-residential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The Energy Code is updated every 3 years, with the most recent update consisting of the 2022 Energy Code that became effective January 1, 2023. Mid-cycle

[11] CEC. 2023. *2023 Integrated Energy Policy Report*. California Energy Commission. Docket Number: 23-IEPR-01.

[12] California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard Program. Website: cpuc.ca.gov/rps (accessed June 2025).

supplements to the 2022 Energy Code will become effective on July 1, 2024. The efficiency standards apply to both new construction and rehabilitation of both residential and nonresidential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in the Energy Code.

California Green Building Standards Code. In 2010, the California Building Standards Commission adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis, with the most recent update consisting of the 2022 CALGreen Code standards that became effective January 1, 2023. The CALGreen Code established mandatory measures for residential and nonresidential building construction and encouraged sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce GHG emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and nonresidential buildings subject to the standard.

California Energy Efficiency Strategic Plan. On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

4.6.4.3 Regional Regulations

There are no regional regulations that apply to the proposed project.

4.6.4.4 Local Regulations

City of Lake Forest General Plan. The City of Lake Forest addresses energy in the Public Facilities Element of the General Plan.[13] The Public Facilities Element includes goals and policies that work to provide a community with adequate power, provided through economically and environmentally sustainable means. The following goals and policies are applicable to the proposed project:

[13] City of Lake Forest. 2020. *General Plan, Lake Forest 2040*. Adopted June 2020. Website: https://www.lakeforestca.gov/sites/default/files/lake-forest/departments/Lake%20Forest%20General%20Plan%20 (accessed June 2025).

Goal PF-6 Energy Management: A community with adequate power, provided through economically and environmentally sustainable means.

Policy PF-6.2 New Development: Continue to require new development and redevelopment to provide verification from energy utilities that states they are able to accommodate the additional demand for service.

Policy PF-6.5 Conservation: Promote conservation strategies during design, construction, and maintenance of facilities.

4.6.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to energy if it would:

Threshold 4.6.1: Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

Threshold 4.6.2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.6.6 Project Impacts

Threshold 4.6.1: Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. Implementation of the proposed project would increase the demand for energy through day-to-day operations and fuel consumption associated with construction activities. This section discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources.

Construction. Construction of the proposed project is anticipated to be completed in 13 months. The project would require energy for activities such as the manufacture and transportation of building materials, grading activities, and building construction. Construction of the proposed project would require electricity to power construction-related equipment. Construction of the proposed project would not involve the consumption of natural gas. The construction-related equipment would not be powered by natural gas, and no natural gas demand is anticipated during construction.

Transportation energy represents the largest energy use during construction and would occur from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). Therefore, the analysis of energy use during construction focuses on fuel consumption.

Construction trucks and vendor trucks hauling materials to and from the project site would be anticipated to use diesel fuel, whereas construction workers traveling to and from the project site would be anticipated to use gasoline-powered vehicles. Fuel consumption from transportation uses depends on the type and number of trips, VMT, the fuel efficiency of the vehicles, and the travel mode.

Estimates of fuel consumption (diesel fuel and gasoline) from construction equipment, construction trucks, and construction worker vehicles were based on default construction equipment assumptions and trip estimates from CalEEMod and fuel efficiencies from EMFAC2021. This analysis is consistent with the CalEEMod modeling assumptions described in Section 4.3, Air Quality. Fuel consumption estimates are presented in Table 4.6.A. CalEEMod output sheets and detailed energy calculations are included as appendices to the Air Quality/GHG/Energy Analysis.[14]

Table 4.6.A: Energy Consumption Estimates During Construction

Energy Type	Total Energy Consumption	Percentage Increase Countywide
Diesel Fuel (total gallons)	129,024.5	0.1
Gasoline (total gallons)	14,731.3	<0.01

Source: Compiled by LSA (June 2025).

As indicated in Table 4.6.A, the proposed project would consume approximately 129,024.5 gallons of diesel fuel and approximately 14,731.3 gallons of gasoline during construction. Based on fuel consumption obtained from EMFAC2021, approximately 1,150.0 million gallons of gasoline and approximately 157.8 million gallons of diesel will be consumed from vehicle trips in Orange County in 2026. Therefore, construction of the proposed project would increase the annual construction generated fuel use in Orange County by approximately 0.1 percent for diesel fuel usage and by less than 0.01 percent for gasoline fuel usage. As such, project construction would have a negligible effect on local and regional energy supplies. Furthermore, impacts related to energy use during construction would be temporary and relatively small in comparison to Orange County's overall use of the State's available energy resources. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel because gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. The proposed project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system. For these reasons, fuel consumption during construction would not be inefficient, wasteful, or unnecessary. Impacts would be less than significant, and no mitigation is required.

[14] LSA. 2025a. *Air Quality, Greenhouse Gas, and Energy Impact Report.*

Operation. Operational energy use is typically associated with natural gas use, electricity consumption, and fuel used for vehicle trips associated with a project. Energy consumption was estimated for the proposed project using default energy intensities by land use type in CalEEMod. As described in Section 4.3, Air Quality, this analysis was conducted using land use codes *Unrefrigerated Warehouse- No Rail*, *Other Asphalt Surfaces,* and *Parking Lot.* This analysis also includes the use of a 300 horsepower (hp) diesel fire pump, which is estimated to run for approximately 50 hours per year and the use of two 200 hp diesel powered cargo handling equipment units, which were included in CalEEMod. Impacts associated with the use of the fire pump are evaluated in Section 4.3, Air Quality, and Section 4.8, Greenhouse Gas Emissions, under stationary source emissions. However, the use of the fire pump is not expected to substantially increase diesel fuel usage and is therefore not evaluated in this energy analysis. By default, CalEEMod assumes natural gas usage. Therefore, consistent with the project design plans, this analysis incorporates selections that reflect no natural gas usage during construction and operation of the proposed project, consistent with the modeling assumptions described in Section 4.3, Air Quality.

The proposed project would result in energy usage associated with gasoline and diesel fuel consumed by project-related vehicle and truck trips. Fuel use associated with vehicle and truck trips generated by the proposed project was calculated based on the project's trip generation described in Section 4.17, Transportation and Traffic, which identifies that the proposed project would generate approximately 573 average daily trips, including 458 passenger car trips, 38 two-axle truck trips, 21 three-axle truck trips, and 58 four-axle truck trips. The amount of operational fuel use was estimated using CARB's EMFAC2021 model, which provided projections for typical daily fuel usage associated with vehicles and trucks in Orange County.

Electricity and fuel usage estimates associated with the proposed project are shown in Table 4.6.B.

Table 4.6.B: Proposed Project Energy Consumption Estimates during Operation

Energy Type	Annual Energy Consumption
Electricity Consumption (kWh/year)	865,996.0
Gasoline (gallons/year)	85,947.6
Diesel Fuel (gallons/year)	142,126.4

Source: Compiled by LSA (June 2025).
kWh = kilowatt-hours

As shown in Table 4.6.B, the estimated potential increase in electricity demand associated with the operation of the proposed project is 865,996.0 kWh per year. Total electricity consumption in Orange County in 2022 was 20,243.7 GWh (20,243,721,856 kWh). Therefore, operation of the proposed project would increase the annual electricity consumption in Orange County by less than 0.01 percent.

Electrical demand associated with project operations would be limited to only what is required to efficiently meet the proposed project's operational needs. In addition, the proposed project's electrical demand would be relatively small in comparison to Orange County's overall use of the State's available electricity resources. Therefore, the proposed project's electrical demand would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. In addition, SCE is the private utility that would supply the proposed project's electricity services. SCE is positioned to meet the State's 60 percent goal for renewable energy by 2030 and the 100 percent goal for achieving carbon neutrality by 2045 mandate set forth in SB 100. SCE plans to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand. As such, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Furthermore, the proposed project would be required to adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. Title 24 building energy efficiency standards establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage. In addition, the proposed project will be seeking Leadership in Energy and Environmental Design (LEED) certification through the Applicant's LEED Volume program. Some of the features included in the design include, but are not limited to, drought tolerant landscaping, low flow fixtures, high efficiency lighting, and infrastructure for electric vehicle (EV) charging.

As shown in Table 4.6.B, the net increase in fuel use associated with the vehicle trips generated by the proposed project is estimated at 85,947.6 gallons of gasoline and 142,126.4 gallons of diesel fuel per year. This analysis conservatively assumes that all vehicle trips generated as a result of project operation would be new to Orange County. Based on fuel consumption obtained from EMFAC2021, approximately 1,128.9 million gallons of gasoline and approximately 157.6 million gallons of diesel will be consumed from vehicle trips in Orange County in 2027. Therefore, vehicle and truck trips associated with the proposed project would increase the annual fuel use in Orange County by less than 0.01 percent for gasoline fuel usage and by approximately 0.1 percent for diesel fuel usage. Therefore, fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Impacts would be less than significant, and no mitigation is required.

Threshold 4.6.2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. In 2002, the Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the Integrated Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for ZEVs and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC's *2023 Integrated Energy Policy Report* provide the results of the CEC's assessments of a variety of energy issues facing California. As indicated above, energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the overall use in the County. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the overall use in Orange County, and the State's available energy resources. Therefore, energy impacts at the regional level would be negligible. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's Integrated Energy Policy Report. Additionally, as demonstrated above, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of energy. Potential impacts related to conflict with or obstruction of a State or local plan for renewable energy or energy efficiency would be less than significant, and no mitigation is required.

4.6.7 Cumulative Impacts

As defined in Section 15355 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area. The cumulative study area for energy is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1. The geographic area for cumulative analysis of electricity is that of the SCE service area, while the geographic area for cumulative analysis of natural gas service is that of the SoCalGas service area.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

The Western Realco Project 1 and Project 2 are reasonably foreseeable projects that would be located in the immediate vicinity of the project site and for the purposes of this analysis are assumed to have construction schedules that overlap with the proposed project. The proposed project and any future development of Western Realco Projects 1 and 2 would result in an increase in energy demand that would impact the existing demand for electricity and vehicle fuel. Therefore, a cumulative analysis is necessary to determine if the proposed project and Western Realco Projects 1 and 2 would result in an inefficient, wasteful, and unnecessary consumption of energy that would be cumulatively considerable.

Although the proposed project and any future development for Western Realco Projects 1 and 2 would result in an increase in demand for electricity, this increase would not require SCE to expand or construct infrastructure that could cause substantial environmental impacts. As discussed previously, total electricity consumption in the SCE service area in 2022 was 85,870 GWh. By 2030, consumption is anticipated to increase by 12,000 GWh for the low-demand scenario and by 22,000

GWh for the high-demand scenario.[15] While this forecast represents a large increase in electricity consumption, the proposed project's share of cumulative consumption would be negligible. The proposed project, in combination with cumulative development, is well within SCE's system-wide net annual increase in electricity supplies over the 2018 to 2030 period, and there are sufficient planned electricity supplies in the region for estimated net increases in energy demands.

Similarly, additional natural gas infrastructure is not anticipated due to cumulative development. Total natural gas consumption in the SoCalGas service area in 2022 was 5.03 billion therms. Between 2018 and 2030, total natural gas consumption in the SoCalGas service area is forecast to remain steady for the low- and mid-demand scenarios and to increase by approximately 650 million therms in the high-demand scenario due to intense energy efficiency efforts.[16] As mentioned in the preceding sections, the proposed project would not utilize natural gas during project construction and operation. Similarly, Western Realco Projects 1 and 2 would also not utilize natural gas during construction and operation. Therefore, the proposed project along with Western Realco Projects 1 and 2's share of cumulative consumption of natural gas in the SoCalGas service area would be zero. In addition, both SCE and SoCalGas demand forecasts include the growth contemplated by the proposed project and the other cumulative development within their respective service areas. Increased energy efficiency to comply with building energy efficiency standards would reduce energy consumption on a per-square-foot basis. Furthermore, utility companies are required to increase their renewable energy sources to meet the Renewable Portfolio Standards mandate of 60 percent renewable supplies by 2030. SCE and SoCalGas plan to continue to provide reliable service to their customers and upgrade their distribution systems as necessary to meet future demand.

Transportation energy use would also increase; however, as described in Section 4.6.6, Project Impacts, this transportation energy use would not represent a major amount of energy use compared to the amount of existing development and to the total number of vehicle trips and VMT throughout Orange County and the region. The proposed project and cumulative development are required to comply with various federal and State government legislation to improve energy efficiency in buildings, equipment, and appliances and to reduce VMT.

As such, cumulative impacts from the proposed project along with Western Realco Projects 1 and 2 would not result in an inefficient, wasteful, and unnecessary consumption of energy. Therefore, the proposed project and Western Realco Projects 1 and 2's contribution to the inefficient, wasteful, and unnecessary consumption of energy would not be cumulatively considerable.

4.6.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to energy.

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15 CEC. 2018. *California Energy Demand, 2018–2030 Revised Forecast*. Publication Number: CEC-200-2018-002-CMF. February. Website: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244 (accessed June 2025).

16 CEC. 2018. *California Energy Demand, 2018–2030 Revised Forecast*. Publication Number: CEC-200-2018-002-CMF. February. Website: https://efiling.energy.ca.gov/getdocument.aspx?tn=223244 (accessed June 2025).

4.6.9 Regulatory Compliance Measures and Mitigation Measures

4.6.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to energy.

4.6.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to energy, and no mitigation is required.

4.6.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to energy.

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4.7 GEOLOGY AND SOILS

This section evaluates the potential impacts to geology and soil conditions from implementation of the proposed project. This section is based in part on the following:

- *Geotechnical Investigation Proposed Warehouse 26200 Enterprise Way, Lake Forest, California* (Geotechnical Investigation) (Southern California Geotechnical 2021a) (provided in Appendix E);
- *City of Lake Forest General Plan Update Existing Conditions Report* (City of Lake Forest, October 2018);
- *City of Lake Forest General Plan* (City of Lake Forest 2022);
- *City of Lake Forest General Plan Public Safety Element* (City of Lake Forest 2022);
- *City of Lake Forest General Plan Recreation and Resources Element* (City of Lake Forest 2020);
- *City of Lake Forest Municipal Code* (City of Lake Forest 2022);
- Numerous State and federal studies of geologic and seismic hazards in the vicinity of Lake Forest; and
- Site-specific investigations in the project area.

4.7.1 Scoping Process

The Notice of Preparation (NOP) was published in March 2024 for the proposed project, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft Environmental Impact Report (EIR). No comments related to geology and soils were received during the public scoping period.

4.7.2 Methodology

The analysis of potential geologic and soil-related impacts is based on the site-specific Geotechnical Investigation completed for the proposed project. There have been no changes to existing conditions since the Geotechnical Investigation was prepared in 2021, and the conclusions of the investigation remain valid for the following analysis. The Geotechnical Investigation included a visual site reconnaissance, subsurface exploration, field and laboratory testing, geotechnical engineering analysis, and review of published reports, maps and aerial photographs. The City's Public Safety and Recreation and Resources Elements of the General Plan and information from State agencies was referenced to establish the existing on-site geologic conditions. In determining the level of significance, the analysis assumes that construction and operation of the proposed project would comply with relevant State laws and regulations, as well as applicable City General Plan policies.

4.7.3 Existing Environmental Setting

The existing setting for geology and soils discussed below includes regional geology, faulting and seismicity, soils, local geology and subsurface conditions, local groundwater conditions, geologic and seismic hazards, and paleontological resources.

4.7.3.1 Regional Geology

The project site is located within the Los Angeles Basin, a northwest-trending alluviated lowland situated at the north end of the Peninsular Ranges geomorphic province of coastal Southern California. The Los Angeles Basin is bounded on the north by the Santa Monica Mountains and the Elysian, Repetto, and Puente Hills, and bounded on the east and southeast by the Santa Ana Mountains and San Joaquin Hills. The Los Angeles Basin is subdivided into four primary structural blocks that are distinguished from one another by contrasting basement rock types and stratigraphy. The project site is located within the boundaries of the southwestern block of the Los Angeles Basin, most of which is a low plain that extends from Santa Monica at the northwest to Long Beach to the southeast (USDI 1965).

4.7.3.2 Faulting and Seismicity

The faulting and seismicity of Southern California are dominated by the San Andreas Fault Zone. The San Andreas Fault Zone separates two of the major tectonic plates that comprise the earth's crust. West of the San Andreas Fault Zone lies the Pacific Plate. This plate is moving northwest relative to the North American Plate, which is east of the San Andreas Fault Zone. This relative movement between the two plates is the driving force of fault ruptures in the western portion of Southern California. The San Andreas Fault generally trends northwest to southeast. North of the Transverse Ranges Province, the fault trends more in an east-west direction, causing a north-south compression between the two plates. The rate of north-south compression in Southern California has been estimated at between 5 and 20 millimeters per year. This compression has produced rapid uplift of many of the mountain ranges in Southern California, including those surrounding the Los Angeles Basin (City of Lake Forest 2018).

There are numerous faults in the Los Angeles Basin that are categorized as active, potentially active, and inactive. A fault is classified as active if it has either moved during the Holocene epoch (the last 10,000 to 11,500 years) or is included in an Alquist-Priolo Earthquake Fault Zone (as established by the California Geological Survey [CGS], formerly the Division of Mines and Geology). A fault is classified as potentially active if it has experienced movement during the Quaternary period (the last 1.6 million years) but shows little or no evidence of movement during the Holocene. Faults that have not moved in the last 1.6 million years generally are considered inactive. Surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts (City of Lake Forest 2018).

The most significant active fault traces in the vicinity of Lake Forest are along the Newport-Inglewood and Elsinore Fault Zones, which are considered active. The Newport-Inglewood Fault Zone was responsible for both the 1933 Long Beach Earthquake and the 1920 Inglewood Earthquake. This zone is visible on the surface as a series of northwest-trending elongated hills

extending from Newport Beach to Beverly Hills, including Signal Hill and Dominguez Hills. The fault zone exhibits as much as 6,000 feet of right-lateral displacement that has occurred since mid-Pliocene time, about 3.4 million years ago, with a maximum displacement of 10,000 feet since late Miocene time, at least 5.3 million years ago. Active or potentially active fault segments of the Newport-Inglewood Fault Zone closest to Lake Forest include the north and south branches of the Newport-Inglewood Fault (City of Lake Forest 2018).

Other known active segments of faults at greater distances from Lake Forest that could pose seismic groundshaking hazards for the project site include those of the Palos Verdes Fault Zone (about 26 miles southwest of the City), the San Jacinto Fault Zone (about 35 miles northeast of the City), the San Andreas Fault Zone (about 43 miles northeast of the City), the Sierra Madre Fault Zone (about 32 miles north of the City), and the Santa Monica–Raymond Fault Zone (about 42 miles northwest of the City) (City of Lake Forest 2018).

4.7.3.3 Local Geology

According to the Geotechnical Investigation completed for the proposed project, the Geologic Map and sections of the South Half of El Toro Quadrangle, Orange County, California, indicate that the majority of the project site is underlain by white to bluish-white, silty, marine, fine- to medium-grained, thick bedded to massive, poorly sorted arkosic sandstone mapped as late Miocene to early Pliocene Capistrano Formation, Oso Member. The Holocene to Pleistocene age Slopewash is mapped in the northwestern and southeastern property lines of the site (Southern California Geotechnical 2021a).

4.7.3.4 Subsurface Conditions and Soils

As part of the Geotechnical Investigation completed for the proposed project, a subsurface exploration was conducted, which consisted of the advancement of 6 borings to depths of 20 to 30 feet below the existing site grades. Asphaltic concrete pavement was encountered at the ground surface of all boring locations. The pavement sections generally consisted of 3.5 to 4.5± inches of asphaltic concrete, underlain by 2.5 to 7.0± inches of aggregate base. Engineered fill soils were encountered below the asphaltic concrete and aggregate base, extending to depths of 12 to more than 30± feet. These fill materials consist of medium dense to very dense silty sands with varying clay content, variable coloration, and variable strength. Capistrano Formation bedrock was encountered beneath the pavements and/or beneath the fill soils at most of the boring locations, extending to at least the maximum depth explored of 30± feet below the existing site grades. The bedrock generally consists of light gray to dark gray fine-grained poorly consolidated silty sandstone and sandstone. The samples occasionally possess trace amounts of clay, organics and iron oxide staining (Southern California Geotechnical 2021a).

4.7.3.5 Local Groundwater Conditions

Free water was not encountered during the drilling of any of the borings advanced as part of the Geotechnical Investigation. Based on the lack of any water within the borings, and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth in excess of 30± feet at the time of the subsurface exploration. According to available groundwater data, the nearest monitoring well on record is located approximately 1.37 miles west

of the site. Water level readings within this monitoring well indicate a groundwater level of approximately 72 feet below the ground surface as of September 2017 (Southern California Geotechnical 2021a).

4.7.3.6 Geologic and Seismic Hazards

Geologic and seismic hazards discussed in this subsection include the following:

- Surface rupture;
- Ground shaking;
- Liquefaction;
- Subsidence and seismic settlement;
- Landslides/slope stability; and
- Compressible, expansive, and collapsible soils.

Surface Rupture. Surface rupture occurs where displacement or fissuring occurs along a fault zone. Although primary ground damage due to earthquake fault rupture typically results in a relatively small percentage of the total damage in an earthquake, the location of structures or facilities too close to a rupturing fault can cause profound damage. It is difficult to reduce the hazards of surface rupture through structural design. The primary method to avoid this hazard is to either set structures and facilities away from active faults, or avoid their construction in close proximity to an active fault.

Faults throughout southern California have formed over millions of years. Some of these faults are considered inactive under present geologic conditions and other faults are known to be active.[1] Such faults have either generated earthquakes in historic times (200 years) or show geologic and geomorphic indications of movement within the last 11,000 years. Faults that have moved in the relatively recent geological past are generally presumed to be the most likely candidates to generate damaging earthquakes in the lifetimes of residents, buildings, or communities.

There are no active faults within or immediately adjacent to the project site based on review of reports and maps published by the CGS and as identified during the Geotechnical Investigation. Additionally, the project site is not located within an Alquist-Priolo Earthquake Fault Zone (Southern California Geotechnical 2021a).

Ground Shaking. The vast majority of earthquake damage is caused by ground shaking. The extent of shaking is a result of the size of the earthquake and distance from the epicenter. The exact way rocks and other earth materials move along the fault can also influence shaking, as can the subsurface orientation of the fault.

[1] The Alquist-Priolo Earthquake Fault Zoning Act defines active faults as those showing proven displacement of the ground surface within the last 11,000 years. Potentially active faults are those showing evidence of movement within the last 1.6 million years.

There are numerous faults capable of producing significant ground motions located near the project site and the project site is in an area that is subject to strong ground motions due to earthquakes (Southern California Geotechnical 2021a).

Liquefaction and Lateral Spreading. Liquefaction occurs primarily in saturated, loose, fine-to-medium-grained alluvial soils in areas where the groundwater table is within 50 feet of the surface. Shaking suddenly causes soils to lose strength and behave as a liquid. Liquefaction-related effects include loss of bearing strength, lateral spreading, and flow failures or slumping.

The project site was evaluated for liquefaction potential as part of the Geotechnical Investigation. Based on the conditions encountered at the boring locations, and the mapping performed by the CGS, liquefaction is not considered to be a significant design concern at the project site (Southern California Geotechnical 2021a).

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "unconfined" face such as an open body of water, channel, or excavation. In soils, this movement is generally due to failure along a weak plane and is often associated with liquefaction. Due to the low potential for liquefaction and lack of nearby open face areas, the project site possesses a low potential for lateral spreading (Southern California Geotechnical 2021a).

Subsidence and Seismic Settlement. Ground subsidence is typically a gradual settling or sinking of the ground surface with little or no horizontal movement, although fissures (cracks and separations) can result from lowering of the ground surface. The common causes of subsidence that can produce small or local collapses to broad regional subsidence include:

- Dewatering of peat or organic soils;
- Dissolution in limestone aquifers;
- First-time wetting of dry low-density soils (hydrocompaction);
- Natural compaction;
- Liquefaction;
- Crustal deformation;
- Ground shaking;
- Subterranean mining; and
- Withdrawal of fluids (groundwater, petroleum, or geothermal).

Most of the damage caused by subsidence is the result of oil, gas, or groundwater extraction from below the ground surface. Ground subsidence may occur as a response to natural forces such as earthquake movements, which can cause abrupt elevation changes of several feet or densification of low density granular soils during an earthquake event that may cause several inches of settlement. According to the Geotechnical Investigation completed for the proposed project, the potential for subsidence to affect the project site is considered low (Southern California Geotechnical 2021a).

Landslides/Slope Stability. Factors that contribute to slope failure include slope height and steepness, shear strength and orientation of weak layers in the underlying geologic units, and pore water pressures. According to the Geotechnical Investigation completed for the proposed project, the project site is not located within an Earthquake Induced Landslide Zone and the potential for landslides to affect the project site is considered low.

Expansive Soils. Expansive soils generally have a significant amount of clay particles that can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The extent of shrink/swell is influenced by the amount and kind of clay in the soil. The occurrence of these soils is often associated with geologic units having marginal stability. According to the Geotechnical Investigation completed for the proposed project, soils on-site were determined to have an expansion index of 12, which is considered a very low expansive potential (Southern California Geotechnical 2021a).

Collapse Potential. Hydrocompaction, or soil collapse, typically occurs in recently deposited Holocene (less than 11,000 years before present time) soils that were deposited in an arid or semi-arid environment. Soils prone to collapse are commonly associated with man-made fill, wind-laid sands and silts, and alluvial fan and mudflow sediments deposited during flash floods. Sudden substantial settlement may occur when saturated, collapsible soils lose their cohesion. An increase in surface water infiltration (such as from irrigation) or a rise in the groundwater table, combined with the weight of a building or structure, may initiate settlement, causing foundations and walls to crack. According to the Geotechnical Investigation completed for the proposed project, soils on-site were determined to have relatively high strengths and favorable consolidation characteristics and low potential for collapse (Southern California Geotechnical 2021a).

Corrosive Soils. Corrosive soils contain chemical constituents that cause damage to construction materials such as concrete and ferrous metals. One such constituent is water-soluble sulfate, which, if high enough in concentration, can react with and damage concrete. Electrical resistivity, chloride content, and percentage of hydrogen (pH) levels are indicators of the soil's tendency to corrode ferrous metals. According to the Geotechnical Investigation completed for the proposed project, the on-site soils are considered to be moderately corrosive to ductile iron pipe (Southern California Geotechnical 2021a).

4.7.3.7 Paleontological Resources

There are no known unique geological features present on site. According to the Geotechnical Investigation, the project site is underlain by engineered fill soils and Capistrano Formation sandstone bedrock. The Capistrano Formation sandstone bedrock generally consists of medium dense to very dense, poorly consolidated fine-grained sandstone (Southern California Geotechnical 2021a). While engineered fill soils may contain fossils, these fossils have been removed from their original location and are thus out of stratigraphic context. Therefore, they are not considered sensitive for paleontological resources. The soil of the Capistrano Formation, however, has produced scientifically important paleontological resources and is considered to be sensitive for paleontological resources (City of Lake Forest 2018).

4.7.4 Regulatory Setting

Federal, State, and local regulations and programs related to geology and soils that are applicable to the proposed project are described below.

4.7.4.1 Federal Regulations

There are no federal regulations that apply to the proposed project with respect to geology and soils.

4.7.4.2 State Regulations

Alquist-Priolo Earthquake Fault Zoning Act (1972). The major State legislation regarding earthquake fault zones is the Alquist-Priolo Earthquake Fault Zoning Act (A-P Act), which was passed in 1972. Following passage of the A-P Act, the State of California began delineating "Earthquake Fault Zones" (called Special Studies Zones prior to 1994) around and along faults that are "sufficiently active" and "well defined" to reduce fault-rupture risks to structures for human occupancy.[2] The boundary of an "Earthquake Fault Zone" is generally 500 feet from major active faults and from 200 to 300 feet from well-defined minor faults. The mapping of active faults is conducted by the State Geologist, and these maps are distributed to all affected cities, counties, and State agencies for their use in developing planning policies and controlling renovation or new construction.

Before a project can be permitted within an identified Earthquake Fault Zone, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. A site-specific evaluation and written report must be prepared by a licensed geologist. If an active fault is identified, a structure intended for human occupancy cannot be placed over the trace of the fault and must be set back from the fault a minimum of 50 feet.

The A-P Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards.

Seismic Hazard Mapping Act (1990). The Seismic Hazard Mapping Act (SHMA) was adopted by the State in 1990 to address the potential hazards posed by secondary effects of seismic activity, including strong ground shaking, soil liquefaction, and associated ground failure and seismically induced landslides. The CGS prepares and provides local governments with seismic hazard zone maps that identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. The seismic hazard zones are referred to as "zones of required investigation" because site-specific geological investigations are required for construction projects located within these areas. Before a project can be permitted, a geologic investigation, evaluation, and written report must be prepared by a licensed geologist to demonstrate that the potential hazards can be successfully mitigated.

Natural Hazards Disclosure Act. Effective June 1, 1998, the Natural Hazards Disclosure Act requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more State-mapped hazard

[2] California Public Resources Code Sections 2621–2630.

areas. If a property is located in a Seismic Hazard Zone as shown on a map issued by the State Geologist, the seller or the seller's agent must disclose this fact to potential buyers.

California Building Code. Current law states that every local agency enforcing building regulations, such as cities and counties, must adopt the provisions of the California Building Code (CBC) within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission, and the code is also known as Title 24, Part 2, of the California Code of Regulations (CCR). Local jurisdictions often adopt local, more restrictive amendments that are based on local geographic, topographic, or climatic conditions. These codes provide minimum standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock on site, and the strength of ground shaking with a specified probability at a site. The 2022 CBC took effect on January 1, 2023. On January 3, 2023, the Lake Forest City Council adopted Ordinance No. 360, the 2022 California Building Standards Code.

Requirements for Geotechnical Investigations. Requirements for geotechnical investigations for subdivisions requiring tentative and final maps and for other types of structures are provided in California Health and Safety Code, Sections 17953 through 17955, and in Section 1802 of the CBC. Testing of samples from subsurface investigations is required, such as from borings or test pits. Studies must be done as needed to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness.

California Public Resources Code Section 5097.5. Section 5097.5 of the Public Resources Code (PRC) provides for the protection of cultural and paleontological resources and prohibits the removal, destruction, injury, or defacement of archaeological and paleontological features on any lands under the jurisdiction of State or local authorities.

4.7.4.3 Local Regulations

City of Lake Forest General Plan 2040. The Public Safety Element of the City of Lake Forest General Plan 2040 contains the following applicable goals and policies related to geology and soils:

Goal PS-1: A community that is adequately prepared for natural hazards related to landslides, geologic instability, and seismic activity.

Policy PS-1.2: Earthquake Protection: Enforce State Seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity.

Policy PS-1.4: Development: Require assessment and mitigation of hazards related to liquefaction, landslides, and flooding for new development projects or City improvement projects that are identified by the City as susceptible to these hazards.

The Recreation and Resources Element of the City of Lake Forest General Plan 2040 contains the following applicable goals, policies, and actions related to paleontological resources:

Goal RR-3: A community that values its history and preserves its cultural features to bolster community identity and protect sensitive resources.

Policy RR-3.1: Preservation. Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Action RR-3b: Require all new development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Director of Community Development shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Community Development Director; and

- If human remains are discovered during any ground disturbing activity, work shall stop until the Director of Community Development and the Orange County Coroner have been contacted. If the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants shall be consulted; and work may only resume when appropriate measures have been taken and approved by the Community Development Director.

Action RR-3d: Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of a paleontological resource:

- If construction or grading activities result in the discovery of significant prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Director of Community Development shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Director of Community Development.

City of Lake Forest Municipal Code, Chapter 8.02. Chapter 8.02 of the City's Municipal Code includes the adoption of the CBC by reference and amendments to the CBC.

- **Section 8.02.001** adopts the CBC for the purpose of prescribing regulations for the erection, construction, enlargement, alteration, repair, improvement, removal, conversion, demolition,

occupancy, equipment, use, height, area and maintenance of all buildings and structures. The California Building Code, 2022 Edition, is based on the 2021 International Building Code as published by the International Code Council with the amendments provided in Section 8.02.020.

- **Section 8.02.020** outlines amendments to the 2022 CBC.

City of Lake Forest Municipal Code, Chapter 8.30. Chapter 8.30 of the City's Municipal Code regulates grading and excavation activities.

- **Section 8.30.030** requires a grading permit obtained from the City Engineer prior to any grading, clearing of brush, grubbing excavation, or any other land disturbance activities.

- **Section 8.30.058** requires a soil engineering and engineering geology report for grading projects. The reports shall include information appropriate for the site including any information required by the City Engineer. Recommendations included in the reports and approved by the City Engineer shall be incorporated in the grading plans or specifications.

- **Section 8.30.100** specifies that cut slopes shall be no steeper than two horizontal to one vertical (2:1) unless otherwise recommended in the soil engineering or engineering geology report and approved by the City Engineer.

- **Section 8.30.110** specifies that unless otherwise approved by the City Engineer and recommended in the approved soil engineering report, fills shall conform to Subarticle 9 of the grading manual. The provisions therein may be waived for minor fills not intended to support structures upon written request by the applicant on a form prescribed by the City Engineer.

- **Section 8.30.150** specifies that grading activities be undertaken in compliance with National Pollutant Discharge Elimination System (NPDES) and City requirements. Each grading project shall implement Best Management Practices (BMPs) to ensure that discharges of pollutants are effectively prohibited and will not cause or contribute to an exceedance of water quality standards. Section 8.30.150 also specifies that, prior to the issuance by the City of a grading permit, the Department of Public Works and/or Development Services Department shall review the project plans.

- **Section 8.30.152** specifies that projects with a grading permit shall submit an erosion control plan to the Building Official for approval by September 15th of each year.

City of Lake Forest Municipal Code, Chapter 15.14. Chapter 15.14 of the City's Municipal Code regulates stormwater quality and prohibits discharges of pollutants into surface waters unless the discharge is authorized by an NPDES permit.

- **Section 15.14.040** requires all new development and redevelopment projects to comply with the requirements of the North Orange County MS4 Permit. Section 15.14.040 specifies that, prior to the issuance of a grading permit or building permit, the Department of Public Works and/or Development Services Department shall review the project plans.

- **Section 15.14.050** requires preparation of an erosion and sediment control plan as a condition of approval for issuance of a construction or grading permit. Section 15.14.050 also requires implementation of construction BMPs to ensure that the discharge of pollutants from the site will be effectively prohibited and will not cause or contribute to an exceedance of water quality standards. Section 15.14.050 specified that construction and grading activities be undertaken in compliance with NPDES and City requirements.

- **Section 15.14.060** requires implementation of operational BMPs on all sites that have the potential to discharge a pollutant to the City's MS4.

4.7.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to geology and soils if it would:

Threshold 4.7.1(i): Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42;

Threshold 4.7.1(ii): Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking;

Threshold 4.7.1(iii): Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction;

Threshold 4.7.1(iv): Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides;

Threshold 4.7.2: Result in substantial soil erosion or the loss of topsoil;

Threshold 4.7.3: 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;

Threshold 4.7.4: 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;

Threshold 4.7.5: 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; or

Threshold 4.7.6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

4.7.6 Project Impacts

Please refer to Section 4.7.9 for full text description of the regulatory compliance and/or mitigation measures referenced in the analysis below.

Threshold 4.7.1(i): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

No Impact. The project site is not located within an Alquist-Priolo Earthquake Fault Zone, and no evidence of faulting was observed during the Geotechnical Investigation completed for the proposed project (Southern California Geotechnical 2021a). Therefore, the proposed project would have no impact associated with potential adverse effects, including the risk of loss, injury or death involving the rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zone Map, and no mitigation is required.

Threshold 4.7.1(ii): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less Than Significant With Mitigation Incorporated. The project site is in a seismically active area, where earthquakes have the potential to subject the proposed project to strong seismic ground shaking. The intensity of ground shaking would depend on the characteristics of the fault, distance from the fault, the earthquake magnitude and duration, and site-specific geologic conditions.

The City requires projects to comply with applicable provisions of the California Building Code (CBC) (Title 24 CCR) and the City's Municipal Code (Sections 8.02.001 and 8.02.020), which provide for stringent construction requirements on projects in areas of high seismic risk based on numerous interrelated factors. It is acknowledged that seismic hazards cannot be completely eliminated, even with implementation of advanced building practices. However, the seismic design standards of the CBC are intended to prevent catastrophic structural failure in the most severe earthquakes currently anticipated. Therefore, compliance with the applicable CBC, which is required by both the City and the State, would ensure that the potential impacts associated with ground shaking would be less than significant.

Ground shaking generated by fault movement is considered a potentially significant impact that may affect the proposed project. **Mitigation Measure (MM) GEO-1** requires that the project Applicant comply with the recommendations of the Geotechnical Investigation, the most current CBC, and the City Building Code, which stipulates appropriate seismic design provisions that shall be implemented with project design and construction. The Geotechnical Investigation recommends the use of

conventional shallow foundations, supported in newly placed compacted fill with a maximum allowable soil bearing pressure of 3,000 pounds per square foot and reinforcement consisting of at least four number five rebars (two top and two bottom) in strip footings. Additionally, the Geotechnical Investigation recommends conventional slab-on-grade building floor supported on newly placed structural fill or densified existing soils, extending to a depth of at least three feet below finished pad grades, with a minimum thickness of 6 inches, and modulus of subgrade reaction k-value of 150 pounds per square inch (psi). With the implementation of seismic design provisions recommended in the Geotechnical Investigation and in required building codes as specified in **MM GEO-1**, potential project impacts related to seismic ground shaking would be reduced to less than significant with mitigation incorporated.

Threshold 4.7.1(iii): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

No Impact. The liquefaction susceptibility of the on-site subsurface soils was evaluated as part of the Geotechnical Investigation prepared for the proposed project. The Earthquake Zones of Required Investigation, El Toro quadrangle map (published by the CGS), indicates that the project site is not located within a designated liquefaction hazard zone. In addition, the subsurface conditions encountered at the project site are not considered to be conducive to liquefaction. According to the Geotechnical Investigation, groundwater was not encountered during the drilling of any on-site borings. Based on the lack of water within the borings, and the moisture contents of the recovered soil samples, the static groundwater table is considered to have been at a depth in excess of 30 feet below ground surface (bgs) at the time of the borings (Southern California Geotechnical 2021a).

Based on the conditions encountered at the boring locations and review of the CGS maps, liquefaction is not considered to be a significant design concern for the proposed project. Therefore, there would be no project-related impacts associated with seismic-related ground failure, including liquefaction, and no mitigation is required.

Threshold 4.7.1(iv): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

No Impact. According to the Geotechnical Investigation prepared for the proposed project, the Earthquake Zones of Required Investigation, the El Toro quadrangle map (published by the CGS), indicates that the project site is not located within a designated Earthquake Induced Landslide Zone. The project site is generally flat, and no existing or historic landslides are present on the property. Therefore, there would be no impacts associated with landslides, and no mitigation is required.

Threshold 4.7.2: Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. During construction of the proposed project, soil would be exposed and there would be increased potential for soil erosion and siltation compared to existing conditions. During storm events, erosion and siltation could occur at an accelerated rate. To address

the potential for erosion, the proposed Project would be required to implement a Storm Water Pollution Prevention Plan (SWPPP) including Best Management Practices (BMPs) during construction, which would reduce erosion in accordance with the requirements of the Construction General Permit as detailed in **RCM WQ-1** (refer to Section 4.10, Hydrology and Water Quality). In addition, the proposed project must also comply with Article XIII of the City's Municipal Code, which requires the preparation and submission of an Erosion Control Plan and that all grading be undertaken in accordance with BMPs for pollution prevention adopted by the City, the City's National Pollutant Discharge Elimination System (NPDES) Permit regulating discharges into and from its Municipal Separate Storm Sewer System (MS4), the Drainage Area Management Plan (DAMP), and any other conditions, requirements, and Water Quality Management Plans (WQMPs) adopted by the City, as detailed in **RCM WQ-2** (refer to Section 4.10).

During project operations, the majority of the project site would be covered with impervious surfaces (e.g., asphalt, concrete, an industrial building), which are not subject to erosion. Furthermore, the proposed project would be required to implement a project-specific Water Quality Management Plan (WQMP), which would contain post-construction measures to reduce potential impacts to soil erosion to less than significant levels as detailed in **RCM WQ-3** and **RCM WQ-4** (refer to Section 4.10).

Compliance with existing regulatory requirements would ensure that the proposed project would result in a less than significant impact related to soil erosion or loss of topsoil, and no mitigation is required.

Threshold 4.7.3: 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?

Landslides and Unstable Slopes.

No Impact. The project site is in a relatively flat area and landslides or other forms of natural slope instability do not represent a significant hazard to the project or the surrounding area. Furthermore, the project site is not within a State-designated hazard zone for seismically induced landslides (Southern California Geotechnical 2021a). Therefore, there would be no impacts associated with on- or off-site landslides, and no mitigation is required.

Lateral Spreading and Liquefaction.

No Impact. During the Geotechnical Investigation completed for the proposed project, groundwater was not encountered above 30 feet bgs. Therefore, liquefaction is not considered to be a design concern for the proposed project, and there would be no impacts. Seismically induced lateral spreading involves lateral movement of soils due to ground shaking and is demonstrated by near vertical cracks with predominantly horizontal movement of the soil mass involved. Due to the low potential for liquefaction and lack of nearby open face areas, the project site possesses a low potential for lateral spreading (Southern California Geotechnical

2021a). Therefore, there would be no impacts associated with lateral spreading and liquefaction, and no mitigation is required.

Subsidence and Collapsible Soils.

Less Than Significant Impact. Subsidence (the sinking of the land surface due to oil, gas, and water production) causes loss of pore pressure as the weight of the overburden compacts the underlying sediments. Minor ground subsidence is expected to occur at the project site due to settlement and machinery working. Implementation of the proposed project is anticipated to cause subsidence of up to 0.1 feet, which is considered acceptable for grading in areas that are underlain by existing engineered fill soils (Southern California Geotechnical 2021a). No subsidence associated with fluid withdrawal is known to have occurred on or in the vicinity of the project site and none is expected because neither construction nor operation of the proposed project would require groundwater dewatering. According to the Geotechnical Investigation completed for the proposed project, soils on-site were determined to have relatively high strengths and favorable consolidation and collapse characteristics (Southern California Geotechnical 2021a). Therefore, impacts associated with subsidence and collapse would be less than significant, and no mitigation is required.

Corrosive Soils.

Less Than Significant With Mitigation Incorporated. Corrosive soils contain constituents or physical characteristics that attack concrete (water-soluble sulfates) and/or ferrous metals (chlorides, ammonia, nitrates, low pH levels, and low electrical resistivity). Corrosive soils could potentially create a significant hazard to the project by weakening the structural integrity of the concrete and metal used to construct the building and could potentially lead to structural instability. Structural damage and foundation instability caused by corrosive soils is a potentially significant impact. According to the Geotechnical Investigation completed for the proposed project, on-site soils are not corrosive to concrete or copper pipe but are moderately corrosive to ductile iron pipe. **MM GEO-2** requires protection of ferrous metals against corrosion. Corrosion protection may include, but is not limited to, sacrificial metal, the use of protective coatings like polyethylene protection, and/or cathodic protection. Additionally, **MM GEO-2** requires a licensed corrosion engineer conduct additional site testing for presence of significant volumes of corrosive soils following demolition of the existing building on site and verify the soluble sulfate concentrations of the soils present at pad grade within the building areas at the completion of rough grading. With implementation of **MM GEO-2**, potential impacts related to corrosive soils would be reduced to less than significant levels with mitigation incorporated.

Threshold 4.7.4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. Expansive soils contain types of clay materials that occupy considerably more volume when they are wet or hydrated than when they are dry or dehydrated. Volume changes associated with changes in the moisture content of near-surface expansive soils

can cause uplift or heave of the ground when they become wet or, less commonly, cause settlement when they dry out. Soils with an expansion index of greater than 20 are classified as expansive for building purposes and therefore have a potentially significant impact. Based on laboratory testing completed as part of the Geotechnical Investigation, the soils on the project site were classified to have very low expansion potential (Expansion Index = 12). Therefore, impacts related to expansive soils would be less than significant and no mitigation is required.

Threshold 4.7.5: Does the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed project does not include construction of septic tanks or connections to septic systems or alternative wastewater disposal systems. Therefore, the proposed project would have no impacts related to the soils capability to adequately support the use of septic tanks or alternative wastewater disposal systems and no mitigation is required.

Threshold 4.7.6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant With Mitigation Incorporated. In the existing condition, the project site is developed. There are no known unique geological features present on site. According to the Geotechnical Investigation completed for the proposed project, the project site is underlain by engineered fill soils and Capistrano Formation sandstone bedrock. The Capistrano Formation sandstone bedrock generally consists of medium dense to very dense, poorly consolidated fine-grained sandstone. While engineered fill soils may contain fossils, these fossils have been removed from their original location and are thus out of stratigraphic context. Therefore, they are not considered sensitive for paleontological resources. The soil of the Capistrano Formation, however, has produced scientifically important paleontological resources and is considered to be sensitive for paleontological resources.

No significant amounts of below-grade construction, such as basements or crawl spaces, are proposed as part of the proposed project. According to the Geotechnical Investigation completed for the proposed project, based on the assumed topography, cuts and fills of approximately 4 to 6 feet would be necessary to achieve the proposed site grades. While engineered fill soils were encountered extending to depths of 12 feet to more than 30 feet, the depth at which Capistrano Formation soils were encountered was not uniform across the site. As such, it is possible that ground-disturbing construction activities could impact significant previously undiscovered paleontological resources. To mitigate adverse impacts to unknown buried paleontological resources that may exist on site, **MM GEO-3** would be implemented. With implementation of **MM GEO-3**, the proposed project would have a less than significant impact with mitigation incorporated to paleontological resources.

4.7.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for geology and soils.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have no impact related to: (1) potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map; (2) potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction; (3) the risk of loss, injury, or death involving landslides; (4) 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, or liquefaction or (5) the soils' capability to adequately support the use of septic tanks or alternative wastewater disposal systems. Therefore, the proposed project would not contribute to a cumulatively considerable impact associated with potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map; potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction; the risk of loss, injury, or death involving landslides; 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, or liquefaction; or the provision of septic tanks or alternative wastewater systems, and no mitigation is required.

Typically, geology and soils impacts are specific to a particular project site and there is little, if any, cumulative relationship between impacts related to geology and soils associated with the development of a proposed project and impacts related to geology and soils associated with development within a larger cumulative area. For example, development within the project site would not alter regional geologic events or soil features/characteristics (e.g., ground shaking, seismic intensity, or soil expansion or compression). Therefore, the potential for cumulative impacts is generally limited to individual development sites and adjacent sites. Therefore, for geology and soils, the cumulative study area consisted of (1) the area that could be affected by proposed project activities, and (2) the areas affected by other projects whose activities could directly or indirectly affect the geology and soils of the project site. In general, only projects occurring adjacent to or very close to the project site could directly or indirectly affect the geology and soils of the project site. Out of the 13 cumulative projects listed in Table 4.A in Chapter 4.0, three projects (project Nos. 3, 4, and 10) are located adjacent to or in the immediate vicinity of the proposed project and were included in the cumulative study area for geology and soils.

As detailed in this section, preparation of geotechnical investigation reports and compliance with recommendations in such reports, as well as applicable codes, regulations, and design standards, would minimize geologic hazards, such as ground subsidence and collapse, corrosive soil, and expansive soils within the project vicinity. The proposed project would be required to implement **MM GEO-1**, which requires that the project Applicant comply with the recommendations of the Geotechnical Investigation, the most current CBC, and the City Building Code, which stipulates appropriate seismic design provisions that shall be implemented with project design and construction. Additionally, **MM GEO-2** requires protection of ferrous metals against corrosion. Compliance with a SWPPP would minimize topsoil erosion by ensuring BMPs are followed during project construction and compliance with the MS4 Permit would reduce potential impacts to soil erosion during project operation. Additionally, the proposed project, would be required to comply with the applicable state and local requirements, including the City of Lake Forest Building Code and the CBC, all of which would reduce impacts to geology and soils to a less than significant level.

Development within the cumulative study area would also be required to comply with recommendations in site-specific geotechnical investigation reports, a SWPPP, and applicable codes, regulations, and design standards including the City of Lake Forest Building Code and CBC, which would reduce potential impacts associated with geologic hazards, such as subsidence and collapse, corrosive soil, and expansive soils as well as impacts to soil erosion.

Therefore, the proposed project would not result in cumulatively considerable impacts related to geologic hazards, such as ground subsidence and collapse, corrosive soil, and expansive soils or erosion of topsoil. The project's contribution to any cumulative impacts would be less than significant and no mitigation is required.

Potential impacts of the proposed project to unknown paleontological resources and unique geologic features, when combined with the impacts of the cumulative project list provided in Chapter 4.0, could contribute to a cumulatively significant impact due to the overall loss of paleontological remains unique to the region. However, each project would be subject to CEQA requirements, mitigation measures, and design review, if applicable. If during this review, a project is determined to have the potential to result in significant impacts to paleontological resources or unique geologic features, an investigation would be required to determine the nature and extent of the potentially impacted resources and identify appropriate mitigation measures. When resources are assessed and/or protected as they are discovered, cumulative impacts on these resources are less than significant.

Therefore, implementation of **MM GEO-3** would ensure that the proposed project, together with cumulative projects, would not contribute a cumulatively considerable impact on unique paleontological resources or sites, or unique geologic features.

4.7.8 Level of Significance Prior to Mitigation

The proposed project would have no impacts related to rupture of a known earthquake fault, seismic-related ground failure including liquefaction, landslides and unstable slopes, lateral spreading and liquefaction, or use of septic tanks of alternative waste water disposal systems. The proposed project would have less than significant impacts related to soil erosion or the loss of

topsoil, subsidence and collapsible soils, or expansive soil. Potential impacts related to seismic shaking and corrosive soil would be potentially significant prior to mitigation. The proposed project would also result in potential impacts to paleontological resources prior to mitigation.

4.7.9 Regulatory Compliance Measures and Mitigation Measures

4.7.9.1 Regulatory Compliance Measures

Regulatory Compliance Measures (RCMs) WQ-1, WQ-2, WQ-3, and WQ-4, as detailed in Section 4.10, Hydrology and Water Quality, are required to reduce potentially significant impacts related to erosion or the loss of topsoil to a less than significant level.

4.7.9.2 Mitigation Measures

The following mitigation measures are required to reduce potentially significant impacts related to seismic ground shaking, corrosive soils, and paleontological resources to a less than significant level:

MM GEO-1 **Compliance with Applicable California Building Code and Project-Specific Geotechnical Specifications.** Prior to the final grading permit and the issuance of building permits, the project Applicant shall provide final project plans to applicable City of Lake Forest (City) staff for review and approval showing that the project, including site preparation and construction of proposed buildings, has been designed and will be constructed in conformance with applicable provisions of the most current California Building Code at the time of City review, the City's Building Code, and the specifications cited in the Geotechnical Investigation, prepared by Southern California Geotechnical, dated November 2021.

During grading, an on-site inspection shall be conducted by the Applicant-hired Project Geotechnical Consultant and the City of Lake Forest Director of Public Works/City Engineer, or designee, to ensure compliance with geotechnical specifications as incorporated into project plans.

Prior to the final grading permit, the Project Geotechnical Consultant shall submit a Final Testing and Observation Geotechnical Report for Rough Grading to the City of Lake Forest Director of Public Works/City Engineer, or designee.

Prior to the issuance of a Certificate of Occupancy for the new building, the Project Geotechnical Consultant shall provide a letter regarding contractor compliance with project plans and required geotechnical. The letter shall be submitted to the City of Lake Forest Building Division for review and approval.

MM GEO-2 **Corrosive Soils.** Prior to issuance of building permits, the project Applicant/ Developer shall retain the services of a licensed corrosion engineer to conduct additional site testing and final design evaluation regarding the possible on-site presence of significant volumes of corrosive soils. At a minimum, the corrosion engineer shall (1) verify the soluble sulfate concentrations of the soils that are present at pad grade within the building areas at the completion of rough grading;

(2) provide detailed corrosion protection measures for cast iron and/or ductile iron pipes, as necessary; (3) confirm that soluble sulfates and chloride levels in the on-site soils do not warrant specialized concrete mix design; and (4) confirm that nitrates present in the on-site soil do not warrant protection for copper materials.

During grading, on-site inspection shall be conducted by the Project Geotechnical Consultant and City of Lake Forest Director of Public Works/City Engineer, or designee, to ensure compliance with the corrosion protection measures of the corrosion engineer, as incorporated into the project plans.

Prior to issuance of a building permit, the Director of the City of Lake Forest Public Works Department, or designee, shall verify that the project plans incorporate the corrosion protection measures of the corrosion engineer.

MM GEO-3 **Paleontological Resources Impact Mitigation Program.** Prior to the final grading permit and the issuance of building permits, the project Applicant/Developer shall provide a letter to the Director of Community Development Department, or designee, stating that they have retained a qualified paleontologist (defined as a practicing paleontologist who is recognized in the paleontological community and proficient in vertebrate paleontology) who is listed on the County of Orange list of certified paleontologists.

Prior to the final grading permit and the issuance of building permits, the qualified paleontologist shall submit to the City, a Paleontological Resources Impact Mitigation Program (PRIMP) for this project. The PRIMP shall include the methods that will be used to protect paleontological resources that may exist within the project site, as well as procedures for monitoring, fossil preparation and identification, curation into a repository, and preparation of a report at the conclusion of grading. The PRIMP shall be consistent with the guidelines of the Society of Vertebrate Paleontology. The City shall not issue a grading permit for the project until the letter and PRIMP, both referenced above, have been received.

During construction, excavation and grading activities in deposits with high paleontological sensitivity shall be monitored by a paleontological monitor as defined by the PRIMP. No monitoring is required for excavations in deposits with no or low paleontological sensitivity (i.e., engineered fill soils).

If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to temporarily redirect construction away from the area of the find in order to assess its significance. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected, and a paleontologist shall be contacted to assess the find for significance.

Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a scientific institution prepared by the Applicant-hired qualified paleontologist.

Prior to the issuance of building permits, a report of findings shall be prepared to document the results of the monitoring program prepared by the Applicant-hired qualified paleontologist. The report shall be provided to the Director of Community Development, or designee.

4.7.10 Level of Significance after Mitigation

Potentially significant impacts would be reduced to less than significant levels after mitigation. Therefore, with implementation of **MM GEO-1**, **MM GEO-2**, and **MM GEO-3**, the proposed project would not result in any significant impacts related to geology and soils.

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4.8 GREENHOUSE GAS EMISSIONS

This section evaluates the potential for the proposed project to produce greenhouse gas (GHG) emissions that would cause environmental impacts. This section is based in part on the following:

- *Air Quality, Greenhouse Gas, and Energy Impact Report* (Air Quality/GHG/Energy Analysis) (LSA 2025a) (Appendix C).

4.8.1 Scoping Process

The Notice of Preparation (NOP) was published in March 2024 for the proposed project, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. Twenty-eight (28) comment letters included comments related to GHG emissions. These comments raised concerns about increases in air pollution and GHG emissions associated with the proposed project, the need for hotspot analyses for key pollutants and a study on manufacturing emissions, and the need for mitigation for impacts related to GHG emissions.

4.8.2 Methodology

This analysis used the California Emissions Estimator Model (CalEEMod) version 2022.1. to quantify the potential GHG emissions associated with both construction and operation of the proposed project.

4.8.3 Existing Environmental Setting

4.8.3.1 Background

Global Climate Change. Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. The Earth's average near-surface atmospheric temperature rose 0.6 ± 0.2 degrees Celsius (°C) or 1.1 ± 0.4 degrees Fahrenheit (°F) in the 20th century. The prevailing scientific opinion on climate change is that most of the warming observed over the last 50 years is attributable to human activities. The increased amounts of carbon dioxide (CO_2) and other GHGs are the primary causes of the human-induced component of warming. GHGs are released by the burning of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect.[1]

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

[1] The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets heat from sunlight in and reduces the heat escaping, greenhouse gases like carbon dioxide, methane, and nitrous oxide in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of greenhouse gas results in global warming, the naturally occurring greenhouse effect is necessary to keep our planet at a comfortable temperature.

- CO_2
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF_6)

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally occurring GHGs (e.g., CO_2, methane, and N_2O), some gases (e.g., HFCs, PFCs, and SF_6) are completely new to the atmosphere.

Certain gases (e.g., water vapor) are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this air quality analysis, the term "GHGs" will refer collectively to the six gases listed above.

These gases vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The global warming potential is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to carbon dioxide, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of CO_2 equivalents (CO_2e). Table 4.8.A shows the GWP for each type of GHG. For example, SF_6 is 23,900 times more potent at contributing to global warming than CO_2.

The following discussion summarizes the characteristics of the six GHGs and black carbon.

Carbon Dioxide. In the atmosphere, carbon generally exists in its oxidized form, as CO_2. Natural sources of CO_2 include the respiration (i.e., breathing) of humans, animals and plants, volcanic out gassing, decomposition of organic matter, and evaporation from the oceans. Human-caused sources of CO_2 include the combustion of fossil fuels and wood, waste incineration, mineral production, and deforestation. Natural sources release approximately 150 billion tons of CO_2 each year, far outweighing the 7 billion tons of manmade emissions of CO_2 each year. Nevertheless, natural removal processes (e.g., photosynthesis by land- and ocean-dwelling plant species) cannot keep pace with this extra input of manmade CO_2, and consequently, the gas is building up in the atmosphere.

Table 4.8.A: Global Warming Potential of Greenhouse Gases

Gas	Atmospheric Lifetime (Years)	Global Warming Potential (100-Year Time Horizon)
Carbon Dioxide	50-200	1
Methane	12	25
Nitrous Oxide	114	310
HFC-23	270	11,700
HFC-134a	14	140
HFC-152a	1.4	140
PFC: Tetrafluoromethane (CF_4)	50,000	6,500
PFC: Hexafluoromethane (C_2F_6)	10,000	9,200
Sulfur Hexafluoride (SF_6)	3,200	23,900

Source: *Second Update to the Climate Change Scoping Plan: Building on the Framework* (CARB 2017). Website: www.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents (accessed June 2025).
CARB = California Air Resources Board HFC = hydrofluorocarbon PFC = perfluorocarbon

In 2021, total annual CO_2 accounted for approximately 81.2 percent of California's overall GHG emissions.[2] Transportation is the single largest source of CO_2 in California, which is primarily comprised of on-road travel. Electricity production, industrial, and residential sources also make important contributions to CO_2 emissions in California.

Methane. CH_4 is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites[3], and oceans. Decomposition occurring in landfills accounts for the majority of human-generated CH_4 emissions in California and in the United States as a whole. Agricultural processes such as intestinal fermentation, manure management, and rice cultivation are also significant sources of CH_4 in California. Total annual emissions of CH_4 accounted for approximately 9.8 percent of GHG emissions in California in 2021.[4]

Nitrous Oxide. N_2O is produced naturally by a wide variety of biological sources, particularly microbial action in soils and water. Tropical soils and oceans account for the majority of natural source emissions. Nitrous oxide is a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion emit N_2O, and the quantity emitted varies according to the type of fuel, technology, and pollution control device used, as well as maintenance and operating practices. Agricultural soil management and fossil fuel combustion are the primary sources of human-generated N_2O emissions in California. N_2O emissions accounted for approximately 3.4 percent of GHG emissions in California in 2021.[5]

2 California Air Resources Board (CARB). 2022c. GHGs Descriptions & Sources in California. Website: ww2.arb.ca.gov/ghg-descriptions-sources (accessed June 2025).

3 Termites are important decomposers of plant material. During digestion, microbes in their guts break down the plant material, producing methane.

4 California Air Resources Board (CARB). 2022c. GHGs Descriptions & Sources in California. Website: ww2.arb.ca.gov/ghg-descriptions-sources (accessed June 2025).

5 California Air Resources Board (CARB). 2022c. GHGs Descriptions & Sources in California. Website: ww2.arb.ca.gov/ghg-descriptions-sources (accessed June 2025).

Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride. HFCs are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol.[6] PFCs and SF_6 are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry leads to greater use of PFCs. HFCs, PFCs, and SF_6 accounted for about 5.6 percent of GHG emissions in California in 2021.[7]

Black Carbon. Black carbon is the most strongly light-absorbing component of PM formed by burning fossil fuels such as coal, diesel, and biomass. Black carbon is emitted directly into the atmosphere in the form of $PM_{2.5}$ and is the most effective form of PM, by mass, at absorbing solar energy. Per unit of mass in the atmosphere, black carbon can absorb one million times more energy than CO_2.[8] Black carbon contributes to climate change both directly, such as absorbing sunlight, and indirectly, such as affecting cloud formation. However, because black carbon is short-lived in the atmosphere, it can be difficult to quantify its effect on global warming.

Most United States emissions of black carbon come from mobile sources (52 percent), particularly from diesel-fueled vehicles. The other major source of black carbon is open biomass burning, including wildfires, although residential heating and industry also contribute. The California Air Resources Board (CARB) estimates that the annual black carbon emissions in California will be reduced approximately 50 percent below 2013 levels by 2030.[9]

Greenhouse Gas Inventories. An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, United States, and California GHG emissions inventories.

Global Emissions. Worldwide emissions of GHGs in 2020 totaled 22.9 billion metric tons (MT) CO_2e. Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change (UNFCCC).[10]

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6 The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion.

7 CARB. 2022c. Op. cit.

8 United States Environmental Protection Agency (USEPA). 2015. Black Carbon, Basic Information. February 14, 2017. Website: 19january2017snapshot.epa.gov/www3/airquality/blackcarbon/basic.html (accessed June 2025).

9 CARB. 2017b. *Short-Lived Climate Pollutant Reduction Strategy.* March. Website: https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf (accessed June 2025).

10 United Nations Framework Convention on Climate Change (UNFCCC). 2021. GHG Data from UNFCCC. Website: unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc/ghg-data-from-unfccc (accessed June 2025).

United States Emissions. In 2022, the year for which the most recent data are available, the United States emitted about 6,343 million metric tons (MMT) CO_2e. Overall, emissions in 2022 increased by 1 percent relative to the 2021 total GHG emissions. This increase in total GHG emissions was driven by fossil fuel combustion due primarily to increased energy use, due inpart to the continued rebound in economic activity after the height of the COVID-19 pandemic. However, GHG emissions in 2022 were 17 percent below those of 2005 levels. Of the five major sectors—residential and commercial, agricultural, industry, transportation, and electricity generation—transportation accounted for the highest amount of GHG emissions in 2022 (approximately 28 percent), with electricity generation second at 25 percent and emissions from industry third at 23 percent.[11]

State of California Emissions. The State emitted 381.3 MMT CO_2e emissions in 2021, 12.6 MMT CO_2e higher than 2020 levels but 23.1 MMT CO_2e below the 2019 levels.[12] CARB estimates that transportation was the source of 38 percent of the State's GHG emissions in 2021, which is 7.4 percent higher than the 2020 emissions. This increase was most likely from passenger vehicles whose activity and emissions rebounded after the COVID-19 pandemic. The next largest sources included industrial sources at approximately 19 percent and electricity generation at 16 percent. The remaining sources of GHG emissions were commercial and residential activities at 10 percent, agriculture at 8 percent, high GWP at 6 percent, and waste at 2 percent.[13]

4.8.4 Regulatory Setting

Federal, State, and local regulations and programs related to greenhouse gas emissions that are applicable to the proposed project are described below.

4.8.4.1 Federal Regulations

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO_2 emissions under the federal Clean Air Act (CAA).

Although there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change, including the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the CAA, finding that seven GHGs (CO_2, CH_4, N_2O, HFCs, NF_3, PFCs, and SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

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11 USEPA. 2023. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022. Website: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks (accessed June 2025).

12 CARB. 2023. *California Greenhouse Gas Emissions for 2000 to 2021, Trends of Emissions and Other Indicators Report*. Website: https://ww2.arb.ca.gov/sites/default/files/2023-12/2000_2021_ghg_inventory_trends. pdf (accessed June 2025).

13 Ibid.

4.8.4.2 State Regulations

The CARB is the lead agency for implementing climate change regulations in the State. Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 1493 (2002). In a response to the transportation sector's significant contribution to California's CO_2 emissions, Assembly Bill (AB) 1493 was enacted on July 22, 2002. AB 1493 requires the CARB to set GHG emission standards (the Pavley Standards) for passenger vehicles and light duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. These standards (starting in model years 2009 to 2016) were approved by the CARB in 2004, but the needed waiver of California Clean Air Act (CCAA) Preemption was not granted by the USEPA until June 30, 2009. The CARB responded by amending its original regulation, now referred to as Low Emission Vehicle III, to take effect for model years starting in 2017 to 2025. The Trump administration revoked California's waiver in 2019; however, the Biden administration restored California's waiver in 2021.

Executive Order S-3-05 (2005). Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05 on June 1, 2005, which proclaimed that California is vulnerable to the impacts of climate change. To combat those concerns, the executive order established California's GHG emissions reduction targets, which established the following goals:

- GHG emissions should be reduced to 2000 levels by 2010;
- GHG emissions should be reduced to 1990 levels by 2020; and
- GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

The Secretary of the California Environmental Protection Agency (CalEPA) is required to coordinate efforts of various State agencies in order to collectively and efficiently reduce GHGs. A biannual progress report must be submitted to the Governor and State Legislature disclosing the progress made toward GHG emission reduction targets. In addition, another biannual report must be submitted illustrating the impacts of global warming on California's water supply, public health, agriculture, the coastline, and forestry, and report possible mitigation and adaptation plans to address these impacts.

The Secretary of CalEPA leads this climate action team (CAT) made up of representatives from State agencies as well as numerous other boards and departments. The CAT members work to coordinate statewide efforts to implement global warming emission reduction programs and the State's Climate Adaptation Strategy. The CAT is also responsible for reporting on the progress made toward meeting the statewide GHG targets that were established in the executive order and further defined under AB 32, the "Global Warming Solutions Act of 2006." The first CAT Report to the Governor and the Legislature was released in March 2006, which it laid out 46 specific emission reduction strategies for reducing GHG emissions and reaching the targets established in the executive order. The most recent report was released in December 2020.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is AB 32, passed by the State legislature on August 31, 2006. This effort

aims at reducing GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG emissions in 1990 at 427 MMT CO_2e. The emissions target of 427 MMT CO_2e requires the reduction of 169 MMT CO_2e from the State's projected business-as-usual (BAU) 2020 emissions of 596 MMT CO_2e. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by the CARB on December 11, 2008, and contains the main strategies California will implement to achieve the reduction goals and includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory.

The CARB approved the *First Update to the Climate Change Scoping Plan* on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020, and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[14] to reflect the 2030 target set by EO B-30-15 and codified by Senate Bill (SB) 32.

The 2022 Scoping Plan[15] was approved in December 2022 and assesses progress towards achieving the SB 32 2030 target and lay out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Senate Bill 97 (2007). SB 97, signed by the Governor in August 2007 (Chapter 185, Statutes of 2007; PRC Sections 21083.05 and 21097), acknowledges climate change is a prominent environmental

14 CARB. 2017a. *California's 2017 Climate Change Scoping Plan*. November.

15 CARB. 2022a. *2022 Scoping Plan Update*. May 10. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed June 2025).

issue that requires analysis under the California Environmental Quality Act (CEQA). This bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Resources Agency guidelines for mitigating GHG emissions or the effects of GHG emissions, as required by CEQA.

The California Natural Resources Agency adopted the amendments to the *State CEQA Guidelines* in November 2018, which went into effect in December 2018. The amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific MMs. The amendments encourage lead agencies to consider many factors in performing a CEQA analysis, but preserve the discretion granted by CEQA to lead agencies in making their own determinations based on substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs when they perform individual project analyses.

Senate Bill 375 (2008). Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB-approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). CARB may update the targets every 4 years and must update them every 8 years. MPOs, in turn, must demonstrate how their plans, policies, and transportation investments meet the targets set by CARB through Sustainable Community Strategies (SCSs). The SCSs are included with the Regional Transportation Plan (RTP), a report required by State law. However, if an MPO finds that its SCS will not meet the GHG reduction targets, it may prepare an Alternative Planning Strategy. The Alternative Planning Strategy identifies the impediments to achieving the targets.

Executive Order B-30-15 (2015). Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target and, therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increasing energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission (CPUC) for the private utilities and by the California Energy Commission (CEC) for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other non-renewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016, the Legislature passed, and the Governor signed, SB 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change (IPCC) analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million CO_2e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

Senate Bill 100. On September 10, 2018, Governor Brown signed SB 100, which raises California's Renewables Portfolio Standard (RPS) requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18. EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Title 24, Part 11, Building Standards Code and CALGreen Code. In November 2008, the California Building Standards Code established the California Green Building Standards Code (CALGreen Code), which sets performance standards for residential and non-residential development to reduce environmental impacts and encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, material conservation, planning and design, and

overall environmental quality. The CALGreen Code is updated every 3 years and was most recently updated in 2022 to include new mandatory measures for residential as well as non-residential uses; the new measures took effect on January 1, 2023. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

Title 24, Part 6, California Building Efficiency Standards. The California Building Standards Code, or Title 24 of the California Code of Regulations (CCR) contains the regulations that govern the construction of buildings in California. Part 6 is California's Energy Efficiency Standards for Residential and Non-Residential Buildings. These standards were first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption and are updated on an approximately 3-year cycle to allow consideration and possible incorporation of new energy efficient technologies and methods. All buildings for which an application for a building permit is submitted on or after January 1, 2023, must follow the 2022 standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

Executive Order N-79-20, Executive Order B-48-18, Low Carbon Fuel Standard and the Advanced Clean Cars Program. EO N-79-20, which was signed by the Governor on September 23, 2020, sets the following goals for the State: 100 percent of in-state sales of new passenger cars and trucks shall be zero-emission by 2035; 100 percent of medium- and heavy-duty vehicles in the State shall be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and 100 percent of off-road vehicles and equipment in the State shall be zero-emission by 2035, where feasible. EO B-48-18 requires all State entities to work with the private sector to have at least 5 million zero-emission vehicles (ZEVs) on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle (EV) charging stations by 2025. This order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. EO S-01-07 calls for a statewide goal to be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020, and that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California. In 2018, CARB approved amendments to the LCFS regulation to readjust carbon intensity benchmarks to meet California's 2030 GHG reductions targets under SB 32. These amendments include opportunities to promote ZEV adoption, carbon capture and sequestration, and advanced technologies for decarbonization of the transportation sector. Furthermore, CARB adopted the Advanced Clean Cars program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of ZEVs, into a single package of regulatory standards for vehicle model years 2017 through 2025. The program's ZEVs regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025.

California Integrated Waste Management Act. To minimize the amount of solid waste that must be disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. In 2011, AB 341 modified the California Integrated Waste Management Act and directed the California Department of Resources Recycling and Recovery

(CalRecycle) to develop and adopt regulations for mandatory commercial recycling. AB 341 also established a statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939. In April 2016, AB 1826 further modified the California Integrated Waste Management Act, requiring businesses that generate a specified amount of organic waste per week to arrange for recycling services for that organic waste in a specified manner.

4.8.4.3 Regional Regulations

South Coast Air Quality Management District. In 2008, the South Coast Air Quality Management District (SCAQMD) formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the South Coast Air Basin. The Working Group developed several different options that are contained in the SCAQMD 2008 draft guidance document titled *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*[16] that could be applied by lead agencies. On September 28, 2010, SCAQMD Working Group Meeting No. 15 provided further guidance, including a tiered approach for evaluating GHG emissions for development projects where the SCAQMD is not the lead agency. The SCAQMD has not presented a finalized version of these thresholds to the governing board.

The SCAQMD identifies the emissions level for which a project would not be expected to substantially conflict with any State legislation adopted to reduce statewide GHG emissions. As such, the utilization of a service population represents the rates of emissions needed to achieve a fair share of the State's mandated emissions reductions. Overall, the SCAQMD identifies a GHG efficiency level that, when applied statewide or to a defined geographic area, would meet the year 2020 and post-2020 emissions targets as required by AB 32 and SB 32. If projects are able to achieve targeted rates of emissions per the service population, the State will be able to accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target and future post-2020 targets.

Southern California Association of Governments. On April 4, 2024, Southern California Association of Governments (SCAG) adopted the 2024–2050 RTP/SCS (Connect SoCal).[17] However, the CARB has not officially approved the 2024–2050 RTP/SCS. In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled (VMT) from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. The RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high-quality transit areas and livable corridors and creating neighborhood mobility areas to integrate land use and transportation and plan for more active

[16] SCAQMD. 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans.

[17] Southern California Association of Governments (SCAG). 2024. Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: https://scag.ca.gov/connect-socal (accessed June 2025).

lifestyles.[18] However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; SCAG is required to consider local land use controls when drafting the SCS.

4.8.4.4 Local Regulations

City of Lake Forest General Plan. The City of Lake Forest addresses GHGs in the Recreation and Resources Element of its General Plan.[19] The Recreation and Resources Element includes goals and policies that work to create a community with optimal air quality for its residents. The following policies from the Recreation and Resources Element are applicable to the proposed project:

> **Goal RR-4 Air Quality and Greenhouse Gas Emissions**: A community optimal air quality for its residents.
>
> > **Policy RR-4.8 Local Reduction Targets**. The City of Lake Forest establishes the following per capita GHG reduction targets, in order to meet the requirements established by the State under AB 32 and SB 32, consistent with the CARB's 2017 Scoping Plan:
> >
> > - 3.99 MT CO_2e per capita by 2030;
> > - 2.66 MT CO_2e per capita by 2040; and
> > - 1.33 MT CO_2e per capita by 2050.

4.8.5 Thresholds of Significance

4.8.5.1 CEQA Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to GHG emissions if it would:

Threshold 4.8.1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

Threshold 4.8.2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

4.8.5.2 Regional Emissions Thresholds

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). The last Working Group meeting was held in September 2010 (Meeting No. 15). At that meeting, SCAQMD proposed to adopt the following tiered approach. While the approach has never

[18] Southern California Association of Governments (SCAG). 2024. Connect SoCal: The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: https://scag.ca.gov/connect-socal (accessed June 2025).

[19] City of Lake Forest. 2020. *General Plan, Lake Forest 2040*. June. Website: https://www.lakeforestca.gov/sites/default/files/lake-forest/departments/Lake%20Forest%20General%20Plan%20(excluding%20Housing%20Element)_20211005121255885 2.pdf (accessed June 2025).

been formally adopted, SCAQMD uses this approach for evaluating GHG emissions from development projects where SCAQMD is not the lead agency:

- **Tier 1—Exemptions:** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2—Consistency with a Locally Adopted GHG Reduction Plan:** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

- **Tier 3—Numerical Screening Threshold:** If GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are considered to be less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. For the analysis of stationary/industrial projects, the SCAQMD adopted a threshold of 10,000 MT of CO_2e per year (MT CO_2e/yr). The proposed project is not a stationary source project and therefore, the 10,000 MT CO_2e/yr threshold is not applicable. For all other land use types, the SCAQMD recommends utilizing one of two options to analyze the impact of a project's GHG emissions. Under Option 1, the SCAQMD applies a "bright-line" screening-level threshold of 3,000 MT of CO_2e/yr) for all land use types. Under Option 2, the SCAQMD applies a "bright-line" screening level threshold based on specific land use types as follows: 1,400 MT CO_2e for commercial projects; 3,500 MT CO_2e for residential projects; or 3,000 MT CO_2e for mixed-use projects. This "bright-line" threshold is based on a review of the Office of Planning and Research (OPR) database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the "bright-line" thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal and therefore less than cumulatively considerable impact on GHG emissions.

- **Tier 4—Performance Standards:** If emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. The SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold. The current recommended approach is per-capita efficiency targets. The SCAQMD is not recommending use of a percentage emissions reduction target. Instead, the SCAQMD proposed a 2020 efficiency target of 4.8 MT CO_2e/yr per service population for project-level analyses and 6.6 MT CO_2e/yr per service population for plan-level projects (e.g., program-level projects such as General Plans).

The City's General Plan established per capita GHG reduction targets for the years 2030, 2040, and 2050. However, these reduction targets have not been formally adopted by the City as GHG reduction thresholds for development projects. Therefore, for the purpose of this analysis, the proposed project will be compared to the SCAQMD threshold of 3,000 MT CO_2e/yr for all land use types. The project is also evaluated for compliance with the 2022 Scoping Plan and SCAG's RTP/SCS.

4.8.6 Project Impacts

Please refer to Section 4.8.9 for full text descriptions of the regulatory compliance and/or mitigation measures referenced in the analysis below.

Threshold 4.8.1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. This section describes the proposed project's construction- and operational-related GHG emissions and contribution to global climate change. The SCAQMD has not addressed emission thresholds for construction in its *CEQA Air Quality Handbook*; however, the SCAQMD requires quantification and disclosure. Thus, an evaluation of the proposed project's impacts related to the release of GHG emissions for both construction and operational phases of the project is described below.

Short-Term Greenhouse Gas Emissions. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As indicated above, the SCAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. The SCAQMD then requires the construction GHG emissions to be amortized over the life of the project, defined by the SCAQMD as 30 years,[20] added to the operational emissions, and compared to the applicable interim GHG significance threshold tier.

Construction emissions were estimated for the project using CalEEMod. As discussed in Chapter 3.0, Project Description, construction of the proposed project would tentatively commence in January 2026 and is expected to be completed in about 13 months, which was included in CalEEMod. Construction of the proposed project would require a net export of approximately 900 cy of material, which was included in CalEEMod. The proposed project would require the use of concrete industrial saws, excavators, impactors, stackers, jaw crushers, bull dozers, tractors, loaders, backhoes, graders, scrapers, forklifts, cranes, generator sets, welders, concrete ride on trowel machine, cement and mortar mixers, paving equipment, and air compressors, which was also included in CalEEMod. Equipment tier engine and number of equipment pieces was provided by the project Applicant, which was included in CalEEMod. In addition, this analysis assumes that the proposed project would comply with SCAQMD Rule 403 measures.

[20] The SCAQMD has identified the average operational lifespan of buildings to be 30 years. SCAQMD. 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf (accessed June 2025).

Number of worker trips, vendor, and hauling trips during construction were also provided by the project Applicant and included in CalEEMod. All other construction details are not yet known; therefore, default assumptions (e.g., off-road emission factors and construction trip lengths) from CalEEMod were used.

Using CalEEMod, it is estimated that the proposed project would generate approximately 1,315.9 MT CO_2e during construction of the project. When annualized over the 30-year life of the project, annual emissions would be 43.9 MT CO_2e.

Long-Term Greenhouse Gas Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle and truck trips), area sources (e.g., maintenance activities and landscaping), stationary sources (e.g., fire pump), indirect emissions from sources associated with energy consumption (e.g., off-site utility providers), waste sources (e.g., land filling and waste disposal), and water sources (e.g., water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers because of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

Consistent with the SCAQMD guidance for estimating emissions associated with land use development projects, CalEEMod was used to calculate the long-term operational emissions associated with the project. The proposed project would construct a 165,803-square-foot (sq ft) industrial building. Therefore, the proposed project analysis was conducted using land use codes *Unrefrigerated Warehouse- No Rail*, *Other Asphalt Surfaces,* and *Parking Lot*. Trip generation rates used in CalEEMod for the project were based on the project's trip generation described in Section 4.17, Transportation and Traffic, which identifies that the proposed project would generate approximately 573 average daily trips, 458 passenger car trips, 38 two-axle truck trips, 21 three-axle truck trips, and 58 four-axle truck trips. As noted in Section 4.17, the trip generation rates are based trip generation rates are from the Institute of Transportation Engineers Trip Generation Manual, 11th Edition and the Warehouse Truck Trip Study Data Results and Usage from the SCAQMD. This analysis assumes that the four-axle truck (heavy heavy-duty trucks) trips would travel approximately 40 miles, consistent with SCAQMD trip distance. To be conservative, separate CalEEMod analyses were prepared for the operational analysis for the proposed project. One CalEEMod run evaluated operational and vehicle trip emissions and another CalEEMod run evaluated four-axle truck trip emissions for the proposed project. In addition, consistent with the project design plans, this CalEEMod analysis incorporates selections to reflect no natural gas usage during construction and operation of the proposed project. This analysis includes the use of a 300 horsepower (hp) diesel fire pump, which is estimated to run for approximately 50 hours per year and the use of two 200 hp diesel powered cargo handling equipment units, which were also included in CalEEMod. In addition,

this analysis assumes that the proposed project would be operational in 2027, which is included in CalEEMod.

Table 4.8.B shows the calculated GHG emissions for the proposed project.

Table 4.8.B: Greenhouse Gas Emissions

Emissions Source	Operational Emissions (MT/yr)			
	CO_2	CH_4	N_2O	CO_2e
Mobile Sources – Vehicle and Light Duty Trucks	877.6	<0.1	<0.1	890.1
Mobile – Heavy Heavy-Duty Trucks	1,276.2	0.1	0.2	1,340.3
Area Sources	3.4	<0.1	<0.1	3.4
Energy Sources	199.9	<0.1	<0.1	200.6
Water Sources	68.2	1.1	<0.1	104.5
Waste Sources	13.9	1.4	0.0	48.7
Off-Road Sources	246.7	<0.1	<0.1	247.6
Stationary Sources	5.7	<0.1	<0.1	5.7
Total Project Operational Emissions				**2,840.9**
Amortized Construction Emissions				43.9
Total Project Emissions				**2,884.8**
SCAQMD Threshold				3,000
Exceed?				**No**

Source: Compiled by LSA (June 2025).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide
SCAQMD = South Coast Air Quality Management District

As discussed above, a project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than 3,000 MT CO_2e/yr. Based on the analysis results, the proposed project would result in approximately 2,884.8 MT CO_2e/yr, which would not exceed the SCAQMD Threshold of 3,000 MT CO_2e/yr. Therefore, operation of the proposed project would not generate significant GHG emissions that would have a significant effect on the environment. Impacts would be less than significant, and no mitigation is required.

Threshold 4.8.2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Significant and Unavoidable Impact. An evaluation of the proposed project's consistency with the 2022 Scoping Plan, EO B-30-15, SB 32, AB 197, and AB 1279, and the SCAG's RTP/SCS is provided below.

2022 Scoping Plan. The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan (including EO B-30-15, SB 32, AB 197, and AB 1279.)

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[21] to

[21] CARB. 2017a. *California's 2017 Climate Change Scoping Plan*. November.

reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016. AB 1279 codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities. The 2022 Scoping Plan contains the GHG reduction targets embedded in EO B-30-15, SB 32, AB 197, and AB 1279. Thus, compliance with the Scoping Plan would also result in compliance with EO B-30-15, SB 32, AB 197, and AB 1279.

The Bay Area Air Quality Management District (BAAQMD) adopted the *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans* (Justification Report) in April 2022.[22] The Justification Report established guidance on how individual projects would be consistent with California's long-term climate goals and provides substantial evidence in supporting the use of their thresholds for projects throughout California because the thresholds are designed to meet the State's established GHG reduction goals, including the 2022 Scoping Plan goals. Therefore, the BAAQMD's Justification Report is being used to analyze the proposed project's consistency with the 2022 Scoping Plan. According to the BAAQMD Justification Report[23], a project would have a less than significant impact related to consistency with the 2022 Scoping Plan if the proposed project achieves a reduction in project-generated VMT below the regional average consistent with the current version of the 2022 Scoping Plan (currently 15 percent) or meets a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Additionally, a project must not include natural gas appliances or natural gas plumbing and should not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*. Lastly, a project must achieve compliance with off-street electric vehicle requirements in the most recently adopted version of

22 Bay Area Air Quality Management District (BAAQMD). 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*. April.

23 Bay Area Air Quality Management District (BAAQMD). 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans.* April. Website: Microsoft Word - FINAL CEQA Thresholds Report for Climate Impacts 03_30_22 revisions with tracked changes (baaqmd.gov) (accessed February 2025).

CALGreen Tier 2. If a project is designed and built to incorporate these design elements related to VMT, natural gas, energy, and EVs, then it would contribute its portion of what is necessary to achieve California's long-term climate goals and an agency reviewing the project under CEQA can conclude that the project would be consistent with the State's 2022 Scoping Plan.

Vehicle Miles Traveled. As described in Section 4.17, Transportation and Traffic, the proposed project VMT would exceed the City's VMT threshold (Target VMT Rate) by 20 percent, resulting in a significant VMT impact. The proposed project would be required to implement Traffic Demand Management (TDM) measures including the installation of bike lanes along Commercentre Drive between Alton Parkway and Dimension Drive as specified in **Mitigation Measure (MM) TRA-1**, to promote alternative transportation within the intent of reducing VMT. According to the California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (December 2021) (CAPCOA Handbook), the addition of bike lanes (T-20 Expand Bikeway Network) can provide a maximum VMT reduction of 0.5 percent. Assuming that this TDM measure could achieve the maximum 0.5 percent VMT reduction, the reduction achieved would not reduce the project's VMT impact to below the City's VMT threshold. Therefore, even with implementation of the TDM measure (addition of bike lanes), the project's VMT impact would be significant and unavoidable. As such, the proposed project would conflict with the goals and policies of the 2022 Scoping Plan related to VMT and would result in a significant and unavoidable impact.

Natural Gas Usage. The proposed project would not be powered by natural gas, and no natural gas demand is anticipated during construction or operation of the proposed project. As described in the BAAQMD Justification Report, eliminating natural gas in new development supports that projects are implementing their "fair share" of emission reductions and supporting achievement of the State's 2045 carbon neutrality goals.[24] As such, if a project does not utilize natural gas, a lead agency can conclude that it would be consistent with achieving the 2045 neutrality goal and the 2022 Scoping Plan and would not have a cumulative considerable impact on climate change.[25] Therefore, because the proposed project would not be powered by natural gas, the proposed project would be consistent with this design element.

Energy Usage. As described in Section 4.6, Energy, fuel consumption during construction would not be inefficient, wasteful, or unnecessary. As shown in Table 4.6.B of that section, the estimated potential increase in electricity demand associated with the operation of the proposed project is 865,996.0 kWh per year. Total electricity consumption in Orange County in 2022 was 20,243,721,856 kWh. Therefore, operation of the proposed project would increase the annual electricity consumption in Orange County by less than 0.01 percent. In addition, the proposed project would be constructed to current Title 24 standards, which would require

[24] Bay Area Air Quality Management District (BAAQMD). 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans.* April. Website: Microsoft Word - FINAL CEQA Thresholds Report for Climate Impacts 03_30_22 revisions with tracked changes (baaqmd.gov) (accessed February 2025).

[25] Ibid.

energy-saving building features. As such, based on this analysis, as required under Section 21100(b)(3) and Section 15126.2(b) of the *State CEQA Guidelines*, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy and energy efficiency measures into the building design, equipment use, and transportation. As such, the proposed project would be consistent with the 2022 Scoping Plan. Therefore, the proposed project would be consistent with this design element.

Electric Vehicle Requirements. The final project design element that the proposed project should include to ensure that it is achieving its "fair share" of GHG emission reductions is compliance with off-street electric vehicle ("EV") requirements in the most recently adopted version of the CALGreen Code Tier 2 measures. The proposed project would include 53 EV capable spaces, 14 electric vehicle supply equipment (EVSE) designated spaces, 1 EVSE van accessible space, and 1 EVSE standard accessible space. Additionally, as specified in **MM GHG-1**, provisions shall be made at the project site for emerging electric truck technology. These provisions include the following: on-site location for future electric truck charging stations, with space available for a minimum of four (4) trucks to simultaneously charge when charging stations are installed in the future pursuant to the CALGreen Code,[26] trenching for future conduit pull, and installation of a minimum of four (4) electric truck charging stations on the site. With implementation of **MM GHG-1**, the proposed project would support the operation of zero-emissions trucks at the project site as such technology is commercially deployed and available. Electric chargers are an effective measure to support the reduction of GHG emissions related to mobile source operational activities, because they would enable drivers of trucks associated with the proposed projects to operate a larger share of miles in electric mode, as opposed to diesel powered mode, thereby displacing GHG emissions from diesel consumption with a lesser amount of indirect emissions from electricity. Therefore, with implementation of **MM GHG-1**, the proposed project would have the potential to further lower mobile source emissions associated with operation of the proposed project. Based on the above, the proposed project would be consistent with this design element.

While the proposed project would be consistent with the project design elements related to natural gas, energy, and EVs, as described above, the proposed project would result in a significant and unavoidable impact related to VMT even with implementation of **MM TRA-1.** Therefore, the proposed project would conflict with the plans and policies adopted for the purpose of reducing the emissions of GHGs, including the 2022 Scoping Plan. This would result in a significant and unavoidable project level impact.

Regional Transportation Plan/Sustainable Communities Strategy. SCAG adopted the 2024–2050 RTP/SCS on April 4, 2024. However, the CARB has not yet approved the 2024–2050 RTP/SCS. Therefore, this analysis evaluates the proposed project consistency with both the 2020–2045 RTP/SCS and the more recent 2024–2050 RTP/SCS.

[26] The passenger vehicle standards for EV charging stations provided in the CALGreen Code, Table 5.106.5.3.1, were used by the City to determine EV truck charging stations required for the proposed project. 23 dock doors = 4 EV truck charging stations.

SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The core vision of the 2020–2045 RTP/SCS and the 2024–2050 RTP/SCS is to better manage the existing transportation system through design management strategies, integrate land use decisions and technological advancements, create complete streets that are safe to all roadway users, preserve the transportation system, and expand transit and foster development in transit-oriented communities. Both the 2020–2045 RTP/SCS and 2024–2050 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in the 2020–2045 RTP/SCS and the 2024–2050 RTP/SCS, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels). Neither the 2020–2045 RTP/SCS nor the 2024–2050 RTP/SCS require that local general plans, specific plans, or zoning be consistent with the RTP/SCS but both plans provide incentives for consistency for governments and developers.

Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emissions reduction targets. As demonstrated in Section 4.3, Air Quality, the proposed project does not meet the criteria identified in *State CEQA Guidelines* Section 15205.b.2 for projects of statewide, regional, or areawide significance. In addition, the proposed project would not require a change to the General Plan land use designation or the current zoning, and would be consistent with the City's General Plan and Zoning Ordinance. As such, the proposed project would not increase population growth forecasts and is not expected to alter SCAG's demographic projections; therefore, the proposed project is already reflected in SCAG's RTP/SCS and would not interfere with SCAG's ability to achieve the region's GHG reduction target of 19 percent below 2005 per capita emissions levels by 2035. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206 and as such, it would not conflict with the SCAG RTP/SCS targets since those targets were established and are applicable on a regional level. Impacts related to consistency with the SCAG RTP/SCS would be less than significant, and no mitigation is required.

As described above, although the proposed project would be consistent with the SCAG RTP/SCS, the proposed project would not be consistent with the policies or goals of the 2022 Scoping Plan related to VMT. Therefore, the proposed project would conflict with a plan or policy adopted for the purpose of reducing GHG emissions. This impact would be significant and unavoidable.

4.8.7 Cumulative Impacts

GHG impacts are by their nature cumulative impacts. Localized impacts of climate change are the result of the cumulative impact of global emissions. The combined benefits of reductions achieved by all levels of government help to slow or reverse the growth in GHG emissions. In the absence of comprehensive international agreements on appropriate levels of reductions achieved by each country, another measure of cumulative contribution is required. This serves to define the State's

share of the reductions regardless of the activities or lack of activities of other areas of the U.S. or the world. Therefore, a cumulative threshold based on consistency with State targets and actions to reduce GHGs is an appropriate standard of comparison for significance determinations. The thresholds developed by the SCAQMD are based on and apply to individual projects. Since climate change is a global issue, it is unlikely that individual projects would generate enough GHG emissions to influence climate change on their own. Consequently, it is speculative to determine how an individual project's GHG emissions would impact climate change in California. As such, impacts identified under the Project Impacts section, are not project-specific impacts to global climate change but are the proposed project's contribution to this cumulative impact. The proposed project's emissions are less than the SCAQMD threshold of 3,000 MT CO_2e/yr; therefore, environmental impacts related to GHG emissions and global climate change would not be cumulatively considerable under CEQA. The proposed project, in conjunction with other cumulative projects, would be subject to all applicable regulatory requirements, which would further reduce GHG emissions.

However, the proposed project would conflict with the goals of the 2022 Scoping Plan related to VMT. As identified under Section 4.8.6, the proposed project would not contribute to its "fair share" of emission reductions required to support SB 743 and the goals of the 2022 Scoping Plan. While implementation of **MM TRA-1** (addition of bike lanes) would promote alternative transportation with the intent of reducing VMT, the project's VMT impact would not be reduced to below the City's VMT threshold, and therefore, would result in a significant and unavoidable transportation impact related to VMT. Therefore, the proposed project would conflict with the plans and policies adopted for the purpose of reducing the emissions of GHGs, including the 2022 Scoping Plan. As such, the proposed project would result in a significant and unavoidable cumulative impact.

4.8.8 Level of Significance Prior to Mitigation

The proposed project would not result in any significant impacts related to mass emissions of GHG, and no mitigation is required. However, the proposed project would conflict with the goals of the 2022 Scoping Plan related to VMT. As such, the proposed project would not contribute to its "fair share" of emission reductions required to support SB 743 and the goals of the 2022 Scoping Plan. This would result in a significant impact.

4.8.9 Regulatory Compliance Measures and Mitigation Measures

4.8.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to GHG emissions.

4.8.9.2 Mitigation Measures

The following mitigation measure is required to contribute to the project's "fair share" of GHG emissions reductions required to support SB 743 and the goals of the 2022 Scoping Plan.

MM GHG-1 **Electric Vehicle Charging.** Provisions shall be made at the project site for emerging electric truck technology. Prior to the issuance of a shell building permit, the City

shall verify that the site plan identifies an on-site location for future electric truck charging stations, with space available for a minimum of four (4) trucks to simultaneously charge when charging stations are installed in the future. The conduit trenching shall be installed to that location for future conduit pull as a requirement of the shell building permit. In conjunction with the approval of tenant improvement plans and permits, the applicant shall install electric truck charging stations on the site for a minimum of four (4) electric truck to simultaneously charge.

4.8.10 Level of Significance after Mitigation

As discussed above, even with implementation of **MM TRA-1** and **MM GHG-1**, the proposed project would result in a significant and unavoidable impact related to VMT. Therefore, the proposed project would conflict with a plan or policy adopted for the purpose of reducing GHG emissions, including the 2022 Scoping Plan. As such, the proposed project would result in a significant and unavoidable cumulatively considerable impact related to GHG.

4.9 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential impacts to hazards and hazardous materials from implementation of the proposed project. This section is based in part on the following:

- *Phase I Environmental Site Assessment conducted on Panasonic Avionics Corporation, 26200 Enterprise Way, Lake Forest, California 92630* (Phase I ESA) (Apex Companies, LLC [Apex] 2021) (provided in Appendix F).

4.9.1 Scoping Process

The Notice of Preparation (NOP) was published in March 2024 for the proposed project, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. Twenty-two comment letters included comments related to hazards and hazardous materials. These comments pertain to concerns about the safety of people in the vicinity of the site and the health of nearby residents, contamination of the environment, hazardous waste incidents, and the emissions and storage of hazardous materials.

4.9.2 Methodology

The analysis of the potential for impacts associated with hazards and hazardous materials is based on the site-specific Phase I ESA completed for the proposed project. There have been no changes to existing site conditions since the Phase I ESA was prepared in 2021, and the conclusions of the report remain valid for the following analysis. The Phase I ESA was prepared in accordance with the requirement of the ASTM E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The Phase 1 ESA included a review of information provided by the client, review of general geology and topography of the project site, review of environmental records and databases, an investigation of historical use of the project site, an interview with the property owner, and an on-site reconnaissance of the project site and adjacent properties. In determining the level of significance, the analysis assumes that construction and operation of the proposed project would comply with relevant federal, State, and local laws and regulations pertaining to the transport, use, storage, and disposal of hazardous materials.

4.9.3 Existing Environmental Setting

4.9.3.1 Project Site History

In its existing condition, the project site is developed with a 144,906-square-foot (sq ft), two-story tilt-up office/industrial building, which was previously used as an office, manufacturing, and research testing facility by Panasonic Avionics. The areas surrounding the project site consist of a mix of land uses, including industrial and residential. The existing building was developed in 1999. Prior to the development of the existing building, the project site was vacant and undeveloped, except for the northeast portion of the project site, which was used for orchards from 1938 to 1952. Surrounding properties were also utilized for orchards from at least 1938 to 1980, when commercial development began in the area (Apex 2021).

4.9.3.2 Site Reconnaissance

The Phase I ESA did not identify any recognized environmental conditions (RECs) at the project site. Site reconnaissance was completed as part of the Phase I ESA and the following hazardous materials were observed at the project site: small volumes of isopropyl alcohol (less than one gallon) used in the lab for cleaning; small quantities of janitorial cleaning chemicals; pad-mounted transformers; hydraulic elevators; and two liquid nitrogen aboveground storage tanks including a 3,000-liter single-walled steel tank and a 1,500-liter liquid nitrogen tank that are not currently in use (Apex 2021).

A vapor encroachment screening (VES) was completed at the project site to determine if any chemicals of concern vapors exist in the subsurface of the project site due to contaminated soil or groundwater either on or near the project site. The screening determined that a vapor encroachment condition does not exist at the project site. Additionally, the Phase I ESA determined that radon and visible fungal growth were not present at the project site and based on the construction date of the existing building, lead-based paint was unlikely to be found in the existing building. The project site was inspected for the presence of suspect asbestos-containing materials (ACM) and presumed asbestos-containing materials (PACM) and various ACM and PACM were observed at the site including wallboard, tape and joint compound, vinyl floor tile and mastic, vinyl sheet flooring and mastic, acoustical panels, cove base and mastic, carpet mastic, and roofing materials (Apex 2021).

4.9.3.3 Regulatory Record Reviews

Available government database information prepared by Environmental Risk Information Services (ERIS) was reviewed to evaluate both the project site and listed sites within ASTM-recommended search distances. This included ASTM Standard Federal, State, and Tribal databases and local lists. The regulatory database report also included an Unmappable Sites Section. Unmappable sites are sites that cannot be plotted with confidence, but can be located by zip code or city name due to inaccurate or missing information in the environmental database record provided by its applicable agency.

A total of 55 listed sites and 2 unmappable sites were identified in the databases reviewed within ASTM-recommended search distances of the project site. However, most of these facilities do not represent a potential REC with respect to the project site due to intervening distance and/or orientation relative to the project site; surface topography; known or suspected groundwater flow direction; regulatory status (e.g., only hold an operating permit, have been issued “No Further Action” status by the appropriate regulatory agency) and/or other available information (Apex 2021).

4.9.4 Regulatory Setting

Federal, State, and local regulations and programs related to hazards and hazardous materials that are applicable to the proposed project are described below.

4.9.4.1 Federal Regulations

Comprehensive Environmental Response, Compensation, and Liability Act. The discovery of environmental health damage from disposal sites prompted the U.S. Congress to pass the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund). The purpose of the CERCLA is to identify and clean up chemically contaminated sites that pose a significant environmental health threat. The Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities.

Superfund Amendments and Reauthorization Act. The Superfund Amendments and Reauthorization Act (SARA) pertains primarily to emergency management of accidental releases. It requires formation of State and local emergency planning committees, which are responsible for collecting, material handling, and transportation data for use as a basis for planning. Chemical inventory data are made available to the community at large under the "right-to-know" provision of the law. In addition, SARA also requires annual reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory (TRI).

Resource Conservation and Recovery Act. The Resource Conservation and Recovery Act (RCRA) Subtitle C addresses hazardous waste generation, handling, transportation, storage, treatment, and disposal. It includes requirements for a system that uses hazardous waste manifests to track the movement of waste from its site of generation to its ultimate disposition. The 1984 amendments to the RCRA created a national priority for waste minimization. Subtitle D establishes national minimum requirements for solid waste disposal sites and practices. It requires states to develop plans for the management of wastes within their jurisdictions. Subtitle I requires monitoring and containment systems for underground storage tanks that hold hazardous materials. Owners of tanks must demonstrate financial assurance for the cleanup of a potential leaking tank.

United States Department of Transportation (USDOT) Regulations, Title 49 Code of Federal Regulations [CFR] (Hazardous Materials Transportation Act). The Hazardous Materials Transportation Act is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail, highways, in the sky, or in pipelines. It includes provisions for materials classification, packaging, marking, labeling, placarding, and shipping documentation.

Occupational Safety and Health Administration (OSHA), Title 29 CFR. OSHA is the federal agency responsible for ensuring worker safety. These regulations provide standards for safe workplaces and work practices, including those relating to hazardous materials handling.

United States Environmental Protection Agency (United States Environmental Protection Agency [USEPA]), Title 40 CFR 700–799 (Toxic Substances Control Act). The Toxic Substances Control Act regulates manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials. It addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls, asbestos-containing materials, and lead-based paint.

The Clean Water Act. National Pollutant Discharge Elimination System (NPDES) (Section 402[p]) (33 United States Code [USC] Section 1342[p]) regulates discharges and spills of pollutants, including hazardous materials to surface waters and groundwater.

The Safe Drinking Water Act. 42 USC Section 300(f) et seq. regulates discharges of pollutants to underground aquifers and establishes standards for drinking water quality.

Wildland-Urban Interface Code. Section 202 of the International Code Council establishes a Wildland-Urban Interface (WUI) and requires projects within WUI areas to develop project-specific Fire Protection Plans that describe ways to minimize and mitigate the fire problems created by the project or development, with the purpose of reducing impacts on the community's fire protection delivery system.

4.9.4.2 State Regulations

California Code of Regulations. Most State and federal regulations and requirements that apply to generators of hazardous waste are spelled out in the California Code of Regulations (CCR), Title 22, Division 4.5. Title 22 contains the detailed compliance requirements for hazardous waste generators, transporters, treatment, storage, and disposal facilities. Because California is a fully authorized State according to RCRA, most RCRA regulations (those contained in 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the California Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the USEPA, the integration of California and Federal hazardous waste regulations that make up Title 22 do not contain as many exemptions or exclusions as does 40 CFR 260. As with the California Health and Safety Code, Title 22 also regulates a wider range of waste types and waste management activities than do the RCRA regulations in 40 CFR 260. To aid the regulated community, California has compiled the hazardous materials, waste and toxics-related regulations contained in CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27 into one consolidated CCR, Title 26 "Toxics." However, the California hazardous waste regulations are still commonly referred to as Title 22. For the purposes of clarity, because of the extensive reach of Title 22 and Title 26, many common household products sold in grocery stores and home improvement warehouses qualify as hazardous materials. These items include household cleaners, detergents, paint, motor oil, lubricants, glues, pesticides, etc. The term "hazardous materials" is also defined to include many on site materials as well, such as lubricants, fuel, etc. Thus, when this section of the EIR discusses the transport and storage of "hazardous materials," it is referring to the potential transport of bulk products to the project locations and to the temporary storage of such materials at the project sites prior to their re-packaging and transport to subsequent destinations.

Assembly Bill (AB) 2948. In response to the growing statewide concern of hazardous waste management, AB 2948 enacted legislation authorizing local governments to develop comprehensive hazardous waste management plans. The intent of each plan is to ensure that adequate treatment and disposal capacity is available to manage the hazardous wastes generated within its jurisdiction.

California State Hazard Mitigation Plan. The purpose of the State Hazard Mitigation Plan (SHMP) is to significantly reduce deaths, injuries, and other losses attributed to natural and human-caused

hazards in California. The SHMP provides guidance for hazard mitigation activities emphasizing partnerships among local, State, and federal agencies as well as the private sector.

Cortese List: Section 65962.5(a). Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop at least annually an updated Hazardous Waste and Substances Sites list (Cortese List). The Cortese List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the locations of hazardous materials release sites. Release sites or hazardous materials release sites may include the following:

- All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.
- All land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.
- All information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.
- All sites listed pursuant to Section 25356 of the Health and Safety Code.
- All sites included in the Abandoned Site Assessment Program.

The California DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List.

California Occupational Safety and Health Administration (Cal/OSHA) Regulations. Cal/OSHA is responsible for developing and enforcing workplace safety standards and ensuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many entities to prepare injury and illness prevention plans and chemical hygiene plans and provides specific regulations to limit exposure of construction workers to lead.

California Office of Environmental Health Hazard Assessment. The California Office of Environmental Health Hazard Assessment (OEHHA) is administered by CalEPA to protect and enhance public health and the environment by scientific evaluation of risks posed by hazardous substances. The OEHHA developed California Human Health Screening Levels (CHHSL)[1] on behalf of the CalEPA pursuant to Health and Safety Code Section 57008 to establish thresholds of chemical concentrations of concern for risks to human health, specifically, an excess of lifetime cancer risk of one-in-a-million (10^{-6}) and a hazard quotient of 1.0 for non-cancer health effects. It should be noted that CHHSL have no regulatory effect and are not intended for use by regulatory agencies that have authority to require remediation of contaminated soil. The numbers are solely advisory and published as reference values for use by citizen groups, community organizations, property owners,

[1] California Human Health Screening Levels. September 23, 2010. Website: https://oehha.ca.gov/risk-assessment/california-human-health-screening-levels-chhsls (accessed July 8, 2024).

developers, and local government officials to estimate the degree of effort that may be necessary to remediate a contaminated site.

The Porter-Cologne Water Quality Control Act (California Water Quality Code, Section 13000 et seq.). The Porter-Cologne Water Quality Control Act regulates water quality through the State Water Resources Control Board and the Regional Water Quality Control Boards, including oversight of water monitoring and contamination cleanup and abatement.

Safe Drinking Water and Toxic Enforcement Act (Proposition 65, California Health and Safety Code, § 25249.5 et seq.). The Safe Drinking Water and Toxic Enforcement Act is similar to the Federal Safe Drinking Water Act and Clean Water Act in that it regulates the discharge of contaminants to groundwater.

California Emergency Services Act. Government Code Sections 8550–8692 provide for the assignment of functions to be performed by various agencies during an emergency so that the most effective use may be made of all manpower, resources, and facilities for dealing with any emergency that may occur. The coordination of all emergency services is recognized by the State to mitigate the effects of natural, man-made, or war-caused emergencies that result in conditions of disaster or extreme peril to life, property, and the resources of the State, and generally, to protect the health and safety and preserve the lives and property of the people of the State.

California Government Code Section 51178. This government code requires the State Fire Marshal to identify areas in the State as moderate, high, and very high fire hazard severity zones based on consistent statewide criteria and based on the severity of fire hazard that is expected to prevail in those areas. Moderate, high, and very high fire hazard severity zones shall be based on fuel loading, slope, fire weather, and other relevant factors including areas where winds have been identified by the Office of the State Fire Marshal as a major cause of wildfire spread.

California Senate Bill (SB) 12. This regulation establishes new rules for construction of industrial, commercial, and residential projects to improve fire safety and prevention. These regulations apply to building materials that are more fire-resistant and defensible space incorporated into the design of projects.

California Building Code (CBC). Chapter 7A of the CBC focuses primarily on preventing ember penetration into homes, a leading cause of structure loss from wildfires, through mitigating former structural vulnerabilities. Construction techniques and materials include roofs, eaves, exterior walls, vents, appendages, windows, and doors and result in hardened structures that have been proven to perform at high levels (resist ignition) during the typically short duration of exposure to burning vegetation from wildfires.

4.9.4.3 Regional Regulations

Certified Unified Program Agency. SB 1082 provides for the designation of a Certified Unified Program Agency (CUPA) that would be responsible for the permitting process and collection of fees regarding hazardous materials. The CUPA would be responsible for implementing at the local level the Unified Program, which serves to consolidate, coordinate, and make consistent the

administrative requirements, permits, inspections, and enforcement activities for the following environmental and emergency management programs: Hazardous Waste; Hazardous Materials Business Plan; California Accidental Release Prevention Program; Underground Hazardous Materials Storage Tanks; Aboveground Petroleum Storage Tanks/Spill Prevention Control & Countermeasure Plans; and Hazardous Waste Generator and On-Site Hazardous Waste Treatment (tiered permitting) Programs.

The Environmental Health Division of the Orange County Health Care Agency (HCA) is designated as the CUPA for the City of Lake Forest, and coordinates the regulation of hazardous materials and hazardous wastes in the City of Lake Forest for construction and operational activities through the following programs:

- Aboveground Petroleum Storage Tank (APST)
- Business Emergency Plan (BEP)
- California Accidental Release Prevention (CalARP)
- Hazardous Materials Disclosure (HMD)
- Hazardous Waste (HW)
- Underground Storage Tank (UST)

The Orange County Fire Authority (OCFA) is the administering agency for the chemical inventory and business emergency plan regulations for the City. OCFA's disclosure activities are coordinated with the HCA. OCFA's Hazardous Materials Services Section (HMSS) is staffed with technical and administrative personnel who are assigned with the implementation and management of the disclosure program.

County of Orange and OCFA Local Hazard Mitigation Plan (2021). This plan identifies risks and vulnerabilities, establishes hazard mitigation strategies, describes emergency organization, task assignments, and general procedures, and provides for coordination of response in the event of an emergency.

4.9.4.4 Local Regulations

City of Lake Forest Local Hazard Mitigation Plan. The City's Local Hazard Mitigation Plan (LHMP) is both a reference document and an action plan to serve as the City's long-term roadmap for community resiliency and sustainability. This is achieved through promoting sound policy to protect life, critical infrastructure and facilities, private property, and the environment from various hazards. The LHMP has information and resources to educate readers and decision makers about hazard events and related issues and includes a comprehensive strategy that the City and community members can utilize to improve resiliency in the City. This plan cumulates the process of assessing vulnerabilities, measuring risk, identifying strategies for risk reduction, and assigning responsible parties to carry out appropriate action. This initiative involves a comprehensive study of multiple hazards that could impact the City including natural and human-caused hazards.

City of Lake Forest Municipal Code. The following City of Lake Forest Municipal Code sections are relevant to hazards and hazardous materials:

Chapter 6.16 of the City of Lake Forest Municipal Code addresses hazardous materials. The intent of this chapter is to:

- Enable emergency service personnel in the City to know of the use and dangers of hazardous materials in the community in order to plan for and respond to potential emergencies and exposure to such materials;

- Provide basic information on the location, type, and health risks of hazardous materials used or stored in the City to firefighters, health officials, planners, elected officials, and other emergency response personnel; and

- Implement the community's right and need for basic information on the use and disposal of hazardous materials in the City and provide for an orderly system for the provision of such information.

Section 9.146.040(A), Hazardous Materials Disclosure. This section requires that certain types of commercial uses comply with Title IV, Division 3, Article 4 of the County's Codified Ordinances, in a manner approved by the Fire Department. Title IV, Division 3, Article 4 of the County's Codified Ordinances includes various requirements related to organic waste disposal reduction.

City of Lake Forest General Plan 2040. The Public Safety and Public Facilities Elements of the Lake Forest 2040 General Plan contains the following applicable goals, policies, and actions related to hazards and hazardous materials:

Goal PS-4: A community that is protected from the potential for hazardous waste and materials contamination.

Action PS-4b: Continue to require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to the Orange County Fire Authority.

Goal PS-2 Fire Safety: A City that is safe and adequately prepared for urban and wildfire emergencies.

Policy PS-2.1 Building Fire Codes. Require that all buildings and facilities within Lake Forest comply with local, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards.

Action PF-8a: The Orange County Fire Authority and City Engineer will review proposed development projects and street networks to evaluate the accessibility for fire engines and other emergency response functions.

4.9.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to hazards and hazardous materials if it would:

Threshold 4.9.1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

Threshold 4.9.2: 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;

Threshold 4.9.3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

Threshold 4.9.4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, it would create a significant hazard to the public or the environment;

Threshold 4.9.5: 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, result in a safety hazard or excessive noise for people residing or working in the project area;

Threshold 4.9.6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

Threshold 4.9.7: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

4.9.6 Project Impacts

Threshold 4.9.1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. Hazardous materials are chemicals that could potentially cause harm during an accidental release or mishap, and are defined as being toxic, corrosive, flammable, reactive, or an irritant or strong sensitizer. Hazardous substances include all chemicals regulated under the U.S. Department of Transportation's (USDOT) "hazardous materials" regulations and the USEPA "hazardous waste" regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. The probable frequency and severity of consequences from the routine transport, use, or disposal of hazardous materials are affected by the type of substance, the quantity used or managed, and the nature of the activities and operations.

The demolition and construction phase of the proposed project would require the short-term transport, use, and/or disposal of petroleum-based fuels, lubricants, pesticides, and other similar materials required for construction. The routine transport, use, and/or disposal of these hazardous materials could pose a potential hazard to construction workers working at the project site as they would be handling the hazardous materials and could therefore be exposed through inhalation of vapors, direct contact with skin, or accidental ingestion. Project operations may also require more regular transport, use, and/or disposal of hazardous materials (e.g., solvents, cleaning agents, sanitizing solutions, paints, fertilizers, and pesticides) depending on the type of future industrial use. Although the future tenant and associated operations of the proposed 165,803 sq ft industrial building is unknown at this time, because the proposed project would include an industrial use, this analysis assumes that future uses would include the regular transport, use, and/or disposal of hazardous materials.

Future activities at the project site, including both construction and operation, would be subject to existing federal, State, and local regulatory programs for hazardous materials.

Worker health and safety is regulated at the federal level by OSHA. OSHA regulations include training requirements for construction workers and a requirement that hazardous materials are accompanied by manufacturer's Safety Data Sheets (SDSs). The Federal Occupational Safety and Health Act of 1970 authorizes states to establish their own safety and health programs with OSHA approval. Worker health and safety protections in California are regulated by the California Department of Industrial Relations (DIR). The DIR includes the Division of Occupational Safety and Health (DOSH), which acts to protect workers from safety hazards through its Cal/OSHA program. Cal/OSHA regulations include requirements for protective clothing, training, and limits on exposure to hazardous materials. California standards for workers dealing with hazardous materials are contained in CCR Title 8 and include practices for all industries (General Industrial Safety Orders), and specific practices for construction, and other industries. The routine transport, use, and disposal of hazardous materials at the project site would be required to comply with a Project Health and Safety Plan (HASP) prepared by the Construction Contractor in accordance with CCR Title 8, which would mitigate potential health hazards for workers related to the routine transport, use, or disposal of hazardous materials to a less than significant level.

As detailed in Section 4.10, Hydrology and Water Quality, because construction of the proposed project would result in soil disturbance greater than 1 acre, management of hazardous materials during construction activities would be subject to the requirements of the Stormwater Construction General Permit (CGP), which requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which includes hazardous materials storage requirements. For example, construction site operators would be required to store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).

The transportation of hazardous materials is subject to USDOT, RCRA, and State regulations. In 1990 and 1994, the federal Hazardous Material Transportation Act was amended to improve the protection of life, property, and the environment from the inherent risks of transporting hazardous material in all major modes of commerce. The USDOT developed hazardous materials regulations,

which govern the classification, packaging, communication, transportation, and handling of hazardous materials, as well as employee training and incident reporting. The California Highway Patrol, the California Department of Transportation (Caltrans), and Cal/EPA DTSC are responsible for enforcing federal and State regulations pertaining to the transportation of hazardous materials. Construction and operation of the proposed project would result in the generation of various waste materials that would require recycling and/or disposal, including some waste materials that may be classified as hazardous waste. Hazardous wastes would be required to be transported by a licensed hazardous waste hauler and disposed of at facilities that are permitted to accept such materials as required by the USDOT, RCRA, and State regulations.

The Environmental Health Division of the Orange County Health Care Agency is designated as the CUPA for the City of Lake Forest, and coordinates the regulation of hazardous materials and hazardous wastes in the City of Lake Forest for construction and operational activities through the following programs:

- Aboveground Petroleum Storage Tank (APST)
- Business Emergency Plan (BEP)
- California Accidental Release Prevention (CalARP)
- Hazardous Materials Disclosure (HMD)
- Hazardous Waste (HW)
- Underground Storage Tank (UST)

The role of a CUPA is to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities associated with the regulation of hazardous materials and hazardous wastes. Businesses that store or use hazardous materials in the city limits of Lake Forest are required to submit chemical and facility information on the California Environmental Reporting System (CERS), which is a statewide web-based system to support CUPAs in electronically collecting and reporting various hazardous materials-related data as mandated by the California Health and Safety Code and 2008 legislation (AB 2286). Chapter 6.95 of Division 20 of the California Health and Safety Code requires a Hazardous Materials Business Plan (HMBP) be submitted to the local CUPA if on-site hazardous materials exceed in aggregate any of the following: 55 gallons for liquids; 500 pounds for solids; or 200 cubic feet of gases at standard temperature and pressure. HMBPs are required to be submitted electronically to the CERS and must include facility information, a Hazardous Materials Inventory Statement, an Emergency Response Plan, and an Emergency Response Training Plan. The HMBP has to be re-certified for completeness and accuracy every year, or updated and revised, as necessary.

The CalARP program aims to reduce the likelihood and impact of accidental releases of regulated toxic and flammable substances. Many of these releases could result in adverse off-site consequences.

The program accomplishes these objectives through:

1. Facility evaluations,
2. Administrative and operational procedures,

3. Emergency preparedness programs, and
4. Facility design requirements.

A facility regulated under the CalARP Program must file a written Risk Management Plan (RMP) with the Environmental Health Division of the Orange County Health Care Agency.

Compliance with the existing hazardous materials regulations and programs described above, including requirements for HMBPs and RMPs for facilities handling significant quantities of hazardous materials, OSHA and Cal/OSHA regulations, CCR Title 8; the CGP; and USDOT, RCRA, and State regulations, would ensure that the proposed project would not create a significant hazard to the public or the environment from the routine transport, use, or disposal of hazardous materials associated with the proposed project by ensuring that these materials are properly handled during construction and operation. Therefore, impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant, and no mitigation is required.

Threshold 4.9.2: 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?

Less Than Significant Impact. During project construction and operation, the public and/or the environment could be affected by the reasonably foreseeable release of hazardous materials into the environment from: (1) the improper handling or use of hazardous substances; (2) a transportation accident; or (3) inadvertent release resulting from an unforeseen event (e.g., fire, flood, or earthquake).

According to the Phase I ESA prepared for the proposed project, the project site was used for agricultural purposes between 1938 and 1952. However, given the length of time since the project site has been used for agricultural activity and given the fact that the project site is currently fully developed and the soils have been previously graded and disturbed, there is a low possibility that residual amounts of pesticides or herbicides remain in the soil. Therefore, construction of the proposed project would not involve the transport of soil containing pesticides or herbicides or result in a potential release of pesticides or herbicides into the environment during construction. The Phase I ESA did not identify any other RECs, historic RECs, or controlled RECs in connection with the existing uses on or surrounding the project site that would result in a potential release of hazardous materials into the environment during construction.

The project site contains three pad-mounted transformers. These transformers are owned and maintained by Southern California Edison Company (SCE), a public utility company. No staining or other evidence of leaks were observed on or around the transformers. Based on the construction date of the existing building, these transformers are unlikely to contain polychlorinated biphenyls (PCBs). PCBs were manufactured in the United States between 1930 and 1977. Therefore, construction of the proposed project would not require the transport of PCBs off site or result in a potential release of PCBs into the environment during construction (Apex 2021).

The existing office/industrial building utilizes two hydraulic elevators. No concerns were noted in associated equipment rooms during the Phase I ESA site inspection. Based on the construction date of the existing building, the hydraulic fluid within the elevator equipment is unlikely to contain PCBs. No other equipment potentially containing PCBs was observed on site. Additionally, based on the construction date of the existing building, lead-based paint was unlikely to be found at the subject property. Therefore, construction of the proposed project which would include demolition of the existing building would not require the transport of PCBs off site or result in a potential release of PCBs into the environment during construction (Apex 2021).

As noted in the Phase I ESA, suspect ACMs were identified on the project site and included wallboard, tape and joint compound, vinyl floor tile and mastic, vinyl sheet flooring and mastic, acoustical panels, cove base and mastic, carpet mastic, and roofing materials. Therefore, demolition of these structures could result in the release of hazardous materials into the environment. Prior to any activities that could disturb suspect ACMs or PACMs, these and similar materials should be analyzed for possible asbestos content. If these materials are confirmed to contain asbestos, the construction contractor would be required to comply with applicable USEPA, OSHA, National Emission Standards for Hazardous Air Pollutants (NESHAPs), and State and local regulations. Compliance with federal and State regulations pertaining to the handling of ACMs would ensure the impacts associated with the removal of ACMs or PACMs would be less than significant (Apex 2021).

Therefore, impacts associated with the routine transport, use, or disposal of hazardous materials and/or the potential release of hazardous materials during construction of the proposed project would be less than significant, and no mitigation is required.

The proposed project includes a mix of office, manufacturing, and warehouse space. Although the tenant for the proposed project is not known at this time, existing federal, State, and local regulations described above under Section 4.9.3 are intended to prevent the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Should the tenant of the proposed project use hazardous materials, compliance with these existing programs would ensure protection of human health and the environment during operation of the proposed project. Therefore, compliance with the existing hazardous materials regulations and programs described above, including requirements for HMBPs and RMPs for facilities handling significant quantities of hazardous materials, OSHA and Cal/OSHA regulations, CCR Title 8; the CGP; and USDOT, RCRA, and State regulations, would ensure that operation of the proposed project would not result in impacts associated with the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, impacts associated with the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during project operation would be less than significant, and no mitigation is required.

Threshold 4.9.3: 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?

Less Than Significant Impact. The closest school to the project site is the Bella Montessori School (20602 Prism Place) located approximately 733 feet (0.14 mile) south of the project site. Additionally, Fullbright Montessori located at 20411 James Bay Circle is approximately 1,500 feet (0.29 mile) west of the project site. The proposed project would be required to comply with all regulations previously discussed under Threshold 4.9.1, including requirements for HMBPs and RMPs for facilities handling significant quantities of hazardous materials, OSHA and Cal/OSHA regulations, CCR Title 8; the CGP; and USDOT, RCRA, and State regulations, which would ensure that the proposed project would not use, emit, or handle hazardous or acutely hazardous materials, substances, or waste in sufficient quantities to create a significant hazard to the public or nearby schools. Any hazardous materials associated with construction of the proposed project or future operations on the project site would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable federal, State, and local standards and regulations as described above. Therefore, impacts related to hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school would be less than significant, and no mitigation is required.

Threshold 4.9.4: 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 a result, would it create a significant hazard to the public or the environment?

No Impact. According to the Phase I ESA prepared for the proposed project, the project site is not included on any hazardous materials sites pursuant to Government Code Section 65962.5 and as a result would not create a significant hazard to the public or the environment. Therefore, there would be no impacts, and no mitigation is required.

Threshold 4.9.5: 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?

No Impact. The project site is not located within an airport land use plan or within 2 miles of a public airport or public use airport. The nearest airport is the John Wayne Airport, which is located approximately 13 miles west of the project site. As a result, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area. Therefore, there would be no impacts, and no mitigation is required.

Threshold 4.9.6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The City is a member of the Orange County Operation Area and the Orange County Emergency Management Organization. Both entities provide mutual aid to communities via the Orange County Sheriff's Department, the OCFA, and the State of California Office of Emergency Services. Emergency response services include fire protection and suppression, inspection services, paramedic emergency medical aid, hazardous materials protection and response, and a variety of public services. The OCFA updated the Orange County Fire Authority Strategic Plan in 2022. This plan addresses firefighter and public safety; Wildland Urban Interface (WUI) challenges; cost-effective projects to reduce wildfire risks and losses; community preparedness; project prioritization; collaborative partnerships, programs, and projects; and identifying adaptations to reduce wildfire risk.

The proposed project would require temporary lane closures to complete the proposed intersection improvements and may require temporary lane closures on Enterprise Way for the completion of utility connections. However, the proposed project would be required to comply with the California Manual on Uniform Traffic Control Devices[2] (CA MUTCD), which provides uniform standards and specifications for all official traffic control devices in California. Compliance with standards included in the CA MUTCD would ensure that any temporary lane closures that may result from the proposed project would not result in inadequate emergency access at the project site or in the project vicinity. Therefore, construction of the proposed project would not physically impair or otherwise interfere with emergency response or evacuation in the project vicinity. Impacts related to emergency response and evacuation in the project vicinity would be less than significant, and no mitigation is required.

Similar to existing conditions, access to and from the project site once the project is operational would be provided via the two existing driveways on Enterprise Way and an existing reciprocal access in the northeast corner of the site to the adjacent property. Implementation of the proposed project would increase the number of trucks operating near the site and would generate an increase in the amount and volume of traffic on local and regional roadway networks. In accordance with the California Fire Code, the project applicant is required to design, construct, and maintain structures, roadways, and facilities to maintain appropriate emergency/evacuation access to and from the project site. Entrances and exits to and from parking and loading facilities would be marked with appropriate directional signage. All site access points and driveway aprons would be designed and constructed to adequate widths for public safety pursuant to OCFA. Site design and compliance with standard and emergency OCFA and City requirements, such as the size and location of fire access routes and fire truck turning radii, would allow for proper site evacuation, if necessary, during project operations. Therefore, implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts related to an adopted emergency response plan or emergency evacuation plan would be less than significant, and no mitigation is required.

[2] California Department of Transportation (Caltrans). 2014. *California Manual on Uniform Traffic Control Devices.* Revised January 11, 2024.

Threshold 4.9.7: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. According to California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zones (FHSZ) and the Local Responsibility Area (LRA) map for Lake Forest, the project site is in a non-Very High FHSZ (VHFHSZ). The nearest VHFHSZs are located approximately 0.6 mile southwest of the project site in the undeveloped area east of the intersection of Bake Parkway and Crescent Bay Drive and 0.8 mile northeast of the project site along Serrano Creek and terminate near the State Route 241 (SR-241) center median.[3] The project site is bound by multi-tenant office and industrial buildings on all sides and is not adjacent to wildland areas. The proposed project includes the demolition of existing on-site uses and construction and operation of a 165,803 sq ft industrial building. Project construction and operation would not change the characteristics of the project site in a way that would make the project site more susceptible to wildland fires. Given its location in a densely developed area, there is a low likelihood that wildfires would spread to the project site. Furthermore, adjacent roadways, including Bake Parkway, Enterprise Way, and Lake Forest Drive, surround the project site and would serve as fire breaks in the unlikely event of the uncontrolled spread of a wildfire. Additionally, SR-241 separates the project site from the nearest VHFHSZ area to the northeast. Furthermore, the proposed project would adhere to applicable building and fire codes, which would reduce the wildfire risk at the project site. Therefore, the proposed project would have no impacts associated with exposing people or structures to a significant risk of loss, injury, or death involving wildland fires and no mitigation is required.

4.9.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for hazards and hazardous materials.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it would be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have no impact related to: (1) a significant hazard to the public or the environment because it is on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; (2) a safety hazard or excessive noise associated with a nearby airport; or (3) a significant risk of loss, injury or death involving wildland fires. Therefore, the proposed project would not contribute to cumulatively considerable impacts associated with a hazardous materials site, excessive noise, or significant risk of loss, injury or death involving a wildland fire, and no mitigation is required.

[3] California Department of Forestry and Fire Protection (CAL FIRE). 2024. *Fire Hazard Severity Zone Viewer.* Website: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/ (accessed May 27, 2024).

Occurrence of a cumulative effect related to hazards and hazardous materials would require that multiple projects release hazardous materials at the same time near each other; therefore, the geographic area of concern for cumulative hazardous materials-related impacts is the project site and nearby areas. Out of the 13 cumulative projects listed in Table 4.A in Chapter 4.0, three are located adjacent to or in the immediate vicinity of the proposed project including Project Nos. 3, 4, and 10. These three projects constitute the cumulative study area for hazards and hazardous materials.

As detailed in this section, the proposed project would involve the routine transport, use, and disposal of hazardous materials. The proposed project is also within 0.14 mile of an existing school. Required compliance with existing hazardous materials regulations including the USEPA, USDOT, RCRA, OSHA, and Cal/OSHA, the California Fire Code, California Health and Safety Code, CCR, and Caltrans, and other federal, State, and local regulations would ensure that project-related impacts involving the routine transport, use, or disposal of hazardous materials or release of hazardous materials into the environment, including hazardous emissions near schools, would be less than significant, and no mitigation is required.

Development within the cumulative study area would also be required to comply with existing hazardous materials regulations including the USEPA, USDOT, RCRA, OSHA, Cal/OSHA, the California Fire Code, California Health and Safety Code, CCR, and Caltrans, and other federal, State and local regulations, to reduce potential impacts associated with the routine transport, use, or disposal of hazardous materials or release of hazardous materials into the environment, including hazardous emissions near schools.

Therefore, the proposed project would not result in cumulatively considerable impacts related to the routine transport, use, or disposal of hazardous materials or accidental release of hazardous materials into the environment, including hazardous emissions near schools. The project's contribution to any cumulative impacts would be less than significant, and no mitigation is required.

Cumulative impacts to emergency response/evacuation can occur when an increase in vehicle traffic occurs in an area with limited vehicular access; therefore, the geographic area of concern for cumulative emergency response/evacuation impacts is the roadway network surrounding the project site. Out of the 13 cumulative projects listed in Table 4.A in Chapter 4.0, seven are located in the nearby vicinity of the project site or along nearby major roadways, including Project Nos. 1, 3, 4, 6, 7, 9, and 10. However, as discussed in this section, while the proposed project would increase the number of trucks operating near the project site and would generate an increase in the amount and volume of traffic on local and regional roadway networks, the proposed project is being designed in compliance with OCFA and City requirements and is being constructed to maintain appropriate emergency/ evacuation access to and from the project site and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. All projects within the cumulative study area would be required to comply with OCFA and City requirements regarding site design and access routes to allow for proper site evacuation and avoid interfering with an adopted emergency response or evacuation plan.

Implementation of the City's General Plan policies and programs would ensure that the City maintains an effective emergency response program that accounts for development of the project and cumulative projects. Therefore, when considered in combination with all development within the cumulative study area, the proposed project would not cumulatively impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, the proposed project would not contribute a cumulatively considerable impact related to emergency response or evacuation plans within the City and cumulative impacts would be less than significant, and no mitigation is required.

4.9.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to hazards and hazardous materials.

4.9.9 Regulatory Compliance Measures and Mitigation Measures

4.9.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to hazards and hazardous materials.

4.9.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to hazards and hazardous materials, and no mitigation is required.

4.9.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to hazards and hazardous materials.

4.10 HYDROLOGY AND WATER QUALITY

This section evaluates the potential impacts to hydrology and water quality conditions from implementation of the proposed project. This section is based in part on the following:

- *Preliminary Water Quality Management Plan* (Kier & Wright 2023b) (provided in Appendix G);
- *Preliminary Hydrologic & Hydraulic Drainage Report* (Kier & Wright 2023a) (provided in Appendix G);
- *Geotechnical Investigation* (Southern California Geotechnical 2021a) (provided in Appendix E); and
- *Infiltration Report* (Southern California Geotechnical 2021b) (provided in Appendix E).

4.10.1 Scoping Process

The Notice of Preparation (NOP) was published in March 2024 for the proposed project, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. Seven comment letters included comments related to hydrology and water quality. These comments pertain to concerns that the proposed project would contaminate or pollute local water bodies, affect drainage, and increase runoff.

4.10.2 Methodology

The analysis of potential project-related impacts to on- and off-site hydrology and water quality are based on the *Preliminary Hydrologic & Hydraulic Drainage Report*, the *Preliminary Water Quality Management Plan*, the *Infiltration Report*, and the *Geotechnical Investigation* completed for the proposed project. There have been no changes to existing conditions since the reports were prepared and the information and conclusions provided in the reports remain valid for the following analysis. The on- and off-site hydrology and water quality impacts were evaluated based on the proposed project's adherence to local, regional, State, and federal standards, the changes in pre- and post-project stormwater flows, and proposed best management practices (BMPs) for control of surface runoff and reduction of pollutants in stormwater runoff.

4.10.3 Existing Environmental Setting

4.10.3.1 Surface Waters

The project site is located within the San Diego Creek Watershed, which is a subwatershed of the larger 154-square-mile Newport Bay Watershed (refer to Figure 4.10-1, Watersheds and Subwatersheds). The Newport Bay Watershed is defined by the foothills of the Santa Ana Mountains to the east (Loma Ridge), and the San Joaquin Hills to the west and southwest (USEPA 2017). The San Diego Creek Watershed is approximately 112 square miles in area and located in parts of Irvine, Aliso Viejo, Laguna Hills, Laguna Woods, Lake Forest, Orange, Santa Ana, and Tustin.

For regulatory purposes, the Santa Ana Regional Water Quality Control Board (RWQCB) designates watershed areas in Hydrologic Units (HUs), which are further divided into Hydrologic Areas (HAs) and Hydrologic Subareas (HSAs). As designated by the Santa Ana RWQCB, the project site is located within the Santa Ana River HU, Lower Santa Ana River HA, and East Coast Plain HSA (Santa Ana RWQCB 1995) (refer to Figure 4.10-2, Hydrologic Units, Areas, and Subareas).

Serrano Creek is located approximately 0.1 mile southeast of the project site. Serrano Creek is an approximately 7.5-mile long tributary of San Diego Creek. Serrano Creek originates in the Santa Ana Mountains in a canyon in Whiting Ranch Wilderness Park, near the boundary of the Cleveland National Forest. From the Santa Ana Mountains, Serrano Creek then flows southwest into the City of Lake Forest, then into San Diego Creek, Newport Bay, and the Pacific Ocean (refer to Figure 4.10-3, Surface Waters). Serrano Creek carries intermittent flows.

4.10.3.2 On-Site Drainage

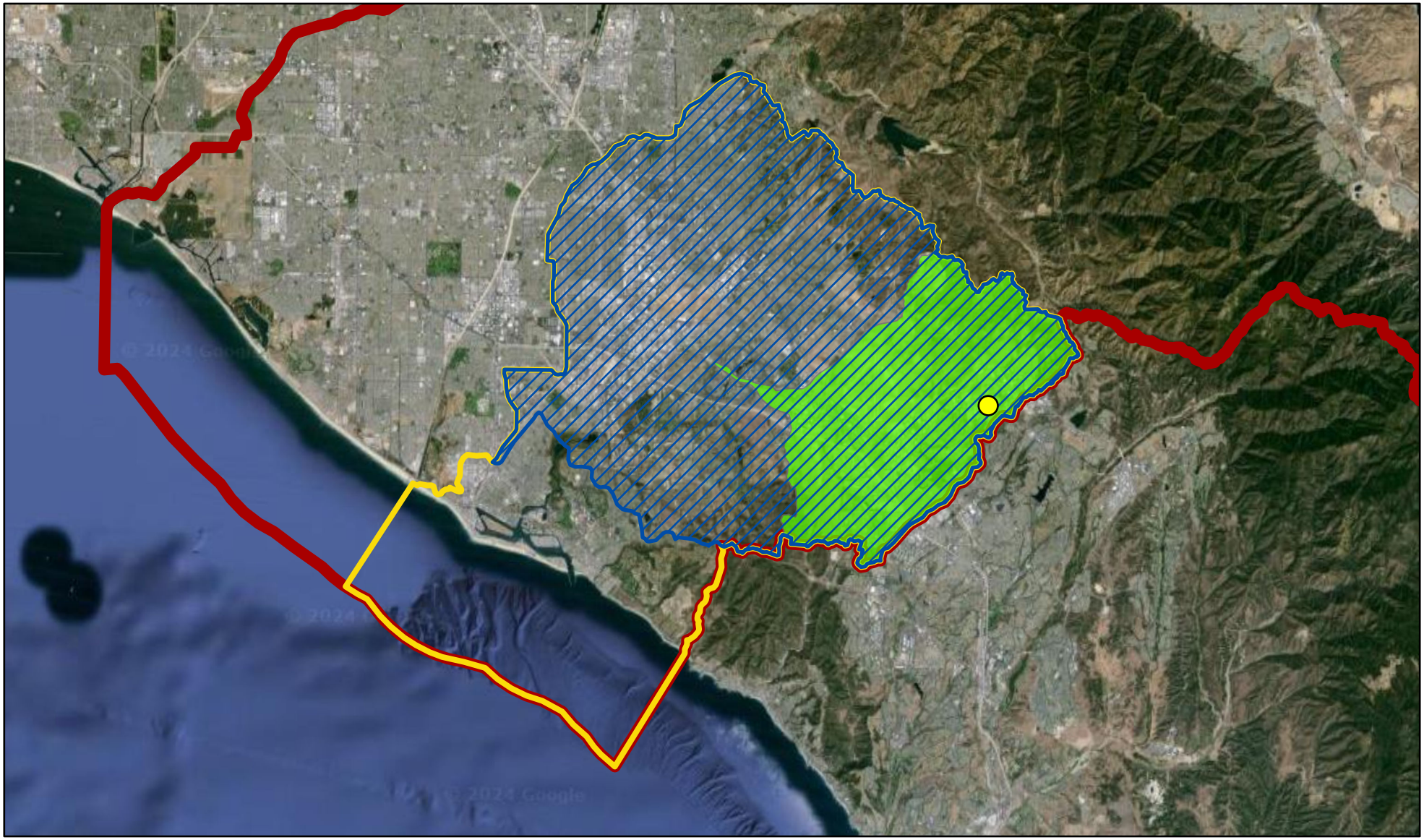
Under existing conditions, stormwater runoff drains to various curb inlets throughout the existing surface parking lot where it is then routed out to the public storm drain system which outfalls to Serrano Creek southwest of the project site at the end of Prism Place.

4.10.3.3 Surface Water Quality

Receiving waters include Serrano Creek, which flows to San Diego Creek Reach 2 and San Diego Creek Reach 1, which extends to Upper Newport Bay. Further downstream is Lower Newport Bay, which flows to the Pacific Ocean (refer to Figure 4.10-3, Surface Waters). The receiving waters for stormwater runoff from the project site are listed as impaired on the 303(d) list for several constituents (SWRCB 2024). Serrano Creek is listed as impaired for ammonia (unionized), benthic community effects, indicator bacteria, pH, and toxicity. San Diego Creek (Reach 2 – above Jeffrey Road to the headwaters) is listed as impaired for benthic community effects, indicator bacteria, nutrients, sedimentation/siltation, and toxicity. San Diego Creek (Reach 1 – below Jeffrey Road) is listed as impaired for benthic community effects, dichlorodiphenyltrichloroethane (DDT), indicator bacteria, malathion, nutrients, sedimentation/siltation, selenium, toxaphene, toxicity, pyrethroids, bifenthrin, and nitrogen. Upper Newport Bay is listed as impaired for chlordane, copper, DDT, indicator bacteria, malathion, nutrients, polychlorinated biphenyls (PCBs), sedimentation/siltation, and toxicity. Lower Newport Bay is listed as impaired for chlordane, copper, DDT, indicator bacteria, nutrients, PCBs, dieldrin, and toxicity.

4.10.3.4 Groundwater

According to the California Department of Water Resources (DWR), the project site is located within the Coastal Plain of the Orange County Groundwater Basin. The basin has a surface area of approximately 224,000 acres (350 square miles) and is located in the northwestern portion of Orange County. The basin is bounded by the Puente and Chino Hills to the north, the Santa Ana Mountains to the east, the San Joaquin Hills to the south, the Pacific Ocean to the southwest, and by a low topographic divide approximated by the Orange County – Los Angeles County line to the northwest (refer to Figure 4.10-4, Groundwater Basins) (DWR 2004).



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FIGURE 4.10-1

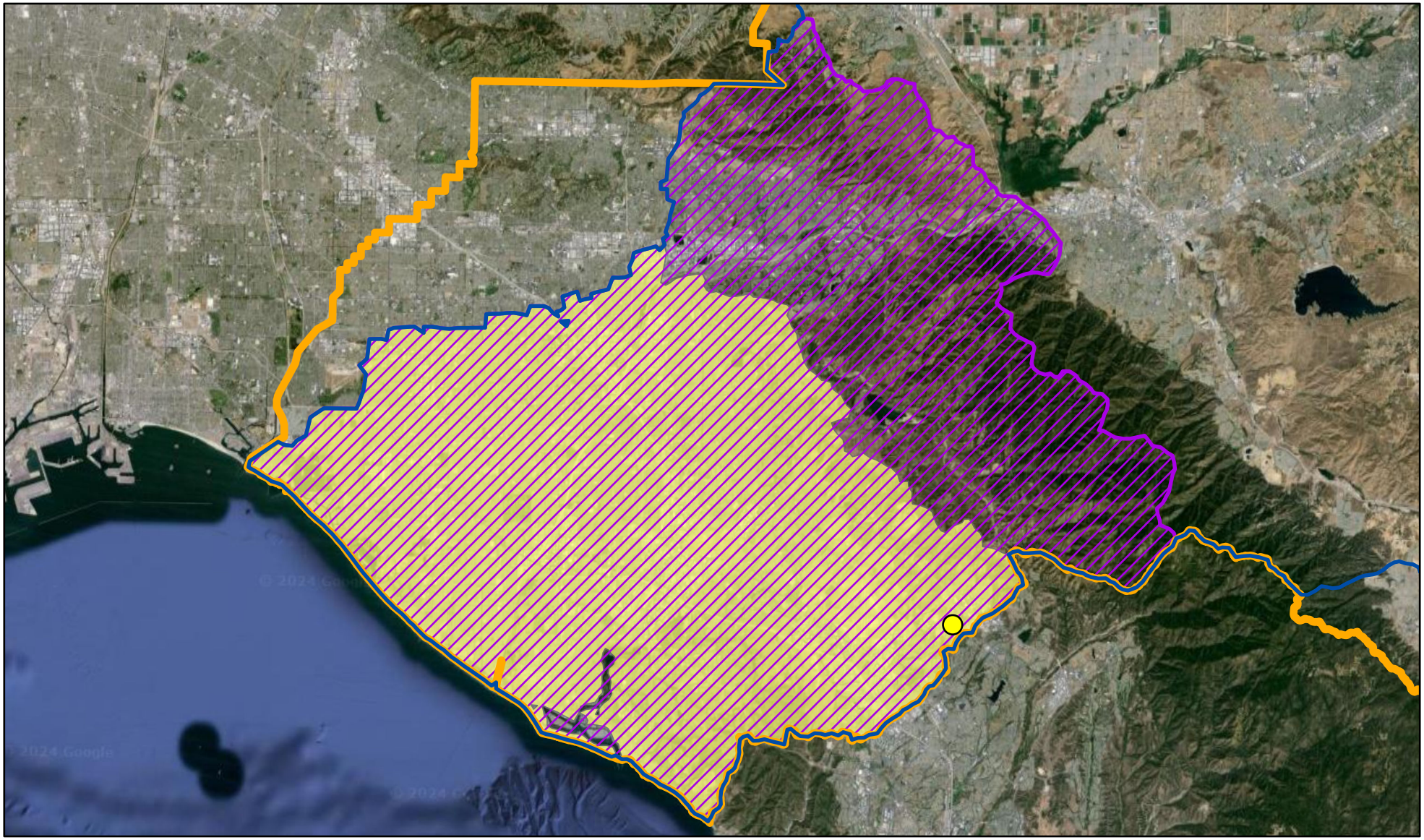
SOURCE: Google Imagery (2023); CDFW (2024)

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IPT Enterprise Business Center LLC Project

Watersheds and Subwatersheds

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FIGURE 4.10-2

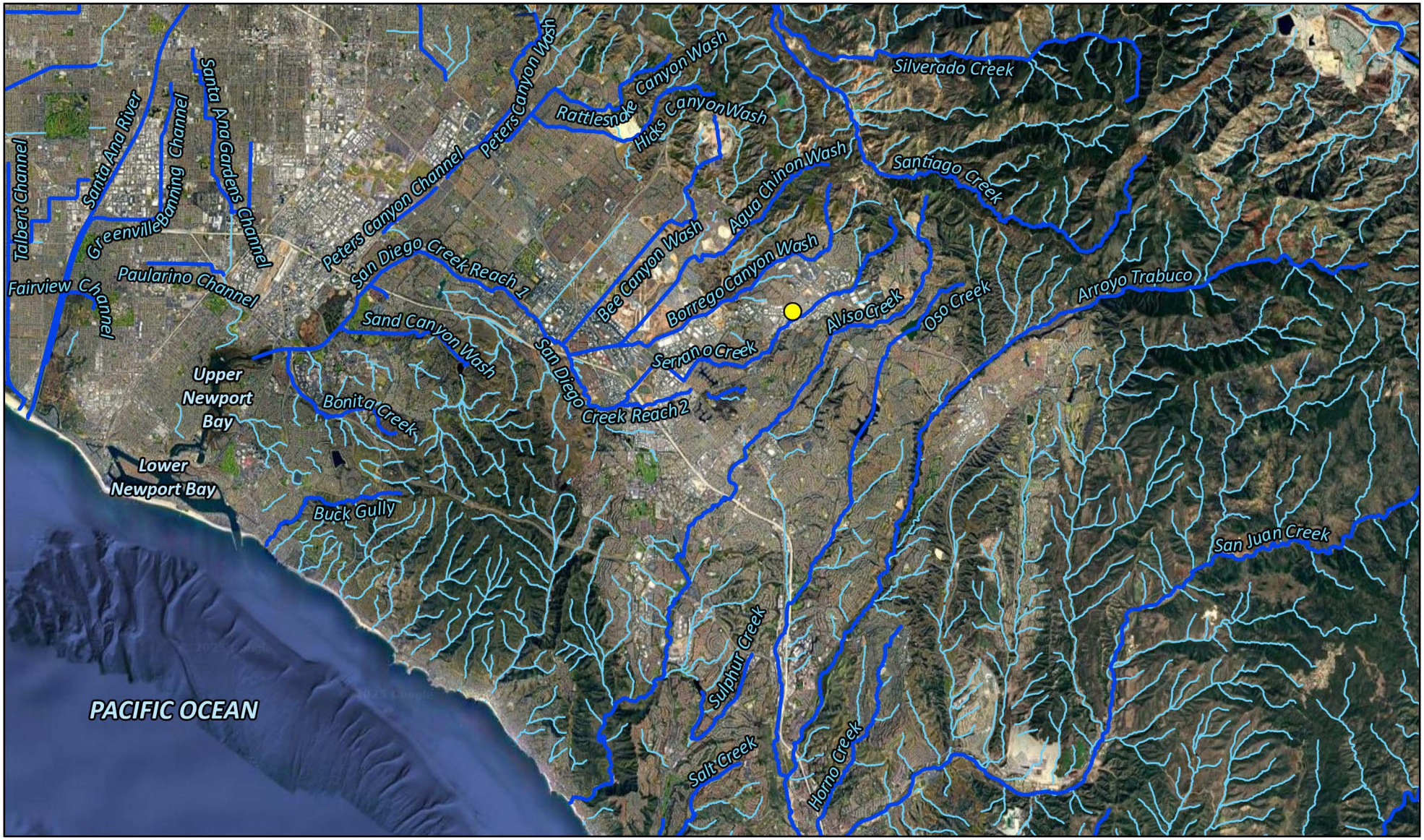
SOURCE: Google Imagery (2023); CDFW (2024)

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Hydrologic Units, Areas, and Subareas

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FIGURE 4.10-3

SOURCE: Google Imagery (2023); CDFW (2024)

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IPT Enterprise Business Center

Surface Waters

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For regulatory purposes, the Santa Ana RWQCB divides the Coastal Plain of Orange County Groundwater Basin into three Groundwater Management Zones. The project site is within the Irvine Groundwater Management Zone (Santa Ana RWQCB 1995). The Irvine Groundwater Management Zone is bounded to the north by the Chino Hills, to the northeast by the Santa Ana Mountains, to the northwest by State Route 55 (SR-55), to the south by the San Joaquin Hills, and to the southwest by the Pacific Ocean.

Recharge to the basin is derived from percolation of Santa Ana River flow, infiltration of precipitation, and injection into wells. Groundwater levels are generally lower than the level in 1969, when the basin is considered to have been full. The level in the forebay has generally stabilized, whereas the southern coastal area has declined steadily through time. Average groundwater levels for the Orange County Groundwater Basin have risen about 15 feet since 1990, with average levels in the forebay area rising about 30 feet and average levels in the coastal area dropping a few feet. The total capacity of the Orange County Groundwater Basin is 38,000,000 acre-feet and, as of 1998, the total freshwater stored within the basin was approximately 37,700,000 acre-feet (DWR 2004).

According to the Geotechnical Investigation completed for the proposed project, groundwater was not encountered during explorations to depths of more than 30 feet below the existing grade. Therefore, the groundwater table is expected to exist at a depth in excess of 30 feet at the project site.

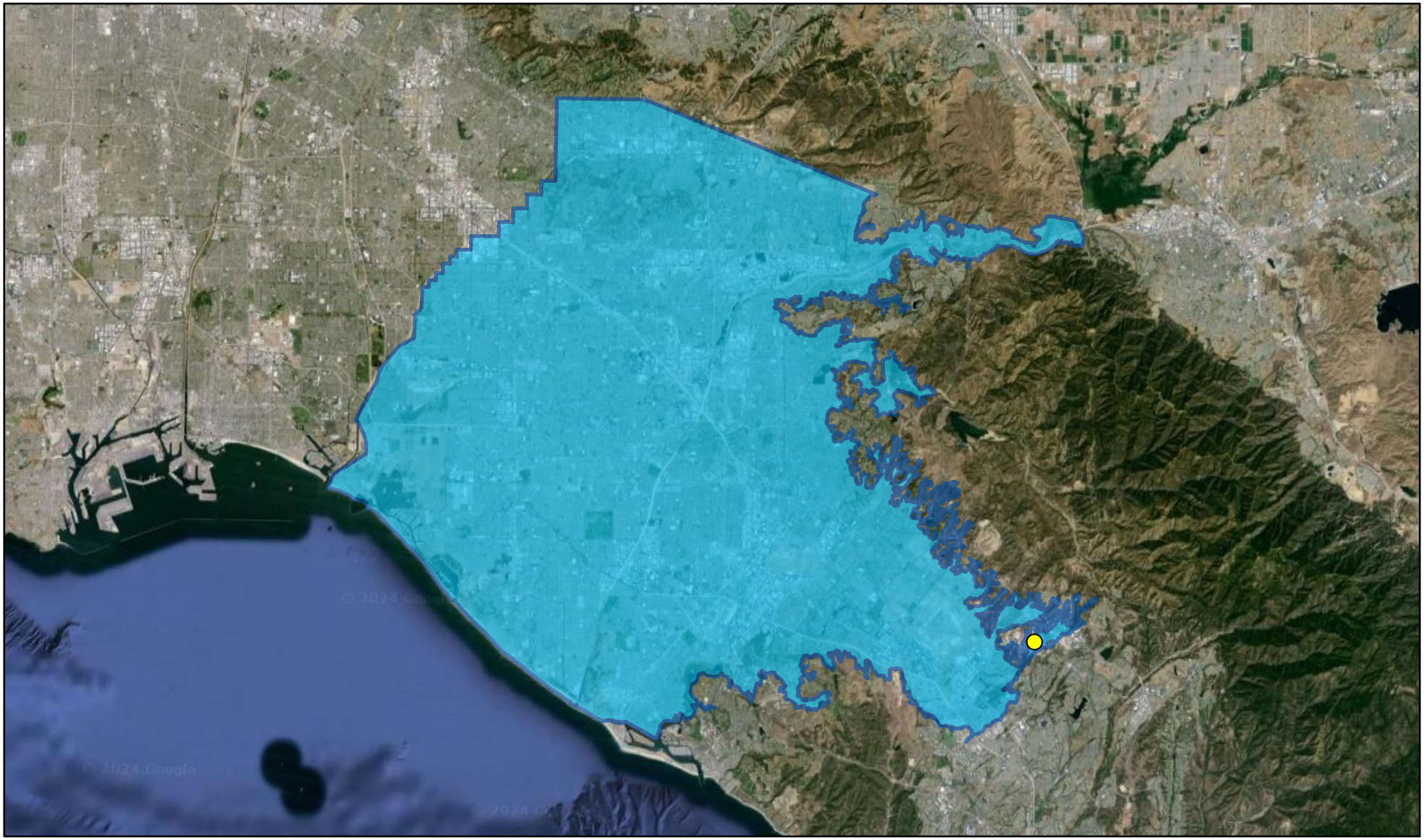
4.10.3.5 Groundwater Quality

Water in the Coastal Plain of the Orange County Groundwater Basin is primarily sodium-calcium bicarbonate based. Total dissolved solids range from 232 to 661 milligrams per liter (mg/L) and average 475 mg/L. Near the coast, groundwater is impaired from seawater intrusion. Groundwater is impaired by salinity, nitrate, and methyl tertiary-butyl ether (MTBE) (DWR 2004).

4.10.3.6 Floodplains

According to the Federal Emergency Management Agency (FEMA) Flood Hazard Map, the project site is located within Zone X (Area with Minimal Flood Hazard) (FEMA 2009). Zone X designates areas of minimal flood risk, and are the areas between the limits of the base flood and the 0.2 percent annual chance flood or 500-year flood.

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FIGURE 4.10-4

IPT Enterprise Business Center

Groundwater Basins

SOURCE: Google Imagery (2023); CDFW (2024)

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4.10.4 Regulatory Setting

Federal, State, and local regulations and programs related to hydrology and water quality that are applicable to the proposed project are described below.

4.10.4.1 Federal Regulations

Clean Water Act. In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Known today as the Clean Water Act (CWA), Congress has amended it several times. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. Important CWA sections are:

- Sections 303 and 304 require states to promulgate water quality standards, criteria, and guidelines and have those standards approved by the United States Environmental Protection Agency (USEPA).

  Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality criteria necessary to support those uses. Water quality criteria are set concentrations or levels of constituents (e.g., lead, suspended sediment, and fecal coliform bacteria) or narrative statements that represent the quality of water that support a particular use. Because California had not established a complete list of acceptable water quality criteria for toxic pollutants, the USEPA Region IX established numeric water quality criteria for toxic constituents in the form of the California Toxics Rule (CTR).

  When designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the CWA requires identifying and listing that water body as impaired. Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, nonpoint, and natural sources that a water body may receive without exceeding applicable water quality standards (often with a "factor of safety" included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body.

  The State Water Resources Board (SWRCB), in compliance with Section 303(d) of the CWA, prepared the 2024 proposed list of impaired water bodies in California. The SWRCB approved the 2024 California Integrated Report (CWA Section 303(d) List/305(b) Report on February 6, 2024, and the USEPA partially approved the 2024 California Integrated Report on December 13, 2024. The 303(d) list includes a priority schedule for the development of TMDL implementation for each contaminant impacting the water body. The current list of impairments for the project site receiving waters are provided in Section 4.10.3.3.

- Section 401 Certification requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the act. (This is most frequently required in tandem with a Section 404 permit request and is discussed further below.)

- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the United States. The USEPA delegated the implementation and administration of the NPDES program to the California State Water Resources Control Board (SWRCB). The SWRCB established nine Regional Water Quality Control Boards (RWQCBs). The SWRCB enacts and enforces the federal NPDES program and all water quality programs and regulations that cross regional boundaries. The nine RWQCBs enact, administer, and enforce all programs, including NPDES permitting, within their jurisdictional boundaries. Section 402(p) requires permits for discharges of stormwater from industrial, construction, and Municipal Separate Storm Sewer Systems (MS4s). To comply with the MS4 permits, storm water pollution controls must be implemented for construction and operational activities that discharge either directly to surface waters or indirectly through separate municipal storm drains. Pollution control is achieved by establishing engineering measures that have been designed, tested, and successfully implemented throughout the past decades, such as detention basins and sediment traps, during both the construction period and the operational phases of a project.

  Direct discharges of pollutants into waters of the United States are not allowed except in accordance with the NPDES program established in Section 402 of the CWA.

- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the United States Army Corps of Engineers (USACE).

  Pursuant to Section 404 of the CWA, the USACE regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in the USACE regulations). The USACE typically regulates as non-wetland waters of the U.S. any body of water displaying an ordinary high water mark (OHWM). To be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. A project-specific discussion regarding Section 404 issues is provided in Section 4.4, Biological Resources, in this Draft EIR.

National Flood Insurance Act. Congress acted to reduce the costs of disaster relief by passing the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The intent of these acts was to reduce the need for large, publicly funded flood control structures and disaster relief efforts by restricting development in floodplains. The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP), which provides flood insurance, floodplain management, and flood hazard mapping. Communities subject to flood hazards voluntarily participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce the potential for flood damage. In turn, the NFIP offers federally funded flood insurance to homeowners, renters, and business owners in participating communities. Under this program, FEMA produces Flood Insurance Rate Maps (FIRMs) that identify properties and buildings in flood insurance risk areas. Flood hazards related to storm events are generally described in terms of 100- or 500-year floods. These are floods that, respectively, have 1 percent and 0.2 percent chance of occurring every year. The City of Lake Forest manages local storm drain facilities, and the Orange County Flood Control District (OCFCD) is responsible for regional flood control planning within Orange County.

4.10.4.2 State Regulations

Porter-Cologne Water Quality Control Act of 1970. The federal CWA places the primary responsibility for the control of water pollution and planning the development and use of water resources with the states, although it does establish certain guidelines for the states to follow in developing their programs.

California's primary statute governing water quality and water pollution is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and the nine RWQCBs broad powers to protect water quality and is the primary vehicle for the implementation of California's responsibility under the federal CWA. The Porter-Cologne Act grants the SWRCB and RWQCBs the authority and responsibility to adopt plans and policies, to regulate discharges to surface water and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, oil, or petroleum product.

Each RWQCB must formulate and adopt a water quality plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that an RWQCB may include in its region a regional plan with water discharge prohibitions applicable to particular conditions, areas, or types of waste. The City, including the project site, is within the jurisdictional boundaries of the Santa Ana RWQCB (Region 8).

State Water Resources Control Board and Regional Water Quality Control Boards. The SWRCB adjudicates water rights, sets water pollution control policy, issues water board orders on matters of statewide application, and oversees water quality functions throughout the State by approving Basin Plans, TMDLs, and NPDES permits. RWQCBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollutant Discharge Elimination System Program. Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of stormwater dischargers, including MS4s. The USEPA defines an MS4 as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over stormwater, that are designed or used for collecting or conveying stormwater." The SWRCB or the RWQCB issues NPDES permits for 5 years, and permit requirements remain active until a new permit has been adopted.

Municipal Separate Storm Sewer System (MS4). The Municipal Stormwater Permitting Program regulates stormwater discharges from MS4s. The NPDES MS4 permits are issued in two phases by the SWRCB and RWQCBs. Phase I MS4 Permits are issued to medium municipalities (serving between 100,000 and 250,000 people) and large municipalities (serving more than 250,000 people). Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. The Phase II MS4 Permits are issued to smaller municipalities (populations of less than 100,000 people). The Phase II Small MS4 Permit covers Phase II permittees statewide and became effective on July 1, 2013. The Phase I and Phase II MS4 Permits require the permittees to develop a stormwater management program and individual dischargers to develop and implement a Storm Water Management Plan.

California Toxics Rule (CTR). As stated previously, because California had not established a complete list of acceptable water quality criteria for toxic pollutants, USEPA Region IX established numeric water quality criteria for toxic constituents in the form of the CTR. The CTR provides water quality criteria for certain potentially toxic compounds for inland surface waters, enclosed bays, estuaries, and waters designated for human health or aquatic life uses. The CTR is often used by the RWQCBs when establishing water quality objectives and TMDLs. Although the CTR criteria do not apply directly to discharges of storm water runoff, they are utilized as benchmarks for toxics in urban runoff. The CTR is used as a benchmark to evaluate the potential ecological impacts of storm water runoff to receiving waters. The CTR establishes acute and chronic surface water quality standards for certain water bodies. Acute criteria provide benchmarks for the highest permissible concentration below which aquatic life can be exposed for short periods of time without negative effects. Chronic criteria provide benchmarks for an extended period of time (i.e., 4 days or more) without negative effects. The acute CTR criteria have a shorter relevant averaging period (less than 4 days) and provide a more appropriate benchmark for comparison for storm water flows.

CTR criteria apply to the receiving water body and are calculated based on the probable hardness values of the receiving waters. At higher hardness values for receiving waters, certain constituents (including copper, lead, and zinc) are more likely to be complexed (bound with) components in the water column. This in turn reduces the bioavailability and resulting potential toxicity of these metals.

General Construction Activity Storm Water Permit. The *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities,* Order No. 2022-0057-DWQ, NPDES No. CAS000002 (Construction General Permit), adopted by the SWRCB, regulates construction activity that includes clearing, grading, and excavation resulting in soil disturbance of at least 1 acre of total land area. The Construction General Permit authorizes the discharge of stormwater to surface waters from construction activities.

The Construction General Permit requires that all developers of land where construction activities will occur over more than 1 acre do the following:

- Complete a Risk Assessment to determine pollution prevention requirements pursuant to the three risk levels established in the General Permit;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States;
- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) that specifies BMPs that will reduce pollution in stormwater discharges to the Best Available Technology/Economically Achievable/Best Conventional Pollutant Control Technology standards;
- Perform inspections and maintenance of all BMPs; and
- Conduct stormwater sampling, if required based on risk level.

To obtain coverage under the Construction General Permit, a project applicant must electronically file all permit registration documents with the SWRCB prior to the start of construction. Permit registration documents must include a:

- Notice of Intent (NOI),
- Risk Assessment,
- Site map,
- SWPPP,
- Annual fee, and
- Signed certification statement.

Typical BMPs contained in SWPPPs are designed to minimize erosion during construction, stabilize construction areas, control sediment, and control pollutants from construction materials. The SWPPP must also include a discussion of the program to inspect and maintain all BMPs.

Groundwater Management Act (Assembly Bill 3030). The Groundwater Management Act (California Water Code, Sections 10750–10756) provides a systematic procedure for an existing local agency to develop a groundwater management plan. Assembly Bill (AB) 3030 allows a local agency whose service includes a groundwater basin that is not already subject to groundwater management pursuant to law or court order to adopt and implement a groundwater management plan and includes plans to mitigate overdraft conditions, control brackish water, and to monitor and replenish groundwater.

Sustainable Groundwater Management Act of 2014 (Senate Bills 1168 and 1319, Assembly Bill 1739). In March 2014, the Governor's Office released a draft framework soliciting input on actions that can be taken to ensure local groundwater managers have the tools and authority to manage groundwater sustainably. In response, Senate Bill (SB) 1168 and AB 1739 were introduced. These bills moved through the legislation process in nearly identical form while the authors and administration convened multiple stakeholder meetings and further developed the provisions of the bills. On August

22, 2014, both bills were amended to divide the provisions between the two bills. In tandem, SB 1168 and AB 1739 provide a comprehensive groundwater sustainability management program.[1] In September 2014, SB 1168 and SB 1319, and AB 1739 were enacted, amending and adding to the State's Government and Water Codes relative to the management of groundwater resources. The three bills comprise the Sustainable Groundwater Management Act of 2014 (SGMA). The SGMA provides for the formation of local groundwater sustainability agencies (GSAs), which are responsible for monitoring and sustainably managing groundwater basins.

Cobey-Alquist Flood Plain Management Act (Sections 8000–9651 of the California Water Code). The Cobey-Alquist Flood Management Act states that a large portion of land resources of the State of California is subject to recurrent flooding. The public interest necessitates sound development of land use, as land is a limited, valuable, and irreplaceable resource, and the floodplains of the State are a land resource to be developed in a manner that, in conjunction with economically justified structural measures for flood control, would result in prevention of loss of life and of economic loss caused by excessive flooding. The primary responsibility for planning, adoption, and enforcement of land use regulations to accomplish floodplain management rests with local levels of government. It is policy of the State of California to encourage local government to plan land use regulations to accomplish floodplain management and to provide State assistance and guidance. As part of its discretionary review process, the City must determine how the project will comply with this act and not create flooding impacts on new occupied land uses.

4.10.4.3 Regional Regulations

Water Quality Control Plans (Basin Plans). The Santa Ana RWQCB has adopted a Basin Plan for their region of responsibility that delineates water resource area boundaries based on hydrological features. For the purposes of achieving and maintaining water quality protection, specific beneficial uses have been identified for each of the surface waters and groundwater management zones described in the Basin Plan. Once beneficial uses are designated, appropriate water quality objectives can be established, and programs that maintain or enhance water quality can be implemented to ensure the protection of beneficial uses.

Beneficial uses of surface receiving waters for the project site are shown in Table 4.10.A. As shown in Table 4.10.A, beneficial uses of surface receiving waters for the project site include: groundwater recharge (GWR); navigation (NAV); water contact recreation (REC1); non-contact water recreation (REC2); commercial and sport fishing (COMM); warm freshwater habitat (WARM); preservation of biological habitats of special significance (BIOL); wildlife habitat (WILD); rare, threatened, or endangered species (RARE); spawning, reproduction and development (SPWN); marine habitat (MAR); shellfish harvesting (SHEL); and estuarine habitat (EST). The surface receiving waters are excepted from the municipal and domestic supply (MUN).

Beneficial uses of the Irvine Groundwater Management Zone include municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PROC).

[1] Association of California Water Agencies. 2014. *Sustainable Groundwater Management Act of 2014.* Website: https://water.ca.gov/programs/groundwater-management/sgma-groundwater-management (accessed July 8, 2024).

Table 4.10.A: Beneficial Uses of Surface Receiving Waters

Receiving Water	Beneficial Use													
	MUN	GWR	NAV	REC1	REC2	COMM	WARM	BIOL	WILD	RARE	SPWN	MAR	SHEL	EST
Surface Waters														
Serrano Creek	❖	☐		☐	☐		☐		☐	●				
San Diego Creek Reach 2 (above Jeffrey Road to headwaters)	❖	☐		☐	☐		☐		☐	●				
San Diego Creek Reach 1 (below Jeffrey Road)	❖			●[1]	●		●		●	●				●
Upper Newport Bay	❖			●	●	●		●	●	●	●	●	●	●
Lower Newport Bay	❖		●	●	●	●			●	●	●	●	●	

Source: *Santa Ana River Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin, Santa Ana Regional Water Quality Control Board* (RWQCB 1995, amended 2019).

Note: ● = Existing or Potential Beneficial Use
☐ = Intermittent Beneficial Use
❖ = Excepted from MUN

[1] Access prohibited in all or part per agency with jurisdiction.

BIOL = preservation of biological habitats of special significance
COMM = commercial and sport fishing
EST = estuarine habitat
GWR = groundwater recharge
MAR = marine habitat
MUN = municipal and domestic supply
NAV = navigation
RARE = rare, threatened, or endangered species
REC1 = water contact recreation
REC2 = non-contact water recreation
RWQCB = Regional Water Quality Control Board
SHEL = shellfish harvesting
SPWN = spawning, reproduction and development
WARM = warm freshwater habitat
WILD = wildlife habitat

Basin Plans also establish implementation programs to achieve water quality objectives to protect beneficial uses and require monitoring to evaluate the effectiveness of the programs. These objectives must comply with the State antidegradation policy (State Board Resolution No. 68-16), which is designed to maintain high-quality waters while allowing some flexibility if beneficial uses are not unreasonably affected.

Basin Plans have established narrative and numeric water quality objectives for inland surface streams and groundwater. If water quality objectives are exceeded, the RWQCBs can use their regulatory authority to require municipalities to reduce pollutant loads to the affected receiving waters. Relevant surface water quality objectives for all inland surface waters, bays and estuaries, and groundwater under the jurisdiction of the Santa Ana RWQCB that are applicable to the receiving waters for the project site are shown in Tables 4.10.B, 4.10.C, and 4.10.D, respectively.

Table 4.10.B: Surface Water Quality Objectives for Inland Surface Waters: Santa Ana RWQCB

<table>
<tr><th>Constituent Name</th><th>Narrative Objective</th></tr>
<tr><td>N/A</td><td>Inland surface water communities and populations, including vertebrate, invertebrate, and plant species, shall not be degraded as a result of the discharge of waste. Degradation is damage to an aquatic community or population with the result that balanced community no longer exists. A balanced community is one that (1) is diverse; (2) has the ability to sustain itself through cyclic seasonal changes; (3) includes necessary food chain species; and (4) is not dominated by pollution-tolerant species unless that domination is caused by physical habitat limitations. A balanced community also: (5) may include historically introduced nonnative species, but (6) does not include species present because best available technology has not been implemented, or (7) because site-specific objectives have been adopted, or (8) because of thermal discharges.</td></tr>
<tr><td>Algae</td><td>Waste discharges shall not contribute to excessive algal growth in inland surface receiving waters.</td></tr>
<tr><td>Ammonia, Un-ionized</td><td>Calculated numerical UIA-N objectives as well as corresponding total ammonia nitrogen concentration for various pH and temperature conditions are shown in Basin Plan Tables 4-2 and 4-3.</td></tr>
<tr><td>Boron</td><td>Boron concentrations shall not exceed 0.75 mg/L in inland surface waters of the region as a result of controllable water quality factors.</td></tr>
<tr><td>Chemical Oxygen Demand (COD)</td><td>Waste discharges shall not result in increases in COD levels in inland surface waters that exceed the values shown in Basin Plan Table 4-1 or that adversely affect beneficial uses.</td></tr>
<tr><td>Chloride</td><td>The chloride objectives listed in Basin Plan Table 4-1 shall not be exceeded as a result of controllable water quality factors.</td></tr>
<tr><td>Chlorine, Residual</td><td>To protect aquatic life, the chlorine residual in wastewater discharged to inland surface waters shall not exceed 0.1 micrograms per liter (mg/L).</td></tr>
<tr><td>Color</td><td>Waste discharges shall not result in coloration of the receiving waters that causes a nuisance or adversely affects beneficial uses. The natural color of fish, shellfish, or other inland surface water resources used for human consumption shall not be impaired.</td></tr>
<tr><td>Dissolved Solids, Total (Total Filtrable Residue)</td><td>The dissolved mineral content of the waters of the region, as measured by the total dissolved solids test (“Standard Methods for the Examination of Water and Wastewater, 16th Ed.,” 1985: 209B (180°C), p. 95), shall not exceed the specific objectives listed in Basin Plan Table 4-1 as a result of controllable water quality factors.</td></tr>
<tr><td>Filtrable Residue,Total</td><td>See Dissolved Solids, Total</td></tr>
<tr><td>Floatables</td><td>Waste discharges shall not contain floating materials, including solids, liquids, foam, or scum, that cause a nuisance or adversely affect beneficial uses.</td></tr>
<tr><td>Fluoride</td><td>Fluoride concentrations shall not exceed values specified below in inland surface waters designated MUN because of controllable water quality factors.
<table>
<tr><th colspan="2">Annual Average Maximum Optimum Fluoride</th></tr>
<tr><th>Daily Air Temperature (°C)</th><th>ntration (mg/L)</th></tr>
<tr><td>12.0 and below</td><td>1.2</td></tr>
<tr><td>12.1 to 14.6</td><td>1.1</td></tr>
<tr><td>14.7 to 17.6</td><td>1.0</td></tr>
<tr><td>17.7 to 21.4</td><td>0.9</td></tr>
<tr><td>21.5 to 26.2</td><td>0.8</td></tr>
<tr><td>26.3 to 32.5</td><td>0.7</td></tr>
</table></td></tr>
<tr><td>Hardness (as $CaCO_3$)</td><td>The objectives listed in Basin Plan Table 4-1 shall not be exceeded as a result of controllable water quality factors. If no hardness objective is listed in Basin Plan Table 4-1, the hardness of receiving waters used for MUN shall not be increased as a result of waste discharges to levels that adversely affect beneficial uses.</td></tr>
</table>

Table 4.10.B: Surface Water Quality Objectives for Inland Surface Waters: Santa Ana RWQCB

Constituent Name	Narrative Objective
Inorganic Nitrogen, Total	See Nitrogen, Total Inorganic
Methylene Blue- Activated Substances (MBAS)	MBAS concentrations shall not exceed 0.05 mg/L in inland waters designated MUN as a result of controllable water quality factors.
Nitrate	Nitrate-nitrogen concentrations shall not exceed 45 mg/L (as NO3) or 10 mg/L (as N) in inland surface waters designated MUN as a result of controllable water quality factors.
Nitrogen, Total Inorganic	The objectives listed in Basin Plan Table 4-1 shall not be exceeded as a result of controllable water quality factors.
Oil and Grease	Waste discharges shall not result in deposition of oil, grease, wax or other material in concentrations that result in a visible film or in coating objects in the water, or which cause a nuisance or adversely affect beneficial uses.
Oxygen, Dissolved	The dissolved oxygen content of surface waters shall not be depressed below 5 mg/L for waters designated WARM, or 6 mg/L for waters designated COLD, as a result of controllable water quality factors. In addition, waste discharges shall not cause the median dissolved oxygen concentration to fall below 85% of saturation or the 95th percentile concentration or fall below 75% of saturation within a 30-day period.
Pathogen Indicator Bacteria	Waste discharges shall not cause or contribute to excessive risk of illness from microorganisms pathogenic to human beings. Pathogen indicator concentrations shall not exceed the values listed in Basin Plan Table 4-pio as a result of controllable water quality factors unless it is demonstrated to the Regional Board's satisfaction that the elevated indicator concentrations do not result in excessive risk of illness among people recreating in or near the water. In all cases, the level of water quality necessary to protect existing uses must be maintained. Where existing water quality is better than necessary to protect the designated use, the existing high level of water quality must be maintained unless it is demonstrated that existing or potential beneficial uses would be protected and that water quality consistent with maximum benefit to the people of California would be maintained, as specified in the state antidegradation policy (SWRCB Resolution No. 68-16). The Regional Board may also require recycled water discharged to freshwaters designated REC-1 or REC-2 to comply with other limitations recommended by the California Department of Public Health (CDPH).
pH	The pH of inland surface waters shall not be raised above 8.5 pH or depressed below 6.5 pH as a result of controllable water quality factors.
Radioactivity	Radioactive materials shall not be present in the waters of the region in concentrations that are deleterious to human, plant, or animal life. Waters designated MUN shall meet the limits specified in the California Code of Regulations, Title 22, and listed here: **Combined Radium-226 and Radium-228:** 5 pCi/L **Gross Alpha Particle Activity:** 15 pCi/L **Tritium:** 20,000 pCi/L **Strontium-90:** 8 pCi/L **Gross Beta Particle:** 50 pCi/L **Uranium 20:** pCi/L
Sodium	The sodium objectives listed in Basin Plan Table 4-1 shall not be exceeded as a result of controllable water quality factors.
Solids, Suspended and Settleable	Inland surface waters shall not contain suspended or settleable solids in amounts that cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.
Sulfate	The objectives listed in Basin Plan Table 4-1 shall not be exceeded as a result of controllable water quality factors.
Sulfides	The dissolved sulfide content of inland surface waters shall not be increased as a result of controllable water quality factors.

Table 4.10.B: Surface Water Quality Objectives for Inland Surface Waters: Santa Ana RWQCB

Constituent Name	Narrative Objective
Surfactants (surface- active agents)	Waste discharges shall not contain concentrations of surfactants that result in foam in the course of flow or use of the receiving water, or that adversely affect aquatic life.
Taste and Odor	The inland surface waters of the region shall not contain, as a result of controllable water quality factors, taste- or odor-producing substances at concentrations that cause a nuisance or adversely affect beneficial uses. The natural taste and odor of fish, shellfish, or other regional inland surface water resources used for human consumption shall not be impaired.
Temperature	The natural receiving water temperature of inland surface waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. The temperature of waters designated COLD shall not be increased by more than 5°F as a result of controllable water quality factors. The temperature of waters designated WARM shall not be raised above 90°F from June through October or above 78°F during the rest of the year as a result of controllable water quality factors. Lake temperatures shall not be raised more than 4°F above established normal values as a result of controllable water quality factors.
Total Dissolved Solids	See Dissolved Solids, Total
Total Filtrable Residue	See Dissolved Solids, Total
Total Inorganic Nitrogen	See Nitrogen, Total Inorganic
Toxic Substances	Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels that are harmful to human health. The concentrations of contaminants in waters that are existing or potential sources of drinking water shall not occur at levels that are harmful to human health. The concentrations of toxic pollutants in the water column, sediments or biota shall not adversely affect beneficial uses.
Turbidity	Increases in turbidity that result from controllable water quality factors shall comply with the following: **Natural Turbidity** / **Maximum Increase** 0–5 NTU / 20% 50–100 NTU / 10 NTU >100 NTU / 10% All inland surface waters of the region shall be free of changes in turbidity that adversely affect beneficial uses.

Source: *Santa Ana River Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin, Santa Ana Regional Water Quality Control Board* (RWQCB 1995, amended 2019).

°C = degrees Celsius
°F = degrees Fahrenheit
$CaCO_3$ = calcium carbonate
COLD = cold freshwater habitat
MUN = municipal supply
NO_3 = nitrate
NTU = nephelometric turbidity unit
pCi/L = picocuries per liter of air
REC-1 = contact water recreation
REC-2 = non-contact water recreation
RWQCB = Regional Water Quality Control Board
SWRCB = State Water Resources Control Board
UIA-N = un-ionized ammonia nitrogen
WARM = warm freshwater habitat

Table 4.10.C: Surface Water Quality Objectives for Bays and Estuaries

Constituent	Concentration
Algae	Waste discharges shall not contribute to excessive algal growth.
Chlorine (residual)	Chlorine residual in wastewater discharged to enclosed bays and estuaries shall not exceed 0.1 mg/L.
Color	Waste discharges shall not result in coloration of the receiving waters that causes a nuisance or adversely affects beneficial uses. The natural color of fish, shellfish or other bay and estuarine water resources used for human consumption shall not be impaired.
Floatables	Waste discharges shall not contain floating materials, including solids, liquids, foam, or scum, that cause a nuisance or adversely affect beneficial uses.
Oil and Grease	Waste discharges shall not result in deposition of oil, grease, wax, or other materials in concentrations that result in a visible film or in coating objects in the water or which cause a nuisance or adversely affect beneficial uses.
Oxygen (dissolved)	Shall not be depressed to levels that adversely affect beneficial uses as a result of controllable water quality factors.
Pathogen Indicator Bacteria	Waters with REC1 Beneficial Use: Fecal coliform log mean less than 200 organisms/100 mL based on five or more samples/30-day period, and not more than 10% of the samples exceed 400 organisms/100 mL for any 30-day period. Water with SHEL Beneficial Use: Fecal coliform median concentration not more than 14 MPN/100 mL and not more than 10% of samples exceed 43 MPN/100 mL.
pH	Shall not be raised above 8.6 or depressed below 7.0 as a result of controllable water quality factors; ambient pH levels shall not be changed more than 0.2 units.
Radioactivity	Shall not be present in concentrations which are deleterious to human, plant, or animal life.
Solids (suspended and settleable)	Shall not cause nuisance or adversely affect beneficial uses as a result of water quality factors.
Sulfides	Shall not increase as a result of controllable water quality factors.
Surfactants	Waste discharges shall not contain concentrations of surfactants that result in foam in the course of flow or use of the receiving water or that adversely affect aquatic life.
Taste and Odor	Shall not contain taste- or odor-producing substances at concentrations that cause a nuisance or adversely affect beneficial uses. The natural taste and odor of fish, shellfish, or other enclosed bay and estuarine resources used for human consumption shall not be impaired.
Temperature	Shall meet the objective specified in the SWRCB's Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan).
Toxic Substances	Shall not be discharged at levels that will bioaccumulate in aquatic resources to levels that are harmful to human health. Concentrations of toxic pollutants in the water column, sediments, or biota shall not adversely affect beneficial uses.
Turbidity	Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%. Where natural turbidity is between 50 and 100 NTU, increases shall not exceed 10 NTU. Where natural turbidity is greater than 100 NTU, increases shall not exceed 10%.

Source: *Santa Ana River Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin, Santa Ana Regional Water Quality Control Board* (RWQCB 1995, amended 2019).
mg/L = milligrams per liter
mL = milliliter
MPN = most probable number
NTU = nephelometric turbidity units
pH = percentage of hydrogen
REC1 = water contact recreation
RWQCB = Regional Water Quality Control Board
SHEL = shellfish harvesting
WARM = Warm Freshwater Habitat

Table 4.10.D: Groundwater Quality Objectives

<table>
<tr><th>Constituent</th><th>Basin Plan Objectives</th></tr>
<tr><td>Arsenic</td><td>Arsenic concentrations shall not exceed 0.05 mg/L in groundwater designated MUN as a result of controllable water quality factors.</td></tr>
<tr><td>Bacteria, Coliform</td><td>Total coliform numbers shall not exceed 2.2 organisms/100 mL median over any 7-day period in groundwaters designated MUN as a result of controllable water quality factors.</td></tr>
<tr><td>Barium</td><td>Barium concentrations shall not exceed 1.0 mg/L in groundwaters designated MUN as a result of controllable water quality factors.</td></tr>
<tr><td>Boron</td><td>Boron concentrations shall not exceed 0.75 mg/L in groundwaters of the region as a result of controllable water quality factors.</td></tr>
<tr><td>Chloride</td><td>Chloride concentrations shall not exceed 500 mg/L in groundwaters of the region designated MUN as a result of controllable water quality factors.</td></tr>
<tr><td>Color</td><td>Waste discharges shall not result in coloration of the receiving waters that causes a nuisance or adversely affects beneficial uses.</td></tr>
<tr><td>Cyanide</td><td>Cyanide concentrations shall not exceed 0.2 mg/L in groundwaters designated MUN as a result of controllable water quality factors.</td></tr>
<tr><td>Dissolved Solids, Total (Total Filterable Residue)</td><td>The dissolved mineral content of the waters of the region, as measured by the total dissolved solids test (“Standard Methods for the Examination of Water and Wastewater, 20th Ed.,” 1998: 2540C (180˚C), p.2-56), shall not exceed the specific objectives listed in Table 4-1 of the Santa Ana RWQCB Basin Plan as a result of controllable water quality factors. (See also discussion of management zone TDS and nitrate-nitrogen water quality objectives in the Santa Ana RWQCB Basin Plan.)</td></tr>
<tr><td>Filterable Residue, Total</td><td>See Dissolved Solids, Total.</td></tr>
<tr><td>Fluoride</td><td>Fluoride concentrations shall not exceed 1.0 mg/L in groundwaters designated MUN as a result of controllable water quality factors.</td></tr>
<tr><td>Hardness (as $CaCO_3$)</td><td>The hardness of receiving waters used for MUN shall not be increased as a result of waste discharges to levels that adversely affect beneficial uses.</td></tr>
<tr><td>Metals</td><td>Metal concentrations shall not exceed the values listed below in groundwaters designated MUN as a result of controllable water quality factors.
<table>
<tr><th>Metal (°C)</th><th>Concentration (mg/L)</th></tr>
<tr><td>Cadmium</td><td>0.01</td></tr>
<tr><td>Chromium</td><td>0.05</td></tr>
<tr><td>Cobalt</td><td>0.2</td></tr>
<tr><td>Copper</td><td>1.0</td></tr>
<tr><td>Iron</td><td>0.3</td></tr>
<tr><td>Lead</td><td>0.05</td></tr>
<tr><td>Manganese</td><td>0.05</td></tr>
<tr><td>Mercury</td><td>0.002</td></tr>
<tr><td>Selenium</td><td>0.01</td></tr>
<tr><td>Silver</td><td>0.05</td></tr>
</table></td></tr>
<tr><td>Methylene Blue-Activated Substances (MBAS)</td><td>MBAS concentrations shall not exceed 0.05 mg/L in groundwaters designated MUN as a result of controllable water quality factors.</td></tr>
<tr><td>Nitrogen (Nitrate, Nitrite)</td><td>Nitrate-nitrogen concentrations listed in Table 4-1 of the Santa Ana RWQCB Basin Plan shall not be exceeded as a result of controllable water quality factors. (See also discussion of management zone TDS and nitrate-nitrogen water quality objectives in the Santa Ana RWQCB Basin Plan.)</td></tr>
<tr><td>Oil and Grease</td><td>Waste discharges shall not result in deposition of oil, grease, wax, or other materials in concentrations that cause a nuisance or adversely affect beneficial uses.</td></tr>
<tr><td>pH</td><td>The pH of groundwater shall not be raised above 9 or depressed below 6 as a result of controllable water quality factors.</td></tr>
</table>

Table 4.10.D: Groundwater Quality Objectives

Constituent	Basin Plan Objectives
Radioactivity	Radioactive materials shall not be present in the waters of the region in concentrations that are deleterious to human, plant, or animal life. Groundwaters designated MUN shall meet the limits specified in the California Code of Regulations, Title 22, and listed below: Combined Radium-226 and Radium-228 ..... 5 pCi/L Gross Alpha particle activity ..... 15 pCi/L Tritium ..... 20,000 pCi/L Strontium-90 ..... 8 pCi/L Gross Beta particle activity ..... 50 pCi/L Uranium ..... 20 pCi/L
Sodium	Groundwaters designated AGR shall not exceed a sodium absorption ration (SAR) of 9 as a result of controllable water quality factors.
Sulfate	Sulfate concentrations shall not exceed 500 mg/L in groundwaters of the region designated MUN as a result of controllable water quality factors.
Taste and Odor	The groundwaters of the region shall not contain, as a result of controllable water quality factors, taste- or odor-producing substances at concentrations that cause a nuisance or adversely affect beneficial uses.
Total Dissolved Solids	See Dissolved Solids, Total
Total Filtrable Residue	See Dissolved Solids, Total
Total Inorganic Nitrogen	See Nitrogen, Total Inorganic
Toxic Substances	All waters of the region shall be maintained free of substances in concentrations that are toxic or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

Source: *Santa Ana River Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin, Santa Ana Regional Water Quality Control Board* (RWQCB 1995, amended 2019).

°C = degrees Celsius
AGR = agricultural water supply
mg/L= milligrams per liter
mL= milliliters
MUN= Municipal Water Supply
pCi/L= picocuries per liter of air
RWQCB = Regional Water Quality Control Board
TDS = total dissolved solids

In addition to the water quality objectives applicable to all surface waters, bays and estuaries, and groundwater, the Santa Ana RWQCB has designated site-specific water quality objectives for waters. The site-specific water quality objectives for San Diego Creek Reach 2 (above Jeffrey Road to the headwaters) are:

- **Total Dissolved Solids:** 720 mg/L
- **Total Inorganic Nitrogen:** 5 mg/L

The site-specific water quality objectives for San Diego Creek Reach 1 (below Jeffrey Road) are:

- **Total Dissolved Solids:** 1,500 mg/L
- **Total Inorganic Nitrogen:** 13 mg/L
- **Chemical Oxygen Demand:** 90 mg/L

There are no site-specific water quality objectives for Serrano Creek, Upper Newport Bay, or Lower Newport Bay.

The site-specific water quality objectives for the Irvine Groundwater Management Zone are:

- **Total Dissolved Solids:** 910 mg/L
- **Nitrate as Nitrogen:** 5.9 mg/L

Orange County National Pollutant Discharge Elimination System Permit. The City is a Permittee of the *Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the Incorporated Cities of Orange County within the Santa Ana Region Areawide Urban Storm Water Runoff Orange County* (North Orange County MS4 Permit), Order R8-2009-0030, NPDES No. CAS618030, as amended by Order No. R8-2010-0062. The North Orange County MS4 Permit regulates discharges into the MS4 system in the cities and county areas within Orange County that are in the Santa Ana Region. As discussed further below, the North Orange County MS4 Permit requires preparation of a Water Quality Management Plan (WQMP) and implementation of post-construction BMPs for new development and significant redevelopment projects that qualify as Priority Projects.

The proposed project is considered a Priority Project under the following category specified in the North Orange County MS4 Permit:

- Significant redevelopment projects that include the addition or replacement of 5,000 square feet (sq ft) or more of impervious surface on a developed site.

Drainage Area Management Program. The Drainage Area Management Plan (DAMP) was created by the County of Orange, the OCFCD, and incorporated cities (permittees), and includes specific water pollutant requirements of the North Orange County Stormwater Program. The DAMP is the principal guidance and compliance document for the county-wide implementation of the Stormwater Program. It is the foundation for the permittees to implement model programs designed to prevent pollutants from entering receiving waters to the maximum extent practicable. Section 7 of the DAMP discusses issues relating to new developments and significant redevelopments.

Local Implementation Plan. The City Local Implementation Plan (LIP) is the principal guidance and compliance document specific to the City's jurisdiction for compliance with the requirements of the North Orange County MS4 Permit. The LIP provides the description and details of the City's water quality program implementation activities. The LIP is designed to work in conjunction with the Orange County DAMP. It should be noted that the Lake Forest LIP takes precedence over DAMP requirements.

Model Water Quality Management Plan. The *Model Water Quality Management Plan* (County of Orange 2011) was developed to aid Orange County, the OCFCD, the cities in Orange County (permittees), and developers in Orange County to address post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects that qualify as Priority Projects. The proposed project is categorized as a significant redevelopment project and, thus, is considered a Priority Project.

Priority Projects are required to develop a Project WQMP to minimize adverse impacts of development to on-site hydrology, volume and rate of runoff, and pollutants of concern. Project WQMPs include project-specific BMPs to minimize these effects (e.g., Low Impact Development [LID],

site design measures, source control BMPs). The requirements identified in the Project WQMPs are subject to Section 7 of the DAMP.

Technical Guidance Document. The County of Orange developed the *Technical Guidance Document for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs)* (Technical Guidance Document) (County of Orange 2013) in cooperation with the incorporated cities of Orange County to aid agency staff and project proponents with addressing post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects in Orange County. The Technical Guidance Document serves as a technical guidance to complete the Project WQMP.

Orange County Construction Runoff Guidance Manual. The *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers* (County of Orange 2012) presents the requirements related to construction from the DAMP. The goal of this Guidance Manual is to control pollutant discharges from construction sites. As such, it helps applicants with building and grading permits to understand the water quality requirements during the construction phase of development projects.

General Waste Discharge Requirements (WDR) Permit for Discharges to Surface Waters That Pose an Insignificant (de Minimus) Threat to Water Quality. The Santa Ana RWQCB requires a permit for discharges to surface waters that pose an insignificant threat to water quality (Order No. R8-2020-0006, NPDES No. CAG998001). Wastewater discharges associated with construction dewatering are regulated under this order. If dewatering occurs during construction of the project within the Santa Ana RWQCB Region, it must comply with this permit.

4.10.4.4 Local Regulations

City of Lake Forest General Plan 2040. The Public Facilities element includes policies and actions related to the City's water system and stormwater system. The following policies and actions from the Public Facilities Element would apply to the proposed project:

Goal PF-5 Storm Drain System: A community with an efficient, attractive, and environmentally sound storm drain system.

Policy PF-5.3 Stormwater Runoff: Encourage that stormwater be directed towards permeable surfaces to allow for more percolation of stormwater into the ground.

Policy PF-5.4 Stormwater Capture: Encourage the use of professionally designed stormwater capture methods to aid in the reuse of rain water for non-potable uses in compliance with applicable State regulations.

Policy PF-5.6: Stormwater Treatments: Promote Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

Action PF-5b: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development

(LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

Action PF-5c: Promote the use of LID strategies in new development and redevelopment projects, including but not limited to the use of canopy trees and shrubs, vegetated swales, and permeable paving.

Action PF-5d: Require new development to mitigate increases in stormwater peak flows and/or volume. Mitigation measures, such as LID strategies, should take into consideration impacts on adjoining lands in the City.

City of Lake Forest Municipal Code Chapter 8.30. Chapter 8.30 of the City's Municipal Code regulates grading and excavation activities.

- **Section 8.30.150** specifies that grading activities be undertaken in compliance with NPDES and City requirements. Each grading project shall implement BMPs to ensure that discharges of pollutants are effectively prohibited and will not cause or contribute to an exceedance of water quality standards. Section 8.30.150 also specifies that, prior to the issuance by the City of a grading permit, the Department of Public Works and/or Development Services Department shall review the project plans.

- **Section 8.30.152** specifies that projects with a grading permit shall submit an erosion control plan to the Director of the City of Lake Forest Public Works Department, or designee, for approval by September 15th of each year.

- **Section 8.30.154** specifies required maintenance of erosion control and sediment control BMPs after rainstorms for projects with a grading permit.

City of Lake Forest Municipal Code Chapter 15.14. Chapter 15.14 of the City's Municipal Code regulates stormwater quality and prohibits discharges of pollutants into surface waters unless the discharge is authorized by an NPDES permit.

- **Section 15.14.040** requires that all new development and redevelopment projects comply with the requirements of the North Orange County MS4 Permit. Section 15.14.040 specifies that, prior to the issuance of a grading permit or building permit, the Department of Public Works and/or Development Services Department shall review the project plans.

- **Section 15.14.050** requires preparation of an erosion and sediment control plan as a condition of approval for issuance of a construction or grading permit. Section 15.14.050 also requires implementation of construction BMPs to ensure that the discharge of pollutants from the site will be effectively prohibited and will not cause or contribute to an exceedance of water quality standards. Section 15.14.050 specified that construction and grading activities be undertaken in compliance with NPDES and City requirements.

- **Section 15.14.060** requires implementation of operational BMPs on all sites that have the potential to discharge a pollutant to the City's MS4.

4.10.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to hydrology and water quality if it would:

Threshold 4.10.1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;

Threshold 4.10.2: Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

Threshold 4.10.3: 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 storm water drainage systems or provide substantial additional sources of polluted runoff; or

(iv) Impede or redirect flood flows;

Threshold 4.10.4: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or

Threshold 4.10.5: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

4.10.6 Project Impacts

Please refer to Section 4.10.9 for full text description of the regulatory compliance and/or mitigation measures referenced in the analysis below.

Threshold 4.10.1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact.

Construction. The proposed project involves the demolition of the existing 144,906 sq ft, two-story office/industrial building and the construction and operation of a 35-foot-tall, 165,803 sq ft, tilt-up concrete industrial building. The project includes a gated truck loading area, truck and auto

parking spaces, and new landscaping throughout the site. The project Applicant also proposes to complete off-site improvements in order to enhance public safety and address concerns related to large truck turning movements at five intersections within Lake Forest. Construction activities would result in the disturbance of 8.4 acres of soil. Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked, and they have the potential to be transported via storm water runoff into receiving waters.

Because construction of the proposed project would disturb greater than 1 acre of soil, the project is subject to the requirements of the Construction General Permit (CGP), which requires preparation of an SWPPP and implementation of construction BMPs during construction activities, as specified in **Regulatory Compliance Measure (RCM) WQ-1**. Construction BMPs would include, but are not limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site as well as Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. In addition, the proposed project must comply with Article XIII of Chapter 8.30 of the City's Municipal Code, which requires the preparation and submission of an Erosion Control Plan and that all grading be undertaken in accordance with BMPs for pollution prevention adopted by the City as detailed in **RCM WQ-2**.

According to the Geotechnical Investigation completed for the proposed project, groundwater was not encountered during explorations to depths of more than 30 feet below the existing grade. Therefore, the groundwater table is expected to exist at a depth in excess of 30 feet at the project site. The proposed project would require excavation to a maximum depth of 6 feet below the existing grade. Therefore, it is not anticipated that groundwater dewatering would be required during construction of the proposed project.

Adherence with the CGP and the City of Lake Forest Municipal Code, including implementation of the required SWPPP, Construction BMPs, and the Erosion Control Plan, would ensure construction impacts related to surface water quality standards, waste discharge requirements, and surface water quality would be less than significant.

Operation. Pollutants of concern from long-term project operations include suspended solids/ sediment, nutrients, pathogens (bacteria/virus), pesticides, oil and grease, heavy metals, toxic organic compounds, and trash and debris. The proposed project would include three linear modular wetland systems and three underground detention systems to reduce site discharge during the 100-year, 24-hour peak runoff rate by 47 percent in accordance with City requirements to reduce flows and associated erosion potential in Serrano Creek. The proposed project would also be required to prepare a Final WQMP, as detailed in **RCM WQ-3**, consistent with the requirement of the City's MS4 permit, because the project consists of significant redevelopment that would replace 5,000 sq ft or more of impervious surface. The Final WQMP would specify the Site Design, Source Control, LID, and Treatment Control BMPs that would be implemented to

capture, treat, and reduce pollutants of concern in storm water runoff. Additionally, as specified in **RCM WQ-4,** a Final Hydrology Study would be required to be prepared, which would demonstrate that the final design of the proposed project meets the hydromodification requirements and that, with implementation of detention facilities and linear modular wetland systems, the peak flow of stormwater runoff in the proposed condition would be less than existing conditions. Therefore, compliance with the requirements of the City and the North Orange County MS4 Permit, as detailed in **RCM WQ-3** and **RCM WQ-4** would ensure that operation impacts to water quality would be less than significant.

Because the proposed project would be required to comply with existing regulations, including the CGP, the City of Lake Forest Municipal Code, and the North Orange County MS4 Permit, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Impacts would be less than significant, and no mitigation is required.

Threshold 4.10.2: 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?

Less Than Significant Impact.

Construction. As discussed under Threshold 4.10.1 above, the Geotechnical Investigation completed for the proposed project indicates that groundwater was not encountered during explorations to depths of more than 30 feet below the existing grade. Therefore, the groundwater table is expected to exist at a depth in excess of 30 feet at the project site. The proposed project would require excavation to a maximum depth of 6 feet below the existing grade. Therefore, it is not anticipated that groundwater dewatering would be required during construction of the proposed project and construction of the proposed project would not substantially decrease groundwater supplies.

Operation. Water service for the proposed project would be provided by Irvine Ranch Water District (IRWD). IRWD water supplies consist of imported water, local groundwater, recycled water, and local surface water. Treated and untreated imported surface water is purchased from the Metropolitan Water District of Southern California (Metropolitan) through the Municipal Water District of Orange County (MWDOC). Potable and non-potable groundwater supplies are extracted from both the Main Orange County Groundwater Basin and the Irvine Sub-Basin. IRWD's local surface water sources are the drainage tributary areas to the Irvine Lake and Harding Canyon Reservoir. Recycled water production at IRWD's Michelson and Los Alisos Water Recycling Plants are primary supplies to IRWD's non-potable distribution system. Therefore, water supply for operation of the proposed project would likely involve the use of both surface and groundwater sources for use in restrooms and for irrigation of landscaped areas. According to water demand factors included in the California Emissions Estimator Model (CalEEMod) emissions model, the proposed project is estimated to demand approximately 107,410 gallons per day or 120 acre feet per year of water. The 2020 Urban Water Management Plan indicates the IRWD has sufficient water supplies to meet water demands through 2045, including during multiple dry

years. Therefore, the proposed project's water needs would not contribute to a substantial depletion of groundwater supplies (IRWD 2021).

Development of the proposed project would result in an increase in impervious surfaces on the project site from approximately 6.8 to 7.5 acres, which could decrease on-site infiltration[2]. According to the *Infiltration Report* (Southern California Geotechnical 2021b) completed for the proposed project, infiltration rates at the project site range from 0.1 to 0.3 inch per hour due to the presence of dense engineered fill soils comprised of silty sands and clayey sands that possess very poor infiltration characteristics. Therefore, the project site is not a significant source of groundwater recharge, and the increase in impervious surface area that would result from the development of the proposed project would not significantly decrease groundwater supplies or interfere with groundwater recharge in a manner that may impede sustainable groundwater management.

For the reasons listed above, impacts related to the decrease of groundwater supplies or interference with groundwater recharge would be less than significant, and no mitigation is required.

Threshold 4.10.3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact.

Construction. As previously discussed, storm water from the project site drains to various curb inlets where it enters storm drains. During construction activities, more than 1 acre of soil would be disturbed. Soil would be exposed and drainage patterns temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As required by **RCM WQ-1,** the CGP requires the preparation of an SWPPP to identify construction BMPs to be implemented as part of the proposed project to reduce impacts on water quality during construction, including those impacts associated with soil erosion and siltation. In addition, the proposed project must comply with Article XIII of Chapter 8.30 of the City's Municipal Code, which requires the preparation and submission of an Erosion Control Plan and that all grading be undertaken in accordance with BMPs for pollution prevention, as detailed in **RCM WQ-2**. With compliance with the requirements in the CGP and City of Lake Forest Municipal Code and implementation of construction BMPs, construction impacts related to on- or off-site erosion or siltation would be less than significant.

Operation. After the completion of project construction, the proposed project would not significantly alter the existing drainage pattern of the site. However, operation of the proposed

[2] Street easements within the 8.83-acre project site have been excluded from the project's drainage area. Therefore, for the purposes of the Water Quality analysis within this EIR, the project's drainage area totals 8.4 acres.

project would result in an increase in impervious surfaces on the project site from approximately 6.8 to 7.5 acres, which would result in a net increase in stormwater runoff that could lead to downstream erosion in receiving waters. However, as discussed above, the three linear modular wetland systems and three underground detention systems included in the project's design would be used for stormwater control and treatment in compliance with the requirements of the North Orange County MS4 Permit as detailed in **RCM WQ-3** and **RCM WQ-4**. With incorporation of LID techniques and hydromodification requirements as required by the North Orange County MS4 Permit, operational impacts related to on- or off-site erosion or siltation would be less than significant.

For the reasons listed above, impacts related to on- or off-site erosion or siltation would be less than significant, and no mitigation is required.

Threshold 4.10.3: 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:

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less Than Significant Impact. Development of the proposed project would result in an increase in impervious surfaces on the project site from approximately 6.8 acres to 7.5 acres, which could have the potential to increase the volume and rate of stormwater runoff discharged from the project site. However, as previously discussed, three linear modular wetland systems and three underground detention systems included in the project's design would be used for stormwater control and treatment in compliance with the requirements of the North Orange County MS4 Permit, as detailed in **RCM WQ-3** and **RCM WQ-4**. The proposed drainage facilities and BMPs needed to accommodate stormwater runoff would be appropriately sized to detain stormwater runoff so that on-site flooding would not occur. Therefore, with implementation of LID techniques and hydromodification requirements as required by the North Orange County MS4 Permit, the proposed project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off site. Impacts would be less than significant, and no mitigation is required.

Threshold 4.10.3: 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:

iii. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact.

Stormwater Drainage System Capacity. Under existing conditions, stormwater from the project site drains to various curb inlets where it enters storm drains that discharge to Serrano Creek, which flows into San Diego Creek Reach 2, which flows into San Diego Creek Reach 1, which flows into Newport Bay, which discharges into the Pacific Ocean (Kier & Wright 2023a). The proposed

project would include three linear modular wetland systems and three underground detention systems to reduce site discharge during the 100-year, 24-hour peak runoff rate by 47 percent. The proposed drainage facilities would be designed in compliance with the North Orange County MS4 Permit as detailed in **RCM WQ-3** and **RCM WQ-4**. The proposed drainage facilities and BMPs needed to accommodate stormwater runoff would be appropriately sized to retain and gradually release stormwater runoff such that drainage facility capacity would not be exceeded during a design storm. Therefore, the proposed project would not result in an exceedance of planned or existing stormwater drainage systems and impacts would be less than significant.

Polluted Runoff. As discussed in Section 4.10.1, pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals, and each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. Drainage patterns would be temporarily altered during grading and other construction activities, and construction-related pollutants could be spilled, leaked, or transported via storm runoff into adjacent drainages and downstream receiving waters. However, as previously discussed and as detailed in **RCM WQ-1**, the proposed project would be required to comply with the requirements set forth by the CGP, including preparation of an SWPPP, which would specify BMPs to be implemented to control the discharge of pollutants in stormwater runoff as a result of construction activities. In addition, the proposed project must comply with Article XIII of Chapter 8.30 of the City's Municipal Code, which requires the preparation and submission of an Erosion Control Plan and that all grading be undertaken in accordance with BMPs for pollution prevention, as detailed in **RCM WQ-2**. Therefore, construction-related impacts would be less than significant, and no mitigation is required.

Expected pollutants of concern from long-term operations include suspended solids/sediment, nutrients, pathogens (bacteria/virus), pesticides, oil and grease, heavy metals, toxic organic compounds, and trash and debris. As previously discussed, and as detailed in **RCM WQ-3** and **RCM WQ-4**, compliance with the North Orange County MS4 Permit, the implementation of LID techniques, and the incorporation of operational BMPs to target pollutants of concern, would ensure that the proposed project would not discharge substantial sources of polluted runoff from the project site. Operation-related impacts would be less than significant, and no mitigation is required.

Threshold 4.10.3: 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:

iv. Impede or redirect flood flows?

No Impact. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06059C0316J, the project site is located in Zone X, which is identified as an area of minimal flood hazard (FEMA 2009). The proposed project would not alter the topography of the project site, which is relatively flat, and would not substantially alter drainage patterns. Because the proposed project would not place improvements and structures directly within a 100-year floodplain, the proposed project would not impede or redirect flood flows, and there would be no impact. No mitigation is required.

Threshold 4.10.4: In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

Less Than Significant Impact.

Flooding. According to FEMA FIRM No. 06059C0316J, the project site is located in Zone X, which is identified as an area of minimal flood hazard. Therefore, the proposed project would not risk release of pollutants due to project inundation due to flood hazard.

Tsunami. The project site is over 10 miles northeast of the Pacific Ocean at an elevation of approximately 700 feet above mean sea level. Based on the distance from the Pacific Ocean, the project site is not located in a tsunami hazard zone and therefore would not be susceptible to impacts associated with a tsunami.

Seiches. Seiches are waves created in an enclosed body of water (e.g., a bay, lake, or harbor) that go up and down or oscillate and do not progress forward like standard ocean waves. Limited isolated damage to adjacent and down-slope structures has been observed from seiches occurring in swimming pools and in small shallow lakes and ponds. Manmade lakes within Lake Forest are shallow, with limited surface areas, and would not generate devastating seiches (City of Lake Forest 2019). There are no nearby enclosed bodies of water in the vicinity of the project site. Therefore, the proposed project would not risk release of pollutants due to project inundation due to seiche.

Dam Inundation. According to the City of Lake Forest General Plan 2040, there are no dam inundation areas in the City of Lake Forest. Therefore, the proposed project would not risk release of pollutants due to dam inundation.

The project site is not located within a flood, tsunami, seiche, or dam inundation area. Therefore, implementation of the proposed project would not result in the release of pollutants from a flood, dam inundation, tsunami, or seiche. Impacts would be less than significant, and no mitigation is required.

Threshold 4.10.5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The proposed project is within the jurisdiction of the Santa Ana RWQCB. The Santa Ana RWQCB adopted a Basin Plan (January 1995, with amendments effective on or before June 2019) that designates beneficial uses for all surface and groundwater within their jurisdiction and establishes the water quality objectives and standards necessary to protect those beneficial uses. As previously discussed, the proposed project would comply with existing NPDES permit requirements, including the CGP and North Orange County MS4 Permit, and would implement construction and operational BMPs to reduce pollutants of concern in stormwater runoff as detailed in **RCM WQ-1, RCM WQ-2, RCM WQ-3,** and **RCM WQ-4**. Compliance with these regulatory requirements would ensure that the proposed project would not degrade or alter water quality, cause the receiving waters to exceed the water quality objectives, or impair the beneficial use of receiving waters. As such, the proposed project would not result in water quality impacts that would conflict

with the Basin Plan. Construction and operational impacts related to a conflict with the Basin Plan would be less than significant.

The Sustainable Groundwater Management Act (SGMA), which was enacted in September 2014, requires governments and water agencies of high- and medium-priority basins to halt overdraft of groundwater basins. The SGMA requires the formation of local Groundwater Sustainability Agencies (GSAs), which are required to adopt Groundwater Sustainability Plans (GSPs) to manage the sustainability of the groundwater basins. The project site is in the Coastal Plain of the Orange County Groundwater Basin, which the California Department of Water Resources designates as a medium priority basin (DWR 2020). As such, the preparation of a GSP is required for the Coastal Plain of the Orange County Groundwater Basin. The GSAs identified for the Coastal Plain of the Orange County Groundwater Basin are Orange County Water District (OCWD), the City of La Habra, and the IRWD.

On January 1, 2017, the OCWD, the City of La Habra, and the IRWD submitted the Basin 8-1 Alternative to the California Department of Water Resources. The Basin 8-1 Alternative is an acceptable alternative to a GSP and includes elements that are described in the California Water Code (Sections 10727.2, 10727.4, and 10727.6) that are be included in GSPs. The Basin 8-1 Alternative includes four management areas consisting of the La Habra-Brea Management Area, the OCWD Management Area, the South East Management Area, and the Santa Ana Canyon Management Area. The project site is located within the South East Management Area (OCWD 2017).

The only groundwater production in the South East Management Area has historically been from six wells located in Lake Forest, within the IRWD service area. Currently only one well is active with an average production of about 125 acre-feet per year over the last 10 years. Imported water from the Metropolitan Water District is the primary water supply source for the entire South East Management Area. Groundwater production within the South East Management Area represents less than 2 percent of the potable water supply for IRWD's Lake Forest area and less than 0.2 percent of IRWD's 2015 potable supply. Despite several more recent years of significant drought, groundwater production in this area has generally remained the same. Due to the relatively low yield of the aquifer in the South East Management Area, groundwater production is expected to remain a relatively insignificant water supply source for the area. The sustainability goal for the South East Management Area is to recognize that it is a small part of the larger OCWD management area whose groundwater levels and water quality will be monitored to assure that conditions do not lead to significant and unreasonable lowering of groundwater levels, reduction in storage, water quality degradation, inelastic land subsidence or unreasonable adverse effect on surface water resources (OCWD 2017).

As previously discussed, the Geotechnical Investigation completed for the proposed project indicates the groundwater table is expected to exist at a depth in excess of 30 feet at the project site. The proposed project would require excavation to a maximum depth of 6 feet below the existing grade. Therefore, it is not anticipated that groundwater dewatering would be required during construction of the proposed project. Therefore, construction of the proposed project would not conflict with or obstruct implementation of the GSP.

As discussed in Section 4.10.2, potable water would be partially obtained from groundwater. However, the 2020 Urban Water Management Plan indicates the IRWD has sufficient water supplies to meet water demands through 2045, including during multiple dry years. Additionally, the GSA has

developed management actions to ensure that future development will not significantly impact groundwater resources. As described above, infiltration rates at the project site range from 0.1 to 0.3 inch per hour due to the presence of dense engineered fill soils comprised of silty sands and clayey sands that possess very poor infiltration characteristics. Therefore, the project site is not a significant source of groundwater recharge. As previously discussed, and as detailed in **RCM WQ-3,** compliance with the North Orange County MS4 Permit, the implementation of LID techniques, and the incorporation of operational BMPs to target pollutants of concern would ensure that the proposed project would not discharge substantial sources of polluted runoff from the project site. For these reasons, the proposed project would not conflict with or obstruct the implementation of a sustainable groundwater management plan. Therefore, construction and operational impacts related to conflicts with or obstruction of water quality control plans or sustainable groundwater management plans would be less than significant, and no mitigation is required.

4.10.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for hydrology and water quality.

For the cumulative analysis related to hydrology and water quality, the cumulative projects being considered include the related projects discharging to the same watersheds as the proposed project (i.e., the San Diego Creek and Newport Bay Watersheds). The related projects within the San Diego Creek and Newport Bay Watersheds include Related Project Nos. 1, 2, 3, 4, 6, 7, 9, 10, 11, 12, and 13. (Please refer to Table 4.A and Figure 4-1 in Section 4.0 of this Draft EIR for the descriptions and locations of these related projects.) Related Project Nos. 5 and 8 are within the Aliso Creek Watershed and are not considered in this analysis because they do not have the potential to contribute to the hydrology- and water quality-related impacts of the proposed project to result in cumulative impacts. Each of these related projects could potentially increase the volume of stormwater runoff and contribute to pollutant loading in stormwater runoff reaching both the City's storm drain system and the San Diego Creek and Newport Bay Watersheds, thereby resulting in cumulative impacts to hydrology and surface water quality.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would not alter drainage patterns in a manner that would impede or redirect flood flows. Because the proposed project would not impede or redirect flood flows as a result of project-related changes to existing drainage patterns, it would not contribute to cumulatively considerable impacts on flood flows. Therefore, there would be no cumulatively considerable impact on flood flows resulting from changes to drainage patterns, and no mitigation is required.

As detailed in this section, new development and redevelopment can result in increased stormwater runoff and increased urban pollutants in stormwater runoff from project sites. Each related project

must include BMPs to reduce impacts to water quality and hydrology in compliance with local ordinances and plans adopted to comply with requirements of the various NPDES permits including the CGP, the North Orange County MS4 Permit, and the City of Lake Forest Municipal Code. The preparation and approval of a SWPPP, erosion and sediment control plans (for construction), and a WQMP (for operation) would be required for each related project to determine appropriate BMPs to minimize water quality impacts. In addition, the preparation and approval of a hydrology study would be required to determine the hydrologic control required to minimize increases in runoff from each site so they do not exceed existing conditions or result in hydromodification impacts. In addition, the City's Public Works Department reviews all development projects on a case-by-case basis to ensure that sufficient local and regional drainage capacity is available.

Each related project must consider impaired receiving waters and TMDLs for receiving waters. The TMDL program is designed to identify all constituents that adversely affect the beneficial uses of water bodies and then identify appropriate reductions in pollutant loads or concentrations from all sources so that the receiving waters can maintain/attain the beneficial uses in the Basin Plan. Thus, by complying with TMDLs, a project's contribution to overall water quality improvement in the San Diego/Newport Bay Watershed in the context of the regulatory program is designed to account for cumulative impacts.

Regional programs and BMPs such as TMDL programs and the MS4 Permit Program have been designed under an assumption that the San Diego Creek Watershed and Newport Bay Watershed would continue their pattern of urbanization. The regional control measures contemplate the cumulative effects of proposed development. The proposed project would be required to comply with the requirements of the CGP and the North Orange County MS4 Permit and implement construction and operational BMPs to reduce pollutants in stormwater runoff. Compliance with these regional programs and permits constitutes compliance with programs intended to address cumulative water quality impacts. As stated above, each related project would be required to develop a SWPPP, erosion and sediment control plans, a WQMP, and a hydrology study, and would be evaluated individually to determine appropriate BMPs and treatment measures to reduce impacts to surface water quality and hydrology. Because the proposed project and other related projects would comply with applicable NPDES requirements and would include BMPs to reduce the volume of stormwater runoff and pollutants of concern in stormwater runoff, the cumulative hydrology and water quality impacts of the proposed project and the related projects would be less than significant. Therefore, the proposed project would not contribute to a cumulatively considerable impact related to hydrology and water quality. Therefore, there would be no cumulatively significant impacts on hydrology and water quality, and no mitigation is required.

4.10.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to hydrology and water quality.

4.10.9 Regulatory Compliance Measures and Mitigation Measures

4.10.9.1 Regulatory Compliance Measures

The following regulatory compliance measures are required for the proposed project:

RCM WQ-1 **Construction General Permit.** Prior to the issuance of a grading permit, the Construction Contractor shall obtain coverage under the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ, NPDES No. CAS000002) (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including a Notice of Intent for coverage under the permit to the SWRCB via the Stormwater Multiple Application and Report Tracking System (SMARTs). The Construction Contractor shall provide the Waste Discharge Identification Number (WDID) to the Lake Forest Public Works Director, or designee, to demonstrate proof of coverage under the Construction General Permit. Project construction shall not be initiated until a WDID is received from the SWRCB and is provided to the City, or designee.

A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared by a Qualified SWPPP Developer in accordance with the requirements of the Construction General Permit and submitted vis SMARTs. These include: Best Management Practices (BMPs) for erosion and sediment control, site management/housekeeping/waste management, management of non-storm water discharges, run-on and runoff controls, and BMP inspection/maintenance/repair activities. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association's Stormwater Best Management Handbook: Construction.

The SWPPP shall include a construction site monitoring program that identifies requirements for dry weather visual observations of pollutants at all discharge locations, and as appropriate (depending on the Risk Level), sampling of the site effluent and receiving waters. A Qualified SWPPP Practitioner shall be responsible for implementing the BMPs at the site and performing all required monitoring and inspection/maintenance/repair activities.

Upon completion of construction and stabilization of the site, a Notice of Termination shall be submitted via SMARTs.

RCM WQ-2 **City of Lake Forest Municipal Code.** Prior to the issuance of a grading permit, the Project Applicant shall submit and obtain approval of an Erosion Control Plan in compliance with Article XIII of Chapter 8.30 of the City of Lake Forest Municipal Code from the Lake Forest Public Works Director, or designee. The Erosion Control Plan shall be submitted to the City of Lake Forest Building Official for approval by September 15 each year for projects under a grading permit. All grading shall be undertaken in accordance with the BMPs for pollution prevention adopted by the City, the City's NPDES Permit regulating discharges into and from its Municipal Separate Storm Sewer System (MS4), the Drainage Area Management Plan (DAMP), and any other conditions, requirements and water quality management plans adopted by the City. Additionally, the project Applicant shall adhere to the erosion

and sediment control and water quality system maintenance requirements listed in Section 8.30.154 of the Lake Forest Municipal Code.

RCM WQ-3 **Final Water Quality Management Plan.** Prior to issuance of a grading permit, the project Applicant shall submit and obtain approval of a Final Water Quality Management Plan (WQMP) to the Lake Forest Public Works Director, or designee. The project shall implement project design features identified in the Final WQMP. The Final WQMP shall demonstrate that any proposed on-site development plan includes BMPs for source control, pollution prevention, site design, low impact development (LID) implementation, and structural treatment control. BMPs shall be designed and implemented to address 303(d) listed pollutants and retain the project site's **minimum** design capture volume and hydromodification volume to ensure that post-development storm water runoff volume or time of concentration does not exceed pre-development storm water runoff by more than 10 percent of the 2-year peak flow in accordance with the Santa Ana Regional Water Quality Control Board Order Number R8-2009-0030, NPDES Permit No. CAS618030, as amended by Order No. R8-2010-0062, also known as the North Orange County MS4 permit. The proposed LID BMPs specified in the Final WQMP shall be incorporated into the grading and development plans submitted to the City of Lake Forest for review and approval. Periodic maintenance of any required BMPs and landscaped areas during project occupancy and operation shall be in accordance with the schedule outlined in the Final WQMP.

RCM WQ-4 **Final Hydrology and Hydraulic Analyses.** Prior to issuance of grading permits, the project Applicant shall submit and obtain approval of the Final Hydrology and Hydraulic Analyses to the Lake Forest Director of Public Works, or designee, and the Orange County Flood Control District (OCFCD). The Final Hydrology and Hydraulic Analyses shall be prepared consistent with the requirements of the Orange County Hydrology Manual (Orange County Environment Agency 1986) and Orange County Hydrology Manual Addendum No. 1 (Orange County Environment Agency 1996), or subsequent guidance manuals. The Final Hydrology and Hydraulic Analyses shall confirm that the on-site storm drains, on-site detention basins, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the peak flow of stormwater discharge from the project site is less than existing conditions. The Final Hydrology and Hydraulic Analyses shall also demonstrate that the detention facilities meet the hydromodification requirements of the *Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the Incorporated Cities of Orange County within the Santa Ana Region Areawide Urban Storm Water Runoff Orange County* (North Orange County MS4 Permit), Order R8-2009-0030, NPDES No. CAS618030 (as amended by Order No. R8-2010-0062). In compliance with the hydromodification requirements, the post-project runoff discharge volume for the 2-year storm shall not exceed that of the predevelopment condition by more than 5 percent, and the time of concentration of post-development runoff for the 2-year storm event shall not be greater than 5 percent less than that of the predevelopment condition. The Director of the City of

Lake Forest Public Works Department, or designee, shall ensure that the drainage facilities specified in the Final Hydrology and Hydraulic Analyses are incorporated into the final project design.

4.10.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to hydrology and water quality, and no mitigation is required.

4.10.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to hydrology and water quality.

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4.11 LAND USE AND PLANNING

This section evaluates the potential impacts to land use and planning from implementation of the proposed project. This section is based in part on the following:

- *City of Lake Forest General Plan* (City of Lake Forest 2020);
- *City of Lake Forest General Plan Land Use Map* (City of Lake Forest 2023);
- *City of Lake Forest Zoning Code* (City of Lake Forest 2023); and
- *City of Lake Forest Zoning Map* (City of Lake Forest 2023).

In addition, pursuant to *State CEQA Guidelines* Section 15125(d), this Draft Environmental Impact Report (EIR) evaluates the proposed project's consistency with other applicable planning documents as they relate to specific topical sections within Chapter 4.0 of this Draft EIR.

4.11.1 Scoping Process

The Notice of Preparation (NOP) for the proposed project was published in March 2024, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the Initial Study NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. Twenty-six comment letters included comments related to land use and planning. These comments pertain to concerns about incompatibility with existing surrounding land uses and the Lake Forest 2040 General Plan and zoning.

4.11.2 Methodology

The analysis of potential land use and planning impacts is based on assessing the context of the proposed project (i.e., its geographic location and compatibility with surrounding development) and the proposed project's consistency with relevant land use plans, policies, or regulations contained in applicable planning documents adopted by the City and other agencies for the purpose of avoiding or mitigating an environmental effect that could cause a significant environmental impact. A project's inconsistency with a plan or policy is only considered significant if such inconsistency would result in a significant physical environmental impact.[1] In other words, a policy or program conflict is not in and of itself considered a significant environmental impact. An inconsistency between the proposed project and an applicable plan is a legal determination that may or may not indicate the likelihood of an environmental impact.

4.11.3 Existing Environmental Setting

4.11.3.1 On-Site Land Uses

The project site is located at 26200 Enterprise Way in the north-central portion of Lake Forest in Orange County, California. The 8.83-acre project site (Assessor's Parcel Number [APN] 610-401-06) is developed with an existing 144,906-square-foot (sq ft), two-story tilt-up office/industrial building, which was previously used as an office, manufacturing, and research testing facility by Panasonic

[1] *State CEQA Guidelines* Section 15382.

Avionics, but is currently vacant. The project site also consists of surface parking and associated landscaping.

The project site is generally flat; however, there are north- and west-facing slopes along the eastern and southern boundaries of the site. These slopes ascend 10 to 15 feet from the project site to the adjacent property. A concrete-lined drainage swale is near the midpoint of the slope. Vegetation covers the remaining areas of the slopes.

Access to the project site is currently provided via two driveways on Enterprise Way and a shared drive aisle that connects to the adjacent property at the northeast corner of the site.

4.11.3.2 Offsite Land Uses

As shown on Figure 3-2, Project Location, in Chapter 3.0, Project Description, the areas surrounding the project site consist of a mix of land uses, including industrial and residential. The project site is bordered to the north, south, and west by existing industrial buildings that include a mix of permitted uses, including office, manufacturing, and warehouse uses. The Meadows Residential Development (formerly the Nakase Nursery site) is to the northeast/east of the project site. Most of the Meadows Residential Development is constructed and occupied, but some residential buildings are still under construction. The existing on-site and adjacent off-site land uses are summarized in Table 4.11.A and are identified on previously referenced Figure 3-2.

Table 4.11.A: Existing On-Site and Adjacent Off-Site Land Uses and Land Use Designations

Location	Current Land Use	General Plan Land Use Designation	Zoning
On-site	Industrial/Office Building	Light Industrial	Pacific Commercentre Planned Community, LI – Light Industrial
North	Industrial/Office, single-family residential, neighborhood park	Light Industrial, Community Park/ Open Space, Low-Medium Density Residential	Pacific Commercentre Planned Community, LI – Light Industrial The Meadows Planned Community, EH/BT-Estate Homes/Backyard Towns and NP-Neighborhood Park
South	Industrial/Office	Light Industrial	Pacific Commercentre Planned Community, LI – Light Industrial
East	Industrial/Office, single-family residential	Light Industrial, Low-Medium Density Residential	Pacific Commercentre Planned Community, LI – Light Industrial The Meadows Planned Community, EH/BT-Estate Homes/Backyard Towns
West	Industrial/Office	Light Industrial	Pacific Commercentre Planned Community, LI – Light Industrial

4.11.3.3 General Plan Land Use and Zoning Designations

The project site currently has a Lake Forest General Plan land use designation of Light Industrial. The Light Industrial designation is intended to provide for a variety of light industrial uses. Permitted uses include wholesale businesses, light manufacturing and processing, research and development uses,

warehousing and storage, distribution and sales, high technology production, ancillary retail sales, and related uses. Other uses that are determined to be compatible with the primary uses may also be allowed.

The project site is located within the Pacific Commercentre Planned Community and has a zoning designation of LI – Light Industrial. The LI Zoning District is intended to provide for a broad range of industrial uses as specified in City Municipal Code Section 9.72.090 (Non-Residential Land Use Matrix), column "I". Permitted uses include, but are not limited to, a variety of office, manufacturing, and warehouse uses.

4.11.4 Regulatory Setting

Federal, State, and local regulations and programs related to land use and planning that are applicable to the proposed project are described below.

4.11.4.1 Federal Regulations

There are no federal regulations that apply to the proposed project with respect to land use and planning.

4.11.4.2 State Regulations

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 including the following seven elements in their general plan: land use, circulation, housing, conservation, open space, noise, and safety. Cities and counties in the South Coast Air Quality Management District (SCAQMD) must also address air quality in their general plans. Cities and counties that have identified disadvantaged communities must also address environmental justice in their general plans, including air quality.[2]

Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375). 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. This statute requires California's regional planning agencies to include a Sustainable Communities Strategy (SCS) or an Alternative Planning Strategy (APS)[3] in their Regional Transportation Plans (RTP). The SCS provides a

[2] Senate Bill 1000, adopted in 2016, requires both cities and counties that have disadvantaged communities to incorporate environmental justice (EJ) policies into their general plans, either in a separate EJ element or by integrating related goals, policies, and objectives throughout the other elements. This update, or revision if the local government already has EJ goals, policies, and objectives, must happen "upon the adoption or next revision of two or more elements concurrently on or after January 1, 2018."

[3] If the emissions reduction targets cannot be met through the Sustainable Communities Strategy, an Alternative Planning Strategy would be prepared that demonstrates how the reduction targets would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

plan for meeting the regional emissions reduction targets established by the California Air Resources Board (CARB). 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 Regional Transportation Plan/Sustainable Communities Strategy (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 and 2024–2050 RTP/SCS is discussed in further detail below.

4.11.4.3 Regional Regulations

The project site is covered by several planning documents and programs that have varying degrees of regulation over use of the project site. The following paragraphs explain regional regulations, plans, and policies applicable to the project site that are analyzed in this EIR section.

Southern California Association of Governments (SCAG). As discussed above, regional planning in Orange, Los Angeles, Ventura, Riverside, San Bernardino, and Imperial Counties is conducted by SCAG. SCAG is also the federally designated Metropolitan Planning Organization (MPO) for these six counties. As the designated MPO, SCAG is mandated by the federal government to research and prepare plans for transportation, a growth forecast, hazardous waste, and air quality. The growth forecast serves as the foundation of these plans. Of the various plans adopted by SCAG, the Regional Comprehensive Plan and the 2020-2045 RTP/SCS and 2024–2050 RTP/SCS are relevant to the proposed project (SCAG 2022).

Regional Comprehensive Plan and Guide. In 2008, SCAG adopted the Regional Comprehensive Plan (RCP) for the purpose of providing a comprehensive strategic plan for defining and solving housing, traffic, water, air quality, and other regional challenges. The 2008 RCP has two primary objectives in implementing this strategic plan: (1) integrating transportation, land use, and air quality planning approaches, and (2) outlining key roles for public and private sector stakeholders to implement reasonable policies regarding transportation, land use, and air quality approaches. While the 2008 RCP outlines several policies to inform local decision-makers within the SCAG region with respect to policy and planning decisions, these policies are considered recommendations and are not mandated by law. With respect to land use policy, the 2008 RCP includes a Land Use and Housing chapter that aims to link land use and transportation planning decisions to the projected population and economic growth in the SCAG region. Specifically, the Land Use and Housing chapter of the 2008 RCP promotes sustainable planning for land use and housing in the SCAG region by maximizing the efficiency of the existing circulation network, providing a greater variety in housing types, promoting a diverse and growing economy, and protecting the existing natural environment.

Regional Transportation Plan/Sustainable Communities Strategy. SCAG adopted the 2024-2050 RTP/SCS on April 4, 2024. However, the CARB has not yet approved the 2024-2050 RTP/SCS. Therefore, this EIR evaluates the proposed project's consistency with both the 2020-2045 RTP/SCS and the more recent 2024-2050 RTP/SCS. The core vision of the 2020-2045 RTP/SCS and the 2024–2050 RTP/SCS is to better manage the existing transportation system through design

management strategies, integrate land use decisions and technological advancements, create complete streets that are safe to all roadway users, preserve the transportation system, and expand transit and foster development in transit-oriented communities. Both the 2020-2045 RTP/SCS and 2024–2050 RTP/SCS contain transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in the 2020-2045 RTP/SCS and the 2024–2050 RTP/SCS, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 19 percent by 2035 (compared to 2005 levels). Neither the 2020-2045 RTP/SCS nor the 2024–2050 RTP/SCS require that local general plans, specific plans, or zoning be consistent with the RTP/SCS but both plans provide incentives for consistency for governments and developers.

4.11.4.4 Local Regulations

City of Lake Forest General Plan 2040. The General Plan is a comprehensive plan intended to guide the physical development of the city and it serves as a blueprint for future growth and development. As a blueprint for the future, the plan contains policies and programs designed to provide decision-makers with a solid basis for decisions related to land use and development. The Land Use and Design Element of the Lake Forest General Plan 2040 includes the following goals, policies, and actions related to land use and planning:

Goal LU-1 Land Use Mix: A community with a balanced land use pattern that meets the City's long-term housing, employment, and civic needs.

Policy LU-1.1 Land Use Pattern: Promote an appropriate land use plan that fosters and enhances community livability and public health; supports economic development; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses.

Policy LU-1.4 Density and Intensity: Allow sufficient density and intensity to enable new development to support all required infrastructure, community facilities, and open space.

Policy LU-1.8 Consistent Standards: Require projects to adhere to the City's Municipal Code.

Goal LU-2 Compatible Development: A community where new development blends harmoniously into the existing neighborhood fabric.

Policy LU-2.1 Physical Characteristic Compatibility: Ensure that new development fits within the existing community setting and is compatible with surrounding land uses and public infrastructure availability.

Policy LU-2.4 Scale and Character: Ensure that the scale and character of new development is appropriate to the setting and intended use.

Policy LU-2.5 Visual Compatibility: Require new development projects achieve visual compatibility with surrounding development through building, site, or design techniques, such as landscaping and architectural design, to achieve visual compatibility.

Policy LU-2.7 Interface with Residential Areas: Promote compatibility of adjacent land uses along the interface of different residential density and non-residential intensity categories by paying special attention to buffers and transitional areas.

Policy LU-2.9 Code Enforcement: Require property owners to maintain homes, structures, and property in good condition; continue code enforcement activities that address nuisances that detract from the City's health, safety, and community image.

Action LU-2a: As part of the City's development review process, ensure that commercial projects are designed to be compatible with residential uses, including appropriate building massing and scale and minimization of impacts related to the operation of the use. Review of employment-generating projects should ensure that the following design concepts are addressed in projects that abut residential areas:

- Appropriate building scale and/or siting;
- Site design and noise-attenuating features to avoid exposure to excessive noise due to long hours of operation or inappropriate location of accessory structures;
- Site and structure design to avoid excessive glare or excessive impacts from light sources onto adjacent properties; and
- Site design to avoid unnecessary loss of community and environmental resources (archaeological, historical, ecological, recreational, etc.).

Action LU-2e: Continue to enforce the Zoning Ordinance and other ordinances to achieve the desired level of regulation.

Goal LU-3 Placemaking: A distinct community image and identity that promotes Lake Forest as a desirable place to live and do business.

Policy LU-3.5 Nonresidential Area Revitalization: Promote rehabilitation of older commercial and industrial properties and buildings to enhance their quality and competitive advantage.

Goal LU-4 Streetscapes: A community with streetscapes that enhance the economic vitality and overall visual quality of the City, support the circulation network, and encourage pedestrian-scale streets and patterns of activity.

Policy LU-4.3 Building Massing: Reduce the bulk and perceived size of large buildings by dividing their mass into smaller parts, stepping down to adjacent structures, recessing openings for doors/windows, and using pedestrian-scale features; single-plane massing is discouraged.

Policy LU-4.4 Building Footprint: Require and enforce appropriate residential and nonresidential development standards, including adequate building setbacks, to ensure that a building's footprint does not negatively affect adjacent uses or the visual quality of the area.

The Economic Development Element of the Lake Forest General Plan 2040 includes the following goals and policies related to land use and planning:

Goal ED-1 Economic Diversification: A City with a diverse economy that fosters fiscal sustainability.

Policy ED-1.1 Land Uses: Maintain land use policies that allow for a balanced variety of housing and business types.

Policy ED-1.2 Industry and Workforce: Pursue strategies that support the attraction and retention of diverse industries and a diverse workforce.

Policy ED-1.3 Revenue Sources: Pursue land use and business attraction and retention strategies that enhance the diversity of municipal revenue sources.

City of Lake Forest Municipal Code. Zoning is the division of a city into districts and the application of land use and development regulations specific to each district. The City of Lake Forest's Zoning Code is located in Title 9 of the Lake Forest Municipal Code. The City also has 10 Planned Communities that are part of the City's Zoning Code. Development in a Planned Community area is subject to compliance with the Planned Community text. Uses, structures, conditions, and situations that are not addressed in a Planned Community text, but are addressed in the Zoning Code, shall be governed by the Zoning Code. As such, the City's Zoning Code and Planned Community texts include use regulations and development standards, including but not limited to, zone-specific height limits, setback requirements, landscape requirements and parking regulations.

It is the intent of the City that the General Plan Land Use Element and the Zoning Code be consistent to ensure that long-term goals and objectives are implemented through land use regulations and other tools. The Zoning Code is a primary tool for implementing the City's General Plan. The project site is located within the Pacific Commercentre Planned Community and has a zoning designation of LI – Light Industrial. The LI Zoning District is intended to provide for a broad range of industrial uses as specified in City Municipal Code Section 9.72.090 (Non-Residential Land Use Matrix), column "I". Permitted uses include a variety of office, manufacturing, and warehouse uses.

4.11.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to land use and planning if it would:

Threshold 4.11.1: Physically divide an established community; or

Threshold 4.11.2: 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.

4.11.6 Project Impacts

Threshold 4.11.1: Would the project physically divide an established community?

No Impact. The physical division of an established community typically refers to the construction of a physical feature (e.g., an interstate highway or railroad tracks) or removal of a means of access (e.g., a local road or bridge) that would impair mobility within an existing community or between a community and outlying areas. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside the community.

The proposed project includes the demolition of an existing 144,906 sq ft, two-story office/industrial building and the construction and operation of a 35-foot-tall, 165,803 sq ft, two-story industrial building. Although the tenant has not been determined yet, the proposed project includes a mix of office (approximately 10,000 sq ft), manufacturing (up to 65,000 sq ft), and warehouse space (the remainder of the building square footage not otherwise utilized as office or manufacturing). A maximum of 23 usable dock high doors, a gated truck loading area, and up to 262 parking spaces for passenger vehicles would be provided for this proposed use. The project site is primarily surrounded by sites with the same zoning designation (i.e., LI), and the proposed project would be consistent with the type and intensity of development in the area. The project site is bordered by a residential community to the east; however, access to the residential community is provided via Bake Parkway and Rancho Parkway and there are no shared access roads with the proposed project or surrounding industrial park uses. Therefore, implementation of the proposed project would not physically divide the established residential community to the east. Furthermore, vehicular access to the project site would continue to be provided via existing driveways on Enterprise Way and a shared drive aisle that connects to the adjacent property at the northeast corner of the site. The proposed project would not require the construction of any new infrastructure that would divide an established community and would not remove any means of access to the community. Therefore, the proposed project would have no impact related to physically dividing an established community, and no mitigation is required.

Threshold 4.11.2: 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?

No Impact. The main documents guiding development and regulating land uses in Lake Forest are the City's General Plan, Zoning Code, and Citywide Design Guidelines. The proposed project's relationship to these planning documents is described below. The proposed project's relationship to SCAG's Regional Comprehensive Plan and RTP/SCS is also discussed below.

City of Lake Forest General Plan. The General Plan is a comprehensive plan intended to guide the physical development of the city and it serves as a blueprint for future growth and development. As a blueprint for the future, the plan contains policies and programs designed to provide decision-makers with a solid basis for decisions related to land use and development. The project site currently has a Lake Forest General Plan land use designation of Light Industrial. The Light Industrial designation is intended to provide for a variety of light industrial uses. Allowable uses include wholesale businesses, light manufacturing and processing, research and development uses, warehousing and storage, distribution and sales, high technology production, ancillary retail sales, and related uses. Other uses that are determined to be compatible with the primary uses may also be allowed. The proposed project is an allowable use that is consistent with the Light Industrial land use designation.

Table 4.11.B provides a consistency analysis of the General Plan goals, policies, and actions that are applicable to the proposed project. As stated in Table 4.11.B, the proposed project would be consistent with the General Plan.

City of Lake Forest Zoning Ordinance. The City's Zoning Code is the primary implementation tool for its General Plan Land Use Element (2020) and the goals and policies therein. For this reason, the Zoning Map must be consistent with the General Plan Land Use Map. The project site has a zoning designation of Light Industrial (LI) in the Pacific Commercentre Planned Community, which is consistent with the Light Industrial General Plan land use designation. The property is regulated by the Pacific Commercentre Planned Community and the City's Zoning Code (Title 9 of the Lake Forest Municipal Code). The LI Zoning District is intended to provide for a broad range of industrial uses as specified in City of Lake Forest Municipal Code Section 9.72.090 (Non-Residential Land Use Matrix), column "I." Permitted uses include, but are not limited to, a variety of office, manufacturing, and warehouse uses. Pursuant to the zoning, the proposed industrial building is a permitted use and the construction of the proposed building requires a Site Development Permit.

Table 4.11.C provides a consistency analysis of the Site Development Standards from the LI zoning district in the Pacific Commercentre Planned Community and the Zoning Code that are applicable to the proposed project. As stated in Table 4.11.C, the proposed project would be consistent with all of the applicable development standards.

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Goal LU-1 Land Use Mix: A community with a balanced land use pattern that meets the City's long-term housing, employment, and civic needs.	
Policy LU-1.8 Consistent Standards: Require projects to adhere to the City's Municipal Code.	**Consistent.** As detailed in Table 4.11.C, the proposed project would be consistent with the City's Zoning Code and the Pacific Commercentre Planned Community. Therefore, the proposed project would not conflict with these General Plan Policies.
Goal LU-2 Compatible Development: A community where new development blends harmoniously into the existing neighborhood fabric.	
Policy LU-2.1 Physical Characteristic Compatibility: Ensure that new development fits within the existing community setting and is compatible with surrounding land uses and public infrastructure availability.	**Consistent.** The proposed industrial building is located within the Pacific Commercentre Planned Community. The Pacific Commercentre Planned Community was developed as a master planned industrial business park with local streets providing internal circulation. The buildings in the Planned Community include a mix of warehouse, distribution, manufacturing, research and development and offices. The proposed industrial building is consistent with the type, scale, and intensity of the existing industrial development in the Pacific Commercentre Planned Community. The proposed project includes the replacement of an existing 2-story concrete tilt-up industrial building with a new 2-story concrete tilt-up industrial building. The subject site is adjacent to the Meadows Residential Community to the northeast/east. The project site is not connected to the Meadows Residential Community by any streets or walkways. Furthermore, a landscape buffer separates the Meadows Residential Community and the industrial area. The proposed project includes the installation of additional landscaping and mature trees along the northeastern corner of the project site, adjacent to the Meadows Community. This new landscaping will further reduce the visibility of the industrial site as viewed from the Meadows Community. Furthermore, the building was designed so that the truck dock and loading area of the proposed building is oriented to the southeast (not facing the residential properties), is located over 200 feet away from the nearest residential property line, and would not be readily visible from the residences. As such, the new proposed building is compatible with the surrounding land uses. As detailed in Sections 4.13 Noise, 4.1 Aesthetics, and 4.3 Air Quality, the proposed project would not result in excessive noise, smoke, dust, light or glare that would impact the nearby residences. The overall building treatment and façade is compatible with the existing architecture of the industrial buildings
Policy LU-2.2 Sensitive Uses: Locate residences away from areas of excessive noise, smoke, or dust and ensure that adequate mitigation measures, including buffers or transitional uses, are made to ensure the health and well-being of existing and future residents.	
Policy LU-2.4 Scale and Character: Ensure that the scale and character of new development is appropriate to the setting and intended use.	
Policy LU-2.5 Visual Compatibility: Require new development projects achieve visual compatibility with surrounding development through building, site, or design techniques, such as landscaping and architectural design, to achieve visual compatibility.	
Policy LU-2.7 Interface with Residential Areas: Promote compatibility of adjacent land uses along the interface of different residential density and non-residential intensity categories by paying special attention to buffers and transitional areas.	
Action LU-2a: As part of the City's development review process, ensure that commercial projects are designed to be compatible with residential uses, including appropriate building massing and scale and minimization of impacts related to the operation of the use. Review of employment-generating projects should ensure that the following design concepts are addressed in projects that abut residential areas: • Appropriate building scale and/or siting; • Site design and noise-attenuating features to avoid exposure to excessive noise due to long hours of operation or inappropriate location of accessory structures; • Site and structure design to avoid excessive glare or excessive impacts from light sources onto adjacent properties; and • Site design to avoid unnecessary loss of community and environmental resources (archaeological, historical, ecological, recreational, etc.).	

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Action LU-2b: As part of the City's development review process, ensure that new developments are designed to minimize glare and light impacts onto adjacent properties.	in the Pacific Commercentre Planned Community. The proposed building would be constructed of architecturally enhanced tilt-up concrete panels and would be painted different shades of gray with a blue accent. The building architecture utilizes scoring, color transitions, and windows to provide articulation to the facades of the building. The truck doors, which would be painted to match the building, would be located on the south elevation of the building, and would not be visible from the surrounding streets or residential properties. All lighting associated with the proposed project would be hooded or shielded to focus the light downward and prevent light spillage onto adjacent properties. The Applicant has provided a photometric plan that shows low illumination at the property lines adjacent to the light industrial areas and no illumination at the property line adjacent to the residential property. The building materials (e.g., concrete, glass, metal) and proposed uses are typical of those found in the surrounding areas and would not create unusual or isolated glare effects that would affect daytime visibility or views in the project vicinity. As detailed in Table 4.11.C, the proposed project would be consistent with the permitted uses and development standards of the City's Zoning Code and the Pacific Commercentre Planned Community. Additionally, as detailed in the Biological Resources, Cultural Resources, Recreation, and Tribal Cultural Resources sections of this EIR, the proposed project would not result in an unnecessary loss of community and environmental resources (archaeological, historical, ecological, recreational, etc.). The proposed project would not conflict with these General Plan Policies or actions.
Goal LU-3 Placemaking: A distinct community image and identity that promotes Lake Forest as a desirable place to live and do business.	
Policy LU-3.4 High-Quality Design: Promote high-quality design for all public and private development projects, including building form, site design, landscaping, lighting, signage, and other components which impact the visual quality of a project.	**Consistent.** The proposed building would be similar in design, scale, and character to existing surrounding industrial uses. The proposed building would be constructed of architecturally enhanced tilt-up concrete panels and would be painted different shades of gray with a blue accent. The building architecture utilizes scoring, color transitions, and windows to provide articulation to long facades of the building. The truck doors, which would be painted to match the building, would be located on the south elevation of the building, and would not be visible from the surrounding streets, nor residential properties. The overall building treatment and façade will be compatible and consistent
Policy LU-3.6 Architectural Styles: Promote architectural styles that emphasize the established community identity while allowing for the introduction of other appealing architectural design strategies that are compatible with their surroundings.	

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
	with the remainder of the existing, surrounding industrial park. The proposed project would not impact any existing parks, trails, or scenic vistas and would enhance streetscapes by providing a variety of trees, shrubs and ground cover and maintaining the existing landscaping around the perimeter of the project site. The proposed project would result in the redevelopment of an older and underutilized site with a new industrial building with improved quality and enhanced site and building design. The proposed project would not conflict with these General Plan Policies.
Goal LU-4 Streetscapes: A community with streetscapes that enhance the economic vitality and overall visual quality of the City, support the circulation network, and encourage pedestrian-scale streets and patterns of activity.	
Policy LU-4.3 Building Massing: Reduce the bulk and perceived size of large buildings by dividing their mass into smaller parts, stepping down to adjacent structures, recessing openings for doors/windows, and using pedestrian-scale features; single-plane massing is discouraged.	**Consistent.** The proposed project would enhance streetscapes by providing a variety of trees, shrubs and ground cover and maintaining the existing landscaping around the perimeter of the project site. The proposed project would include an on-site accessible path of travel through the parking lot that would lead to a paved walkway along the north side of the building and would connect to an existing striped crosswalk across Enterprise Way. The proposed building would be constructed of architecturally enhanced tilt-up concrete panels and would be painted different shades of gray with a blue accent. The building's main entrances would be emphasized with vertical and horizontal bands, windows, and decorative light sconces. The building architecture utilizes scoring, color transitions, and windows to provide articulation to long facades of the building. The proposed building would be consistent with allowable building setbacks and, as detailed in Table 4.11.C, the proposed project would be consistent with the City's Zoning Code and permitted uses and developed standards of the Pacific Commercentre Planned Community. Additionally, the proposed project would include the installation of landscaping and mature trees around the project site and proposed building with densely placed mature trees along the northeastern corner of the proposed building and project site to reduce the visibility of the project site from adjacent residential uses and to improve the overall visual quality of the site The proposed project would not conflict with these General Plan Policies.
Policy LU-4.4 Building Footprint: Require and enforce appropriate residential and nonresidential development standards, including adequate building setbacks, to ensure that a building's footprint does not negatively affect adjacent uses or the visual quality of the area.	

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Goal M-1 Regional and Local Roads: A transportation system that meets and balances local and regional mobility needs.	
Action M-1b: As part of the development review process, the Community Development Department and the Public Works Department shall require developers to complete and fund the following: 1. A local transportation analysis to ensure that the site plan incorporates City transportation goals, policies, and standards, that identifies the effects of the project on the local transportation system, and identifies improvements to maintain adopted LOS standards for operations at signalized city-controlled intersections; 2. The project's proportional share of the effects on the City's circulation network through payment of fees; and 3. For local project-related circulation effects requiring improvements that are not included in an adopted fee program, either complete the necessary improvements or pay a proportional share of the cost.	**Consistent.** As part of the proposed project, off-site improvements would be made at 5 intersections to enhance public safety and address concerns related to large truck turning movements. Based on the results of the TIA, the proposed project would not result in any level of service (LOS) deficiencies or impacts. Therefore, the existing intersections and roadways, including City-designated truck routes, would be able to accommodate all traffic (passenger vehicles and trucks) associated with implementation of the proposed project. The TIA is consistent with the objectives and methodologies set forth in the City's TA Guidelines, the 2021 Congestion Management Program (CMP) for Orange County, and applicable provisions of CEQA. The proposed project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Items 2 and 3 of this action are not applicable to the proposed project. The proposed project would not conflict with these General Plan Policies or actions.
Goal M-5 Bicycle, Pedestrian, and Equestrian Use: Support and promote the use of pedestrian, bicycle, and equestrian facilities.	
Policy M-5.1 Promote Non-Vehicular Modes: Promote the provision of non-vehicular circulation modes within Lake Forest.	**Consistent.** The proposed project would include bike racks (31 spaces total) and pedestrian connections to nearby sidewalks and crosswalks. The proposed project would not conflict with these General Plan Policies.
Policy M-5.2 Pedestrian Access Between Uses: Improve pedestrian access between complementary uses such as residential and commercial areas and seek to increase the number of bridges and/or grade-separated crossings over freeways and major roadways.	
Goal M-6 Safety: Provide a safe transportation system for all users.	
Policy M-6.3 Site Designs and Safety: Ensure, through the development review process, that development projects follow best design practices to reduce conflicts between multiple travel modes.	**Consistent.** The project includes off-site improvements at five intersections to enhance public safety and address concerns related to large truck turning movements, which would be completed consistent with design standards to reduce conflicts between multiple travel modes. By incorporating intersection improvements into the design of the proposed project, the proposed project does not include any geometric design features or incompatible uses that could substantially increase circulation/traffic hazards. The proposed project would not conflict with this General Plan Policy.

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Goal M-9 Goods Movement: Accommodate safe goods movement through the City's transportation network.	
Policy M-9.1 Goods Movement Along City Arterials: Continue to restrict truck traffic through the City to its arterial roadways in order to facilitate goods movement to regional facilities; continue to prohibit truck traffic on residential streets.	**Consistent**. Truck traffic associated with the proposed project would be restricted to arterial roadways and truck traffic would not be allowed on residential streets. The project site is not located along a City arterial or designated truck route; however, the proposed off-site intersection improvements are located along City arterials and designated truck routes. The off-site improvements are proposed to enhance public safety and address concerns related to large truck turning movements and would be completed consistent with design standards to facilitate truck access. The proposed project is anticipated to generate 727 total daily trips (in passenger car equivalents [PCEs]), which is broken down to 455 daily passenger vehicle trips and 272 daily truck trips (in PCEs). Based on the results of the TIA, the proposed project would not result in any level of service (LOS) deficiencies or impacts. Therefore, the existing intersections and roadways, including City-designated truck routes, would be able to accommodate all traffic (passenger vehicles and trucks) of the proposed project. The proposed project would not conflict with these General Plan Policies.
M-9.2 Roadway Design: Maintain roadway design standards along City arterials to facilitate truck access to light industrial, manufacturing, commercial, and mixed-use areas along designated truck routes.	
Goal M-10 Funding: Ensure the utilization of various financing methods to improve and provide a fiscally sound transportation system.	
Policy M-10.2 New Developments: Ensure that new development projects contribute their appropriate fair share to transportation network improvements and that existing funding commitments are met.	**Consistent.** As detailed in Chapter 3.0, Project Description, the proposed project would include off-site improvements at five intersections within the City to enhance public safety and address concerns related to large truck turning movements. These improvements will be paid for by the applicant for this project. The proposed project would not conflict with this General Plan Policy.
Goal RR-3 Cultural Resources: A community that values its history and preserves its cultural features to bolster community identity and protect sensitive resources.	
Policy RR-3.1 Preservation: Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.	**Consistent.** As detailed in Section 4.5, Cultural Resources, and Section 4.7, Geology and Soils, the proposed project would not result in significant impacts to historic, archaeological, and paleontological resources. Human remains, if discovered, would be handled in compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98. As detailed in Section 4.18, Tribal Cultural Resources, consultation with Native American tribes has occurred in accordance with state, local, and tribal intergovernmental consultation requirements.
Policy RR-3.3 Development: Ensure that human remains are treated with sensitivity and dignity, and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.	
Policy RR-3.4 Tribal Consultation: Consult with Native American tribes that may be impacted by proposed development, as necessary, and in accordance with state, local, and tribal intergovernmental consultation requirements.	
Action RR-3a: City staff shall require applicants for future proposed ground disturbing projects to provide a technical	

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
cultural resources assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified archaeologist meeting Secretary of the Interior Standards and certified by the County of Orange. If resources are known or reasonably anticipated the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provide a treatment plan for potential resources that includes data to be collected, requires professional identification, other special studies as appropriate, requires curation at an accredited museum such as the John D. Cooper Center operated by the County of Orange for artifacts meeting significance criteria, requires a comprehensive final mitigation compliance report including a catalog of specimens with museum numbers and an appendix containing a letter from the museum stating that they are in possession of the materials. **Action RR-3b:** Require all new development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains: • If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Director of Community Development shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Community Development Director; and • If human remains are discovered during any ground disturbing activity, work shall stop until the Director of Community Development and the Orange County Coroner have been contacted. If the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants shall be consulted; and work may only resume when appropriate measures have been taken and approved by the Community Development Director. **Action RR-3d:** Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of a paleontological resource: • If construction or grading activities result in the discovery of significant prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Director of Community Development shall be notified, the resources shall be	A *Cultural Resources Assessment* was prepared for the proposed project by BCR Consulting (BCR Consulting 2021), which included a record search, survey, background context and project-specific recommendations performed by a qualified archaeologist meeting the Secretary of the Interior's Standards and certified by the County of Orange. The *Cultural Resources Assessment* indicated that no additional cultural resources work or monitoring is necessary during proposed activities associated with the development of the project site. However, in the unlikely event that previously undocumented cultural resources are identified during earthmoving activities, a qualified archaeologist should be contacted to assess the nature and significance of the find, diverting construction excavation if necessary. In the unlikely event archaeological resources are discovered at any time during construction, those activities would be halted in the vicinity of the find until the find can be assessed for significance by a qualified archaeologist (**Mitigation Measure CUL-1**). To mitigate adverse impacts to unknown buried paleontological resources that may exist on site, **Mitigation Measure GEO-3** would be implemented, which requires the preparation and implementation of a Paleontological Resources Impact Mitigation Program, as detailed in Section 4.7, Geology and Soils. The proposed project would not conflict with these General Plan Policies or actions.

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Director of Community Development.	
Goal RR-4 Air Quality and Greenhouse Gas Emissions: A community with optimal air quality for its residents.	
Policy RR-4.7 Mitigation: Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.	**Consistent.** As detailed in Section 4.3, Air Quality, implementation of **Mitigation Measures AQ-1** and **AQ-2** would be required reduce potential air quality impacts associated with the proposed project, which require use of construction equipment equipped with Tier 4 final engines or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type and use of "Super-Compliant" low volatile organic compounds (VOC) paints for interior and exterior surfaces and low VOC paint for parking lot surfaces. The proposed project would not conflict with this General Plan Policy.
Policy RR-4.8 Local Reduction Targets: The City of Lake Forest establishes the following per capita GHG reduction targets, in order to meet the requirements established by the state under AB 32 and SB 32, consistent with the CARB's 2017 Scoping Plan: • 3.99 MT CO2e per capita by 2030 • 2.66 MT CO2e per capita by 2040; and • 1.33 MT CO2e per capita by 2050.	**Partially Consistent.** As detailed in Section 4.8, Greenhouse Gas Emissions, the City's GHG reduction targets have not been formally adopted by the City as GHG reduction thresholds for development projects. The proposed project would result in a significant and unavoidable impact related to VMT even after implementation of **Mitigation Measure TRA-1** (addition of bike lanes). Therefore, the proposed project would conflict with SB 743 and the goals of the 2022 Scoping Plan for the purpose of reducing the emissions of greenhouse gases and would result in a significant and unavoidable impact related to GHG. As such, the proposed project would not meet the overall goals established by AB 32 and SB 32 for the reduction of GHGs and would not be consistent with the CARB's 2017 and 2022 Scoping Plans. However, with implementation of **Mitigation Measure GHG-1** requiring provisions be made at the project site for emerging electric truck technology and supporting the operation of zero-emissions trucks at the project site as such technology is commercially deployed and available, the proposed project would have the potential to further lower mobile source emissions associated with operation of the proposed project. **Mitigation Measure GHG-1** is required to contribute to the project's "fair share" of GHG emissions reductions required to support SB 743 and the goals of the 2017 and 2022 Scoping Plan (including SB 32 and AB 32). Based on the above, the proposed project would be partially consistent with this General Plan Policy.

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Action RR-4a: Review all new industrial and commercial development projects for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.	**Consistent**. As detailed in Section 4.3, Air Quality, with implementation of **Mitigation Measures AQ-1** and **AQ-2,** the proposed project would not result in the exposure of nearby sensitive receptors to significant emissions of criteria pollutants. The proposed project would not conflict with this General Plan Action.
Action RR-4b: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, which include analysis and identification of: 1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions. 2. Potential exposure of sensitive receptors to toxic air contaminants. 3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.	**Consistent.** An Air Quality, Greenhouse Gas, and Energy Impact Report was completed for the proposed project,[4] which addresses all SCAQMD and General Plan requirements. As detailed in Section 4.3, Air Quality, the proposed project would meet local and regional air quality standards and SCAQMD requirements and emissions thresholds with the implementation of **Mitigation Measures AQ-1** and **AQ-2,** which require use of construction equipment equipped with Tier 4 final engines or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type and use of "Super-Compliant" low volatile organic compounds (VOC) paints for interior and exterior surfaces and low VOC paint for parking lot surfaces. The proposed project would not conflict with this General Plan Action.
Action RR-4d: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the Lake Forest Municipal Code.	**Consistent.** As detailed in Section 4.6, Energy, the proposed project would comply with the CCR Title 24 standards as well as energy efficiency standard established by the Lake Forest Municipal Code. The proposed project would not conflict with this General Plan Action.
Action RR-4n: Future development projects implemented under the General Plan will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions shall be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures. 1. Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet USEPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. This DPF will reduce diesel particulate matter and NOx emissions during construction activities.	**Consistent.** Refer to the General Plan Consistency Analysis for Action RR-4b, above. The proposed project would not conflict with this General Plan Action.

[4] LSA Associates, Inc. 2025a. *Air Quality, Greenhouse Gas, and Energy Impact Report.* IPT Enterprise Business Center LLC Project, Lake Forest, California. August.

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
2. Require a minimum of 50 percent of construction debris be diverted for recycling. 3. Require building materials to contain a minimum 10 percent recycled content. Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.	
Action RR-4o: Future development projects implemented under the General Plan will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of their project. • Develop a project-specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools. • Provide onsite solar/renewable energy in excess of regulatory requirements. • Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties. • Require dripless irrigation and irrigation sensor units that prevent watering during rain storms. Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.	**Consistent.** Refer to the General Plan Consistency Analysis for Policy RR-4b, above. The proposed project would not conflict with this General Plan Action.
Goal RR-5 Biological Resources: A community that harmoniously coexists with existing plant and animal life.	
Policy RR-5.7 Development: Require that all new development identify potential impacts to existing biological resources and provide mitigation measures as necessary pursuant to CEQA in order to protect these resources from negative externalities.	
Action RR-5b: Require new development, as well as infrastructure projects, long-range planning projects, and other projects, to comply with the requirements of the Orange County Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) to ensure that potentially significant impacts to special-status species and sensitive resources are adequately addressed.	

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Action RR-5c: Require new development which has the potential to result in water quality impacts to the City's creeks and the local groundwater basin to implement all feasible mitigation measures to reduce impacts.	**Consistent.** As detailed in Section 4.4, Biological Resources, the proposed project would result in less than significant impacts to sensitive, rare, or endangered plant and wildlife species with the implementation of Regulatory Compliance Measure (**RCM) BIO-1**, which requires compliance with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. A *Biological Resources Report* (ELMT Consulting, 2021) was completed for the proposed project, which did not identify any potential significant impacts to biological resources. Additionally, the proposed project would be consistent with the rules and regulations of the NCCP/HCP. A variety of trees, shrubs, and groundcover surrounding the proposed industrial building is proposed. As detailed in Section 4.10, Hydrology and Water Quality, the proposed project would implement **RCMs WQ-1**, **WQ-2**, **WQ-3**, and **WQ-4** to reduce water quality impacts to the City's creeks and the local groundwater basin. The proposed project would not conflict with these General Plan Policies or actions.
Goal PS-1 Seismic and Geologic Hazards: A community that is adequately prepared for natural hazards related to landslides, geologic instability, and seismic activity.	
Policy PS-1.2 Earthquake Protection: Enforce State Seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity.	**Consistent.** As detailed in Section 4.7, Geology and Soils, the proposed project would comply with the most current California Building Code (CBC) and the City Building Code, which stipulate appropriate seismic design provisions. A Geotechnical Investigation was completed for the proposed project (Southern California Geotechnical 2021a), which did not identify the project site as susceptible to liquefaction, landslides, or flooding. The proposed project would not conflict with these General Plan Policies.
Policy PS-1.4 Development: Require assessment and mitigation of hazards related to liquefaction, landslides, and flooding for new development projects or City improvement projects that are identified by the City as susceptible to these hazards.	
Goal PS-2 Fire Safety: A City that is safe and adequately prepared for urban and wildfire emergencies.	
Policy PS-2.1 Building Fire Codes: Require that all buildings and facilities within Lake Forest 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 proposed project would comply with local, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards as detailed in Section 4.20, Wildfire. The proposed project would not conflict with these General Plan Policies.

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Goal PS-4 Hazardous Waste and Materials: A community that is protected from the potential for hazardous waste and materials contamination.	
Action PS-4b: Continue to require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to the Orange County Fire Authority.	**Consistent.** As detailed in Section 4.9, Hazards and Hazardous Materials, the proposed project would comply with existing hazardous materials regulations and programs, including requirements for HMBPs and RMPs for facilities handling significant quantities of hazardous materials, OSHA and Cal/OSHA regulations, CCR Title 8; the CGP; and DOT, RCRA, Orange County Health Care Agency regulations, Orange County Fire Authority (OCFA) regulations and State regulations. The proposed project would not conflict with these General Plan Policies or actions.
Goal PS-6 Noise: A comfortable community environment that is free from excessive noise pollution.	
Policy PS-6.1 Land Use Planning: Require development and infrastructure projects to be consistent with the maximum allowable noise exposure standards identified in Table PS-1 to ensure acceptable noise levels for existing and future development.	**Consistent.** As detailed in Section 4.13, Noise, a *Noise and Vibration Impact Analysis* was completed for the proposed project, which included an acoustical study with representative noise measurements, estimates of existing and projected noise measures, and mitigation measures as necessary to ensure compliance with applicable regulatory documents. The project would implement design techniques to minimize noise impacts to adjacent sensitive uses including shielding by the proposed building and a planed 16-foot-high, 60-foot-long wall located at the eastern end of the loading docks, west of the proposed trash enclosure. The proposed project would not exceed the maximum allowable noise exposure standards or the noise limits established in the Municipal Code, or result in a substantial increase in ambient noise levels as detailed in Action PS-6d. The proposed project would comply with the City's noise ordinance with implementation of **RCM NOI-1** and would not result in any significant noise impacts during the construction period. Vibration impacts during construction would be less than significant level with implementation of **RCM NOI-2**. The proposed project would not conflict with these General Plan Policies or actions.
Policy PS-6.3 Site Design: Require site planning and project design techniques to minimize noise impacts adjacent to sensitive uses in order to comply with City standards.	
Policy PS-6.4 Noise Control: Ensure that noise levels do not exceed the limits established in the Municipal Code by incorporating sound-reduction design in new construction and retrofit projects impacted by non-transportation-related noise sources.	
Policy PS-6.8 Commercial Noise: Require the use of noise attenuation measures, including screening and buffering techniques, for all new commercial development expected to produce excessive noise; in existing cases where the City's noise standards are exceeded, work with Code Enforcement to require compliance.	
Action PS-6b: To ensure that noise does not adversely affect new sensitive receptors, the City will use land use compatibility noise criteria for various land use types in Table PS-1 when making planning and development decisions. The criteria in Table PS-1 represent the acceptable noise level for new sensitive receptors. Existing and future noise contours from transportation noise in the City will be used as a guide for land use and development decisions. If the noise level at a project does not exceed the outdoor activity area allowable noise level in Table PS-1, the project is considered compatible with the noise environment. If the project will exceed the allowable outdoor activity area and interior space noise levels in Table PS-1, the project proponent shall be required to demonstrate (with an acoustical analysis) that the project is designed to attenuate noise to meet the criteria in Table PS-1, and California Building Standards Code,	

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
and California Green Building Standards Code (Title 24) interior noise standards. If the project is not designed to meet the noise criteria, noise reduction measures may be recommended in the analysis. If the analysis demonstrates that the noise criteria can be met with implementation of the noise reduction measures, the project may be approved with the noise reduction measures required as conditions of project approval.	
Action PS-6c: To ensure that noise from new development does not adversely affect existing sensitive receptors, the City will require acoustical studies for all new discretionary projects, including those related to development and transportation, which have the potential to generate stationary noise impacts which exceed the criteria identified in the Municipal Code. The studies shall include existing ambient noise measurements, estimates of projected noise levels, and noise reduction measures necessary to ensure compliance with this element.	
Action PS-6d: In making a determination of traffic noise impact under the California Environmental Quality Act (CEQA), a significant impact will occur if ambient noise levels have a substantial increase and the resultant noise levels are in excess of the City's guidelines. Generally, a 3 A-weighted decibel (dBA) increase in noise levels is barely perceptible. Therefore, increases in noise levels shall be considered substantial when the following occurs: • When existing noise levels are between 60 dBA Ldn and 65 dBA Ldn, a 3 dBA increase in noise will be considered substantial; • When existing noise levels exceed 65 dBA Ldn, a 1.5 dBA increase in noise will be considered substantial.	
Goal PF-5 Storm Drain System: A community with an efficient, attractive, and environmentally sound storm drain.	
Policy PF-5.3 Stormwater Runoff: Encourage that stormwater be directed towards permeable surfaces to allow for more percolation of stormwater into the ground.	**Consistent.** As detailed in Section 4.10, Hydrology and Water Quality, the proposed project would include three modular wetland systems and three underground detention chambers to reduce site discharge during the 100-year, 24-hour peak runoff rate by 40 percent in accordance with City requirements to reduce flows and associated erosion potential in Serrano Creek. The proposed project would also be required to prepare a Final Water Quality Management Plan (WQMP), as detailed in **RCM WQ-3**, consistent with the requirement of the City's MS4 permit, because the project consists of significant redevelopment that would replace 5,000 sq ft or more of impervious surface. The Final WQMP would specify the Site Design, Source Control, LID, and Treatment Control BMPs that would be implemented to capture, treat, and reduce pollutants of concern in storm water runoff. Additionally, as specified in **RCM WQ-4**, a Final Hydrology Study would be required to be prepared, which would demonstrate that the final design of the
Policy PF-5.4 Stormwater Capture: Encourage the use of professionally designed stormwater capture methods to aid in the reuse of rain water for non-potable uses in compliance with applicable State regulations.	
Policy PF-5.6 Stormwater Treatments: Promote Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.	
Action PF-5b: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.	
Action PF-5c: Promote the use of LID strategies in new development and redevelopment projects, including but not	

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
limited to the use of canopy trees and shrubs, vegetated swales, and permeable paving.	proposed project meets the hydromodification requirements and that, with implementation of detention facilities and modular wetland systems, the peak flow of stormwater runoff in the proposed condition would be less than existing conditions. The proposed project would not conflict with these General Plan Policies or actions.
Action PF-5d: Require new development to mitigate increases in stormwater peak flows and/or volume. Mitigation measures, such as LID strategies, should take into consideration impacts on adjoining lands in the City.	
Goal PF-6 Energy Management: A community with adequate power, provided through economically and environmentally sustainable means.	
Policy PF-6.2 New Development: Continue to require new development and redevelopment to provide verification from energy utilities that states they are able to accommodate the additional demand for service.	**Consistent.** As detailed in Section 4.6, Energy, the proposed project would not result in the inefficient, wasteful, or unnecessary consumption of energy and SCE would be able to accommodate the additional demand for service. The proposed project would obtain verification from SCE prior to development of the proposed project. The proposed project would be required to adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. Title 24 building energy efficiency standards establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage. Additionally, the proposed project will be seeking Leadership in Energy and Environmental Design (LEED) certification through the applicant's LEED Volume program. Some of the features included in the design include, but are not limited to, drought-tolerant landscaping, low-flow fixtures, high-efficiency lighting and infrastructure for EV charging. The proposed project would not conflict with these General Plan Policies.
Policy PF-6.5 Conservation: Promote conservation strategies during design, construction, and maintenance of facilities.	
Goal PF-8 Community Safety: A community protected from illicit activities and crime by high-quality public safety services, facilities, and technology.	
Policy PF-8.3 Department Consultation: Promote coordination between the City of Lake Forest and Police and Fire services during the review of new development applications to ensure that adequate attention is being paid to fire and safety concerns during the design and planning of a project.	**Consistent.** As detailed in Section 4.15, the proposed project would be required to comply with all Orange County Fire Authority (OCFA) access requirements and California Fire Code requirements and all development projects submitted for review by OCFA must use a fair share approach to mitigate fire service response impacts and facility/equipment needs.
Policy PF-8.6 Site Design: Recognize the role of site design in crime prevention and implement best practices into existing plans and new development strategies.	

Table 4.11.B: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Action PF-8a: The Orange County Fire Authority and City Engineer will review proposed development projects and street networks to evaluate the accessibility for fire engines and other emergency response functions.	The proposed project would implement Crime Prevention through Environmental Design (CPTED) techniques that would discourage and or reduce crime from occurring on site. Such CPTED techniques would include, but not be limited to, surface drive aisle/parking lighting, building façade lighting, low-lying landscaping designed to minimize opportunities for concealment, continued maintenance activities on the site, and deadbolts/locks on building exterior doors. The proposed project would not conflict with these General Plan Policies or actions.

Table 4.11.C: Pacific Commercentre Planned Community Site Development Standards Consistency Analysis

Applicable Site Development Standards	Consistency Analysis
Building Height Limit: No maximum except that building heights shall comply with the provisions of Section 9.144.050 (Height Limits) of the Lake Forest Municipal Code. Within the High Technology and Light Industrial Planning Areas, prior to the issuance of any building permit for any structure or buildings which are proposed to be greater than 35 feet above the proposed grade elevation, applicant shall obtain approval of a Use Permit.	**Consistent.** The proposed building would be a maximum height of 35 feet and would comply with the provisions of Section 9.144.050 (Height Limits) of the Lake Forest Municipal Code. The proposed project would not conflict with this development standard.
Building Setbacks: All setbacks shall be measured from the ultimate right-of-way line and interior property lines. • **Adjacent to Local Street:** Along any local street, buildings shall be set back a minimum of 15 feet from the ultimate right-of-way line, except that unsupported roofs or architectural elements may project 6 feet into the required setback area • **Adjacent to a Non-Residential Parcel:** Along property lines that separate business park and non-residential uses there shall be no required minimum setback.	**Consistent.** The proposed building would be greater than 15 feet from the right-of-way lines for adjacent local streets, including Enterprise Way and Enterprise Court. The proposed project would not conflict with this development standard.
Off-Street Parking: Off-street parking shall be provided in accordance with Chapter 9.168 (Off-Street Parking) of the Lake Forest Municipal Code.	**Consistent**. The proposed project includes 262 parking spaces around the perimeter of the proposed structure and the parcel boundary. In compliance with Municipal Code requirements, bike racks (31 spaces total) would also be provided on site. Parking would be in accordance with Chapter 9.168 of the Lake Forest Municipal Code. The proposed project would not conflict with this development standard.

Table 4.11.C: Pacific Commercentre Planned Community Site Development Standards Consistency Analysis

Applicable Site Development Standards	Consistency Analysis
Loading: All loading shall be performed on the site. Loading platforms and areas shall be screened from view from adjacent streets and highways.	**Consistent**. The proposed project includes a gated truck loading area. Loading docks would be located on the southwest side of the proposed building and screened from the adjacent streets. The proposed project would not conflict with this development standard.
Trash and Storage Areas: All storage, including cartons, containers, materials, products or trash, shall be shielded from view within a building or area enclosed by a solid masonry wall not less than 6 feet in height.	**Consistent.** The proposed project would include two trash enclosures to shield trash storage. The trash enclosures would be composed of a painted concrete tilt-up wall panel and would be approximately 11.13 feet high with a roof that extends to 13.13 feet. The proposed project would not conflict with this development standard.
Streets and Intersections: Screening (including walls and fences) along all streets and boundaries shall have a height of not less than 36 inches nor more than 42 inches within 20 feet of the point of intersection of: • A vehicular accessway or driveway and a street; • A vehicular accessway or driveway and a sidewalk and • Two or more vehicular accessways, driveways or streets.	**Consistent**. The proposed project includes perimeter landscaping that would serve as a screen along all streets and boundaries. Vegetation within 20 feet of driveway and street intersections would be between 36 inches and 42 inches high. The proposed project would not conflict with this development standard.
Mechanical Equipment: Mechanical equipment placed on any roof such as, but not limited to, air conditioning, heating, ventilating ducts, and exhaust shall be screened from view from any abutting street or highway.	**Consistent.** Equipment located on the roof of the proposed building would be screened by the building parapet and would be out of the line of sight from the property line. The proposed project would not conflict with this development standard.
Landscaping: Landscaping, consisting of evergreen or deciduous trees, shrubs, ground cover, or hardscape shall be installed and maintained subject to the following standards: • Boundary landscaping along public streets, other than arterial highways, is required to an average depth of 10 feet and a minimum depth of 5 feet. • **Separation:** Any landscaped area shall be separated from an adjacent vehicular area by a wall or curb at least 6 inches higher than the adjacent vehicular area or in some manner be protected from vehicular damage. • **Watering:** Permanent automatic watering facilities shall be provided for all landscaped areas. Site development plans shall incorporate provisions for a dual water system utilizing reclaimed wastewater for irrigation purposes, consistent with the requirements of the Irvine Ranch Water District.	**Consistent.** The proposed project includes boundary landscaping that would be an average depth of 10 feet and a minimum depth of 5 feet along public streets. Landscaped areas would be separated by a curb at least 6 inches or higher from adjacent vehicular areas. Landscaped areas would be watered using permanent automatic watering facilities and would be maintained in a neat, clean, and healthy condition. The proposed project would not conflict with this development standard.

Table 4.11.C: Pacific Commercentre Planned Community Site Development Standards Consistency Analysis

Applicable Site Development Standards	Consistency Analysis
• **Maintenance:** All landscaping shall be maintained in a neat, clean and healthy condition. This shall include proper pruning, mowing of lawns, weeding, removal of litter, fertilizing, replacement of plants when necessary, and the regular watering of all plantings.	
Environmental Control: Any permitted business or light industrial use shall be performed or carried out entirely within a building that is designed and constructed so that the enclosed operations and uses do not cause or produce a nuisance to adjacent sites, such as, but not limited to the following: Radio frequency interference, sound, vibration, electromechanical disturbance, electromagnetic disturbance, radiation, air pollution, dust, odors, fumes, emission of toxic or non-toxic matter, humidity, heat, cold or glare.	**Consistent.** As discussed in Sections 4.1 Aesthetics; 4.3 Air Quality; 4.6 Energy; 4.8 Greenhouse Gas Emissions; 4.9 Hazards and Hazardous Materials; and 4.13 Noise; the proposed project would not cause or produce a nuisance to adjacent sites related to sound, vibration, radiation, air pollution, dust, odors, fumes, emissions of toxic or non-toxic matter, or glare. Additionally, the uses associated with the proposed project would not result in radio frequency interference, electromechanical disturbance, electromagnetic disturbance, humidity, heat, cold or glare. The proposed project would not conflict with this development standard.

City of Lake Forest Citywide Design Guidelines. The Citywide Design Guidelines are intended to supplement the goals and policies set forth in the City's General Plan Land Use Element and the development standards in the City's Municipal Code. The design guidelines are intended to guide proposed development so that it is aesthetically pleasing, high quality, and reflective of the character of the surrounding community. The Citywide Design Guidelines are general in nature and provide examples of the expected level of design for development within the City. For example, the design guidelines provide direction on issues not typically covered by the development standards (e.g., building orientation, architectural styles, and building materials). Individual design guidelines should be viewed as qualitative rather than mandatory development standards, provided the project design meets or exceeds the intent of the guidelines. The proposed project has been designed consistent with all discretionary measures included in the Citywide Design Guidelines. Furthermore, the proposed project would require a Site Development Permit, which would provide an opportunity for the City to review the physical improvements to the project site, including the overall building scale, massing, and design to ensure compatibility and compliance with the Citywide Design Guidelines.

SCAG Regional Comprehensive Plan. The 2008 Regional Comprehensive Plan (RCP) addresses regional goals related to growth and infrastructure in the Southern California region. The RCP also addresses issues such as housing, traffic, air quality, and water resources as a guide for local agencies to use in preparing plans that deal with regional issues. The RCP outlines a vision of how the Southern California region can balance growth with conservation to achieve a higher quality of life. In order to achieve this balance, the RCP establishes the following land use goals: (1) focus growth in existing centers and along major transportation corridors, (2) encourage mixed-use development, (3) provide new housing opportunities, (4) encourage development near existing and planned transportation stations to reduce traffic congestion and associated air pollutants, (5) preserve existing single-family

neighborhoods, and (6) protect open space and environmentally sensitive habitat areas from development. RCP Goals 2, 3, and 6 do not apply to the proposed project.

The project site is located approximately 700 feet southeast of Bake Parkway, which is considered a Primary Arterial consisting of four lanes. Additionally, the project site is located approximately 550 feet east of Commercentre Drive, which is considered a secondary arterial consisting of four lanes. The proposed project would be surrounded by existing commercial and industrial uses and would replace an existing office/industrial building with a new industrial building. The project site can be easily accessed from Bake and Rancho Parkways and other major transportation corridors near the site (e.g., State Route 241 [SR-241]). The nearest bus stop is located approximately 550 feet southwest of the project site and the Irvine Transportation Center is located approximately 3.4 miles southwest of the project site, which is a multimodal transit station that includes a Metrolink/Amtrak train station and serves as hub for express, local and rail-feeder bus services operated by the Orange County Transportation Authority (OCTA). Therefore, the proposed project would be consistent with RCP Goal 1 to focus growth along major transportation corridors and Goal 4 to encourage new development near existing transportation stations.

The proposed project would replace an existing office/industrial building with a new industrial building. As such, the proposed project is consistent with the existing site use and would not interfere or conflict with the existing land use patterns and visual character of surrounding industrial business park or established residential neighborhoods near the site. Therefore, the proposed project would be consistent with RCP Goal 5 of preserving existing single-family neighborhoods.

For the reasons stated above, the proposed project would be consistent with applicable goals and policies in SCAG's 2008 RCP.

Southern California Area of Governments RTP/SCS. The core vision of the 2020-2045 RTP/SCS and the 2024–2050 RTP/SCS is to better manage the existing transportation system through design management strategies, integrate land use decisions and technological advancements, create complete streets that are safe to all roadway users, preserve the transportation system, and expand transit and foster development in transit-oriented communities.

The proposed project aims to re-envision an existing underutilized office/industrial property to build a new financially and environmentally sustainable building and to provide a building type that is flexible and accommodating to a variety of permitted land uses.. Additionally, the proposed project aims to provide employment opportunities and facilitate job-creation for the residents of Lake Forest and surrounding communities to reduce the need for members of the local workforce to commute outside the area for employment and to contribute to the City's fiscal benefits. The proposed project would cluster land uses in proximity to other similar industrial/commercial uses and close to access points of the State highway system, such as SR-241, which reduces traffic congestion on surface streets and reduces local air pollution emissions from vehicle sources. Therefore, the general objectives/goals of the proposed project would be consistent with the intent and goals of the 2020-2045 RTP/SCS and the 2024–2050 RTP/SCS. Overall, the proposed project would be consistent with the City's General Plan, the City's Zoning Code, including applicable regulations in the Pacific Commercentre Planned Community, and SCAG's RCP and RTP/SCS. Therefore, the proposed project

would have no impacts associated with conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and no mitigation is required.

4.11.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for land use and planning. The cumulative study area for land use and planning is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have no impact on land use and planning. Because the proposed project would have no impact on land use and planning, it would not contribute to a cumulatively considerable impact on land use and planning. Therefore, there would be no cumulatively significant impact on land use and planning, and no mitigation is required.

4.11.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to land use and planning.

4.11.9 Regulatory Compliance Measures and Mitigation Measures

4.11.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to land use and planning.

4.11.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to land use and planning, and no mitigation is required.

4.11.10 Level of Significance after Mitigation

The proposed project would result in no impacts related to land use and planning.

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4.12 MINERAL RESOURCES

This section evaluates the potential impacts to mineral resources from implementation of the proposed project. This section is based in part on the following:

- *Public Draft Environmental Impact Report for the 2040 Lake Forest General Plan, SCH# 2019090102* (City of Lake Forest, November 2019);
- *City of Lake Forest General Plan Update Existing Conditions Report* (City of Lake Forest, October 2018);
- *County of Orange General Plan Chapter VI, Resources Element* (County of Orange 2005); and
- California Geological Survey (CGS) data.

4.12.1 Scoping Process

The Notice of Preparation (NOP) was published in March 2024 for the proposed project, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft Environmental Impact Report (EIR). No comments related to mineral resources were received during the public scoping period.

4.12.2 Methodology

Evaluating the potential for project-related activities to impact mineral resources is based on maps, reports, and other data developed by the California Geological Survey (CGS) to locate mineral extraction areas within the City of Lake Forest and project area.

4.12.3 Existing Environmental Setting

The Surface Mining and Reclamation Act (SMARA) enacted by the California Legislature in 1975 provides guidelines to assist with the classification and designation of mineral lands. Areas are classified on the basis of geologic factors without regard to existing land uses and ownership. SMARA categorizes areas into four Mineral Resource Zones (MRZs):

- **MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** An area containing mineral deposits of which their significance cannot be properly evaluated.
- **MRZ-4:** An area where information is not adequate enough to be able to assign to any other MRZ zone.

Of these four categories, lands classified as MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the California State Mining and Geology Board (SMGB) as being "regionally significant." Such designations require that a Lead Agency's land use decisions involving designated areas are to be made in accordance with its mineral resource management policies and that it considers the importance of the mineral resource to the region or the State as a whole, not just to the Lead Agency's jurisdiction.

4.12.3.1 Orange County

The primary mineral resource in Orange County is construction aggregate consisting of sand and gravel. Significant sand and gravel resources within Orange County are located in portions of the Santa Ana River, Santiago Creek, San Juan Creek, Arroyo Trabuco, and other areas. The California Geological Survey also identifies fire clay and industrial sand as having historically been produced in large quantities within Orange County (County of Orange 2005).

4.12.3.2 City of Lake Forest

The primary mineral resources in the City include construction sand, and gravel. Approximately 62 acres of land in the eastern portion of Lake Forest are designated as MRZ-2. The MRZ-2 resource area, previously known as the El Toro Materials Sand and Gravel Operation, in the eastern portion of Lake Forest was previously excavated for sand and gravel materials. However, the El Toro Materials Sand and Gravel Operation is no longer operational. The 62-acre MRZ-2 resource area is currently developed with residential uses, a baseball field, and a storm drain basin. As such, the MRZ-2 resource area is no longer available for mining (City of Lake Forest 2019).

4.12.4 Regulatory Setting

Federal, State, and local regulations and programs related to mineral resources that are applicable to the proposed project are described below.

4.12.4.1 Federal Regulations

There are no federal regulations that apply to the proposed project with respect to mineral resources.

4.12.4.2 State Regulations

Surface Mining and Reclamation Act of 1975. The State of California has recognized that mineral resources are essential to the needs of society and the economic well-being of the State. In 1975, the State Legislature passed the Surface Mining and Reclamation Act (SMARA), Public Resources Code (PRC) Section 2710, et seq. The intent of SMARA is to promote production and conservation of mineral resources, minimize the environmental effects of mining, and ensure mined lands are reclaimed to conditions suitable for alternative uses. Reclaiming land for other uses once mining operations are completed is important for the general health, safety, and welfare of the community. Under SMARA, permits are required for all mining activities commencing operation on or after January 1, 1976. In addition, all new and existing mining operations are required to file a

reclamation plan with the appropriate jurisdiction to address how the land would be brought back to a productive status once mining operations cease.

SMARA also requires every lead agency within which a mineral resource's economic value has been classified by the State Geologist or has been designated as having regional economic significance by the SMGB, to establish Mineral Resource Management Policies (MRMPs) for the mineral resources in its General Plan.

Under current SMARA statutes (PRC Section 2763), prior to permitting a use that would threaten the potential to extract minerals in an area designated by the SMGB as having mineral resources of regional or statewide significance, the City must prepare a statement specifying its reasons for permitting the proposed use. In it, the City must consider its MRMPs, balance the mineral values against alternative land uses, and consider the importance of the minerals to their market region as a whole and not just their importance to the City area. This process is designed to ensure that decision-makers weigh the economic and environmental value of nonrenewable mineral resources when determining whether or not to protect existing mineral resources.

4.12.4.3 Regional Regulations

There are no regional regulations that apply to the proposed project with respect to mineral resources.

4.12.4.4 Local Regulations

City of Lake Forest Municipal Code, Chater 9.150 Surface Mining and Land Reclamation Regulations. This section of the City's Municipal Code includes provisions for regulating surface mining and quarrying, and the processing of these materials, consistent with SMARA.

4.12.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to mineral resources if it would:

Threshold 4.12.1: Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state; or

Threshold 4.12.2: Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

4.12.6 Project Impacts

Threshold 4.12.1: Would the project result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

No Impact. There are no known mineral resources in the vicinity of the project site. The 62-acre MRZ-2 designated resource area (formerly known as the El Toro Materials Sand and Gravel Operation) within Lake Forest that is discussed above is located approximately 0.8 mile northeast of

the project site and is no longer operational as it has been fully developed with residential uses, a baseball field, and a storm drain basin. There are no other known mineral deposits or resources within Lake Forest that are of significant value to the region or the State. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region or residents of the State. There would be no impact, and no mitigation is required.

Threshold 4.12.2: Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The project site does not contain a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. As noted above, the former El Toro Materials Sand and Gravel Operation is the only designated mineral resource area in the City and is no longer operational as it has been fully developed. Therefore, the proposed project would not result in the loss of availability of a locally important mineral resource recovery site. There would be no impact, and no mitigation is required.

4.12.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for mineral resources. The cumulative study area for the proposed project is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have no impact on mineral resources sites or the site of an existing mining/mineral extraction operation. Furthermore, there are no known or designated mineral resources within the City boundaries. Because the proposed project would have no impact on mineral resources, it would not contribute to a cumulatively considerable impact on mineral resources. Therefore, there would be no cumulatively significant impact on mineral resources, and no mitigation is required.

4.12.8 Level of Significance Prior to Mitigation

The proposed project would result in no impacts related to mineral resources.

4.12.9 Regulatory Compliance Measures and Mitigation Measures

4.12.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to mineral resources.

4.12.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to mineral resources, and no mitigation is required.

4.12.10 Level of Significance after Mitigation

The proposed project would result in no impacts related to mineral resources.

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4.13 NOISE

This section evaluates the potential impacts from noise with implementation of the proposed project. This section is based in part on the following:

- *Noise and Vibration Impact Analysis* (LSA 2025c) (provided in Appendix H) that was prepared for the proposed project and included in this Draft Environmental Impact Report (EIR);
- *City of Lake Forest General Plan Public Safety Element* (City of Lake Forest 2025);
- *City of Lake Forest Municipal Code* (City of Lake Forest 2025); and
- *City of Lake Forest CEQA Significance Thresholds Guide* (City of Lake Forest 2025).

4.13.1 Scoping Process

The Notice of Preparation (NOP) was published in March 2024 for the proposed project, and Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the Initial Study (IS)/NOP. For a copy of the IS/NOP comment letters received, refer to Appendix A of this Draft EIR. Fifty-seven (57) comment letters included comments related to noise. These comments raised concerns about the potential of the proposed project to generate noise during construction (including demolition of the existing structures) and operations of the proposed project, such as an increase in heavy vehicle traffic associated with the warehouse operations and on-site loading/unloading activities, which would be disruptive to nearby residents.

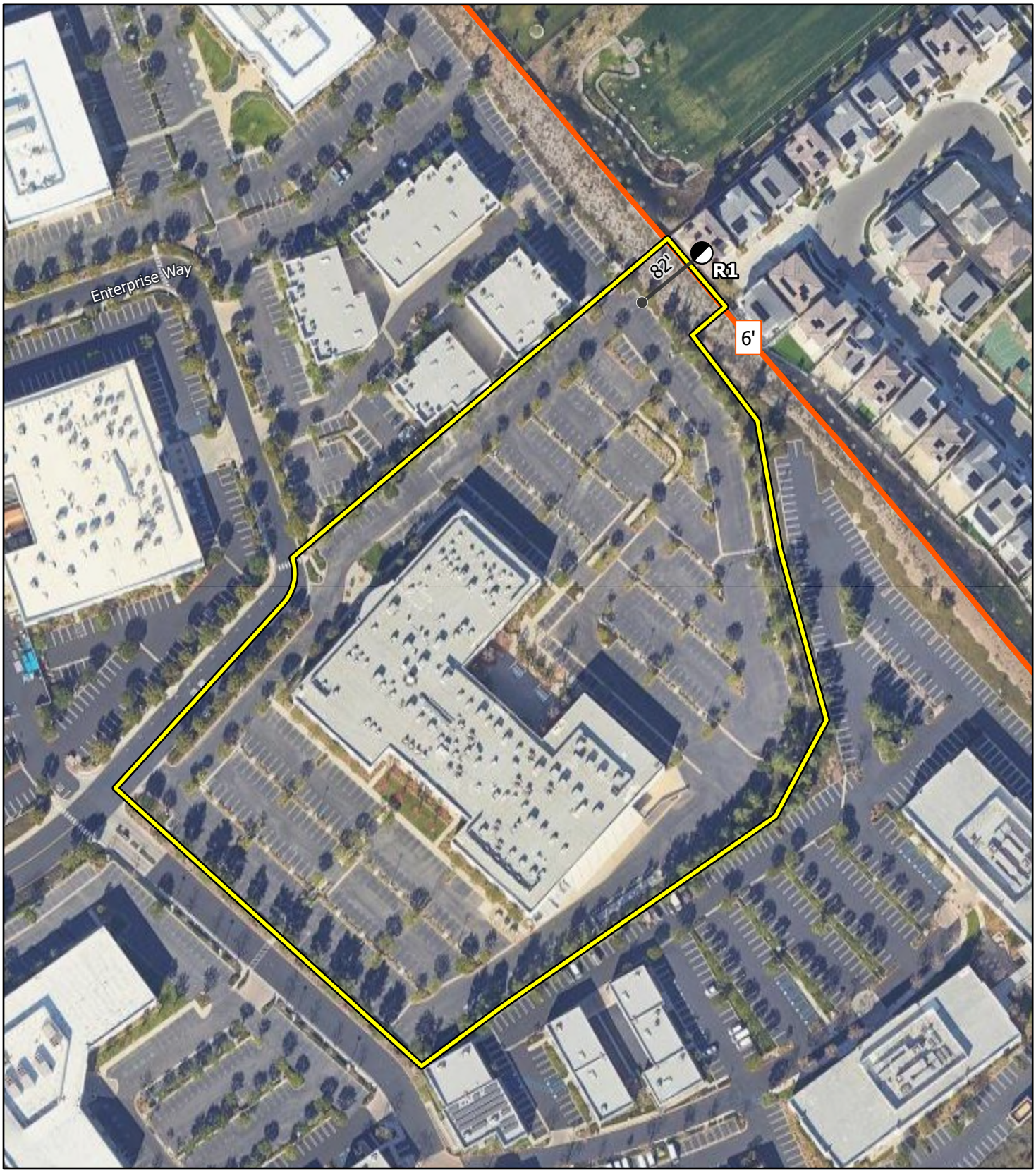
4.13.2 Methodology

The evaluation of noise and vibration impacts was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the City of Lake Forest Public Safety Element, Municipal Code, and CEQA Significance Thresholds Guide. The Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA-RD-77-108)[1] was used to determine traffic noise impacts. Please refer to the *Noise and Vibration Impact Analysis* (LSA 2025c) for additional details on the noise and vibration modeling methodology and assumptions used to estimate construction and operation impacts of the proposed project.

To assess the potential for long-term operational and short-term construction noise and vibration annoyance impacts, noise measurements were taken at sensitive receptor locations in the vicinity of the project site (refer to Figure 4.13-1, Sensitive Receptor Locations) to use as baseline noise conditions. Sensitive receivers near the project site include existing residential uses as described below. Other sensitive land uses in the project study area that are located at greater distances than those identified in this report would experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding by intervening structures.

[1] Federal Highway Administration (FHWA). 2006. *FHWA Roadway Construction Noise Model User's Guide.* January. Washington, D.C. Website: www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf (accessed August 2024).

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LSA

Project Location

Receptor Location

Existing Barrier

Distance from Receptor to Project Boundary

N

0 75 150

FEET

FIGURE 4.13.1

IPT Enterprise Business Center LLC

Sensitive Receptor Locations

SOURCE: Google Maps (2023)

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- **R1:** Represents existing residential uses located approximately 82 feet (ft) east of the project site boundary to the building's façade.

Other residential uses are located north of the project site, at approximately 900 ft from the project's northern boundary limit as measured to the residential building façade. In addition, a nature park is located to the south of the proposed project site, within 450 ft from the proposed project site southern boundary as measured to the center of the park. Land uses that are considered relatively insensitive to noise include commercial, and office developments.

Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To assess the potential for short-term vibration damage, impacts were assessed at the buildings located at 26180 and 26190 Enterprise Way. The buildings are located within 10 ft of the northern property line.

4.13.3 Existing Environmental Setting

4.13.3.1 Existing Project Site and Vicinity

The 8.83-acre project site is located at 26200 Enterprise Way in the north-central portion of Lake Forest in Orange County, California. The project site is currently developed with an existing 144,904-square-foot (sq ft) building. Existing residential uses are located east of the project site, and light industrial uses are located north, west, and south of the project site. Residential uses are located to the east of the project site.

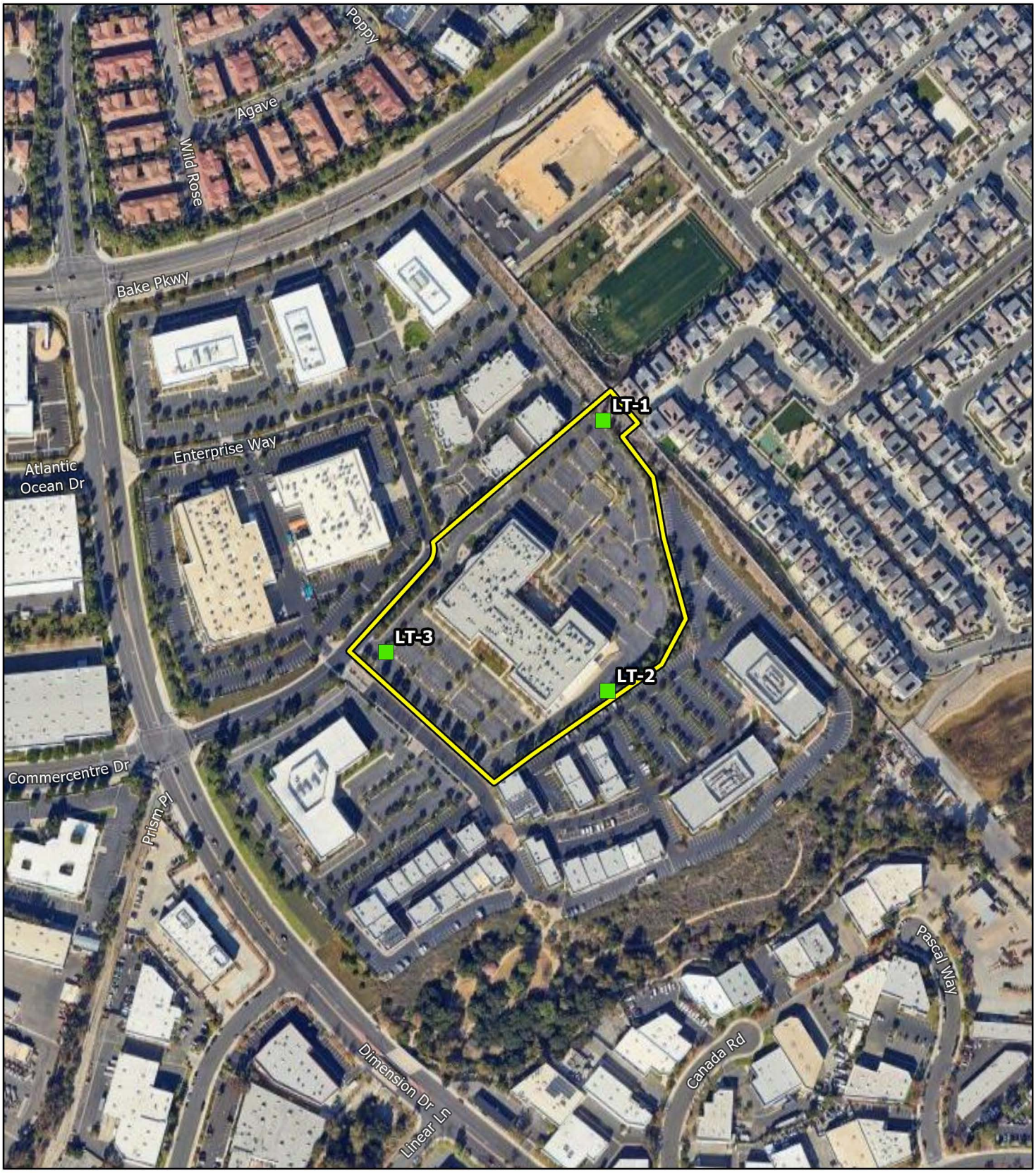
The nearest sensitive receptors to the project site are single-family homes approximately 82 ft from the project's eastern boundary line.

The nearest buildings to the project site are approximately 10 ft from the project's northern property line (26180 and 26190 Enterprise Way).

4.13.3.2 Existing Noise Levels

The ambient noise levels in the project study area are dominated by transportation-related noise associated with Bake Parkway, Dimension Drive, and other driveways in the industrial area in the vicinity of the project site. To assess existing noise levels, LSA conducted three long-term (24-hour) noise measurements in the vicinity of the project site. The noise-monitoring locations are described in Table 4.13.A and are shown on Figure 4.13-2. The existing ambient noise levels are also detailed in Table 4.13.A. The daytime and nighttime equivalent continuous noise levels (L_{eq}) shown in this table represent the range of all hourly noise levels observed during the monitoring time periods. The 24-hour noise level is represented by the Day-Night Noise Level (L_{dn}), which is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours.

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LSA

Project Location

Noise Monitoring Location

FIGURE 4.13.2

N

0 150 300

FEET

SOURCE: Google Maps (2023)

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IPT Enterprise Business Center LLC

Noise Monitoring Location

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Table 4.13.A: Long-Term 24-Hour Ambient Noise Monitoring Results

Location		Daytime Noise Levels[1] (dBA L_{eq})	Nighttime Noise Levels[2] (dBA L_{eq})	Daily Noise Levels (dBA L_{dn})
LT-1	Along the northern property line of the project site on a tree near a residential retaining wall, approximately 725 ft away from the Bake Parkway centerline.	45.1-56.7	40.8-52.8	55.0
LT-2	Center of the southern property line of the project site near the existing loading dock on a light pole, approximately 975 ft away from the Dimension Drive centerline.	40.3-51.9	40.1-49.5	52.0
LT-3	Along the western property line of the project site near Enterprise Way and Enterprise Court on a tree, approximately 70 ft away from the Enterprise Way centerline.	47.9-56.6	41.6-54.0	56.8

Source: Compiled by LSA (2025).
Note: Noise measurements were conducted from March 9 to March 10, 2024, starting at 2:00 p.m.
[1] Daytime Noise Levels = noise levels during the hours from 7:00 a.m. to 10:00 p.m.
[2] Nighttime Noise Levels = noise levels during the hours from 10:00 p.m. to 7:00 a.m.
dBA = A-weighted decibels
ft = foot/feet
L_{dn} = Day-night Noise Level
L_{eq} = equivalent continuous sound level

4.13.4 Regulatory Setting

State and local regulations and programs related to noise that are applicable to the proposed project are described below.

4.13.4.1 State Regulations

State of California Green Building Standards Code. The State of California's Green Building Standards Code (CALGreen Code) contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 A-weighted decibel Community Noise Equivalent Level (dBA CNEL) or L_{dn}, such as within a noise contour of an airport, freeway, railroad, or other noise source. If the development falls within an airport or freeway 65 dBA CNEL or L_{dn} noise contour, buildings shall be constructed to provide an interior noise level environment attributable to exterior sources that does not exceed an hourly equivalent level of 50 dBA L_{eq} in occupied areas during any hour of operation.

California Department of Transportation (Caltrans). Vibration standards included in the California Department of Transportation (Caltrans) *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020) (Caltrans Manual) are used in this analysis for ground-borne vibration impacts on human annoyance and building damage. The criteria for environmental impact from ground-borne vibration are based on the maximum levels for a single event and the root-mean-square (RMS) vibration level. Table 4.13.B provides the criteria for assessing the potential for interference or annoyance from vibration levels in a building.

Table 4.13.B: Interpretation of Vibration Criteria for Detailed Analysis

Human Response	Vibration Level (RMS in/sec)
Barely perceptible	0.01
Distinctly perceptible	0.04
Strongly perceptible	0.10
Severe	0.40

Source: *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020).
in/sec = inch/inches per second RMS = root-mean-square

Table 4.13.C lists the potential vibration building damage criteria associated with construction activities, as suggested in the Caltrans Manual. Caltrans guidelines show that a vibration level of up to 0.3 in/sec in PPV is considered safe for newer residential structures and modern industrial or commercial buildings and would not result in any construction vibration damage.

Table 4.13.C: Construction Vibration Damage Criteria

Structure / Condition	PPV (in/sec)
Extremely fragile historic buildings, ruins, ancient monuments	0.08
Fragile buildings	0.10
Historic and some old buildings	0.25
Older residential structures	0.30
New residential structures	0.50
Modern industrial / commercial buildings	0.50

Source: *Transportation and Construction Vibration Guidance Manual,* Table 19 (Caltrans 2020).
in/sec = inch/inches per second
PPV = peak particle velocity

4.13.4.2 Regional Regulations

There are no regional regulations that apply to the proposed project with respect to noise.

4.13.4.3 Local Regulations

City of Lake Forest General Plan 2040. The Noise section within the Public Safety Element of the City of Lake Forest General Plan (2025) is intended to identify sources of noise and provide objectives and policies that ensure that noise from various sources does not create an unacceptable noise environment. Overall, the City's Noise Element describes the noise environment (including noise sources) in the City; addresses noise mitigation regulations, strategies, and programs; and delineates federal, State, and City jurisdiction relative to rail, automotive, aircraft, and nuisance noise. Based on Table 4.13.D below, the noise levels for industrial land uses such as the proposed project is 75 dBA L_{dn} for outdoor activity areas and 45 dBA L_{eq} for interior spaces.

Table 4.13.D: Land Use Compatibility for Community Noise Environment

Land Use[1]	Outdoor Activity Areas [2,3] L_{dn}, dBA	Interior Spaces	
		L_{dn} dBA	L_{eq}, dBA[4]
Residential	60	45	-
Motels/Hotels	65	45	-
Mixed-Use	65	45	-
Hospitals, Nursing Homes	60	45	-
Theaters, Auditoriums	-	-	35
Churches	60	-	40
Office Buildings	65	-	45
Schools, Libraries, Museums	70	-	45
Playgrounds, Neighborhood Parks	70	-	-
Industrial	75	-	45
Golf Courses, Water Recreation	70	-	-

Source: *City of Lake Forest General Plan* (2025).

1. Where a proposed use is not specifically listed, the use shall comply with the criteria for the most similar use as determined by the City.
2. Outdoor activity areas for residential developments are considered to be the private exterior living area of single-family homes and the main common areas where people generally congregate for multi-family and residential components of mixed-use developments. Outdoor activity areas for non-residential developments are the common areas where people generally congregate, including community centers, pool areas, and outside lunch facilities. New multi-family developments and residential components of mixed-use developments with balconies or patios that are exposed to noise that exceeds the outdoor criteria in this table are required to provide occupancy disclosure notices to all future tenants regarding potential noise impacts.
3. In areas where it is not possible for a new project to reduce exterior noise levels to achieve the outdoor activity area criteria using a practical application of the best noise-reduction technology, as determined by a qualified acoustician, an increase of up to 5 CNEL over the outdoor standard will be allowed provided that available exterior noise reduction measures have been implemented and interior noise levels are in compliance with this table.
4. Determined for a typical operating hour during periods of use.
5. In accordance with Policy PS-6b, this table shall be used for land use compatibility noise criteria for when making planning and development decisions. These criteria represent the acceptable noise level for new sensitive receptors. These criteria are not to be retroactively applied for existing uses. These criteria are also not generally intended for use as CEQA significance thresholds for noise generated by new projects to existing receptors; that purpose is achieved by compliance with Municipal Code standards,.

dBA = A-weighted decibels L_{eq} = equivalent noise level
L_{dn} = Day-Night Average Level

The City's noise standards correlate with land use zoning classifications to maintain identified ambient noise levels and to limit, mitigate, or eliminate intrusive noise that exceeds the ambient noise levels within a specified zone. The following policies and actions to provide a comfortable community environment that is free from excessive noise pollution are applicable to the proposed project:

PS-6 Policies.

- PS-6.1: Land Use Planning. Require development and infrastructure projects to be consistent with the maximum allowable noise exposure standards identified in Table PS-1 (refer to Table 4.13.D, below) to ensure acceptable noise levels for future development.

- PS-6.3: Site Design. Require site planning and project design techniques to minimize noise impacts adjacent to sensitive uses in order to comply with City standards.

- PS-6.4: Noise Control. Ensure that noise levels do not exceed the limits established in the Municipal Code (refer to Table 4.13.E, below) by incorporating sound-reduction design in new construction and retrofit projects impacted by non-transportation-related noise sources.

- PS-6.8: Commercial Noise. Require the use of noise attenuation measures, including screening and buffering techniques, for all new commercial development expected to produce excessive noise; in existing cases where the City's noise standards are exceeded, work with Code Enforcement to require compliance.

PS-6 Actions.

- PS-6b: To ensure that noise does not adversely affect new sensitive receptors, the City will use land use compatibility noise criteria for various land use types in Table PS-1 (Table 4.13.D of this document) when making planning and development decisions. The criteria in Table PS-1 (Table 4.13.D of this document) represent the acceptable noise level for new sensitive receptors.

  Existing and future noise contours from transportation noise in the City will be used as a guide for land use and development decisions. If the noise level at a project does not exceed the outdoor activity area allowable noise level in Table PS-1 (Table 4.13.D of this document), the project is considered compatible with the noise environment.

  If the project will exceed the allowable outdoor activity area and interior space noise levels in Table PS-1 (Table 4.13.D of this document), the project proponent shall be required to demonstrate (with an acoustical analysis) that the project is designed to attenuate noise to meet the criteria in Table PS-1 (Table 4.13.D of this document), and California Building Standards Code, and California Green Building Standards Code (Title 24) interior noise standards. If the project is not designed to meet the noise criteria, noise reduction measures may be recommended in the analysis. If the analysis demonstrates that the noise criteria can be met with implementation of the noise reduction measures, the project may be approved with the noise reduction measures required as conditions of project approval.

- PS-6c: To ensure that noise from new development does not adversely affect existing sensitive receptors, the City will require acoustical studies for all new discretionary projects, including those related to development and transportation, which have the potential to generate stationary noise impacts which exceed the criteria identified in the Municipal Code. The studies shall include existing ambient noise measurements, estimates of projected noise levels, and noise reduction measures necessary to ensure compliance with this element.

- PS-6d: In making a determination of traffic noise impact under the California Environmental Quality Act (CEQA), a significant impact will occur if ambient noise levels have a substantial increase and the resultant noise levels are in excess of the City's guidelines. Generally, a 3 A-weighted decibel (dBA) increase in noise levels is barely perceptible. Therefore, increases in noise levels shall be considered substantial when the following occurs:

- When existing noise levels are between 60 dBA L_{dn} and 65 dBA L_{dn}, a 3 dBA increase in noise will be considered substantial;
- When existing noise levels exceed 65 dBA L_{dn}, a 1.5 dBA increase in noise will be considered substantial.

Municipal Code. Chapter 11.16, Noise Control, of the City's Municipal Code provides direction and criteria related to operational and construction noise and vibration. Additionally, requirements such as allowable hours of construction and applicable exemptions are identified.

Section 11.16.040 A, Exterior Noise Standards, identifies exterior noise standards which set limits for noise that land uses are allowed to generate as received by other land uses. These standards may be used during Code enforcement of potential noise violations. For purposes of determining potential project impacts during environmental impact review processes pursuant to CEQA, the average hourly level (L_{eq}) standards shall be utilized unless all sources are impact in nature. The standards shall apply to the corresponding land use in Residential and Mixed-Use zones only. It is unlawful for any person to create any noise either within or outside the City due to a Stationary Noise Source (or any Mobile Noise Source not pre-empted by State or Federal laws), or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the Noise Level when measured at the property line of any residential use in a residential or mixed use zone, to exceed the applicable noise standards listed in Table 1 – Exterior Noise Standards (Table 4.13.E of this document).

Table 4.13.E: Exterior Stationary Noise Standard[1]

Noise Level Descriptor	Noise Level (dBA L_{eq})	Noise Level (dBA L_{max})	Time Period
Residential in Residential Zones	60	80	7:00 a.m. – 10:00 p.m.
	50	70	10:00 p.m. – 7:00 a.m.
Residential Portion of Mixed-Use in Mixed-Use Zones	65	85	7:00 a.m. – 10:00 p.m.
	50	70	10:00 p.m. – 7:00 a.m.
Churches, Hospitals, and Schools in Residential and Mixed-Use Zone	65	85	All Hours
Churches, Hospitals, and Schools in Commercial and Industrial Zones	70	90	All Hours

Source: *City of Lake Forest Municipal Code* (2025).
[1] No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.
dBA = A-weighted decibels
L_{eq} = equivalent continuous sound level

Section 11.16.040 D clarifies that in the event the measured ambient noise level exceeds any of the noise limit categories above, the noise limit as applied to the contribution of the source(s) in question shall be the ambient noise level.

Section 11.16.050 states the exemptions from the aforementioned exterior noise standards. Subsection D prescribes that the exemption would apply to noise sources associated with

construction, repair, remodeling, or grading of any real property, provided that: (1) the City has issued a building permit, grading permit, or similar permit for such activities; (2) said activities do not take place between the hours of 8:00 p.m. and 7:00 a.m., Monday through Saturday, or at any time on Sunday or a legal City of Lake Forest holiday; and (3) the average Construction Noise Levels do not exceed 80 dBA L_{eq} at the first floor of nearby Noise-Sensitive Residential Uses Exterior Noise Standards.

Section 11.16.080, Construction, provides additional direction associated with construction noise. The following regulations set hours, allowed noise levels, and best management practices for construction noise that occurs within the City of Lake Forest. These standards may be used during code enforcement of potential noise violations or used to determine potential project impacts during environmental review processes. The following is required for construction:

A. Construction activities, including delivery of material or equipment, shall not take place between the hours of 8:00 p.m. and 7:00 a.m., Monday through Saturday, or at any time on Sunday or a City holiday; and the average Construction Noise Levels shall not exceed 80 dBA L_{eq} (1-hour) at the first floor of nearby noise-sensitive land uses.

B. If construction noise has the potential to exceed the standards in section 11.16.090.A., as determined by code enforcement of noise violations, analysis of potential construction noise impacts during a review pursuant to CEQA, or if construction using heavy equipment is proposed within 100 feet of noise-sensitive land uses, a Construction Noise Management Plan shall be prepared by a qualified acoustician and submitted by the applicant. The noise reduction measures shall be determined in the plan and shall be quantified to demonstrate that noise levels would not exceed the standards.

Section 11.16.090, Vibration, provides additional direction associated with vibration standards.

A. Operating or permitting the operation of any device that creates vibration that exceeds current published Caltrans vibration criteria at a receiving vibration-sensitive land use is prohibited.

B. For projects implementing a phase or phases of construction that incorporate equipment as presented in Table 2 below (Table 4.13.F of this document): during the pre-building permit issuance phase and after a specific equipment list has been determined: 1) A qualified structural engineer, as approved by the Director of Community Development, or designee shall identify all structures that are located within the distances established in Table 2 (Table 4.13.F of this document) and that have the potential to be affected by ground-borne vibration originating from the construction; and 2) A qualified acoustical engineer shall compile a list of proposed construction equipment and compare to the City's accepted vibration criteria. If it is determined that the proposed equipment would generate vibration levels below the City's standard of 0.3 inches per

second (in/sec) peak particle velocity (PPV), no further vibration assessment is necessary. However, if vibration levels would potentially exceed the City's standard of 0.3 in/sec PPV, the Project Applicant shall develop a Vibration Monitoring and Construction Contingency Plan for approval by the Director of Community Development, or designee, to ensure that vibration levels would not exceed the City's accepted vibration damage criteria of 0.3 in/sec PPV. If a Vibration Monitoring and Construction Contingency Plan is deemed necessary, monitoring of vibration during initial construction activities shall be required. Monitoring results may indicate the need for more or less intensive measurements. The Vibration Monitoring and Construction Contingency Plan, at the discretion of the Director of Community Development or designee, shall include the following items as necessary:

- Identification of structures where monitoring would be conducted;
- A vibration monitoring schedule;
- Defined structure-specific vibration limits;
- Photographic, elevation, and crack surveys to document before and after construction conditions; and
- Identification of construction contingencies for when vibration levels approach the limits.

When vibration levels approach the limits specified in this Chapter, construction shall be suspended and contingencies identified in the approved Vibration Monitoring and Construction Contingency Plan shall be implemented as necessary to lower vibration levels. For some projects, the ability to shield or protect the affected building from potential vibration impacts may be possible as an alternative to changing construction methods.

Table 4.13.F: Vibration Assessment Guidelines

Phase of Construction	Distance (ft)
Grading	
● Large Equipment *Example: D9 Dozer, Loaded Dump Truck	15
● Impact Hand tools *Example: Jackhammer	10
Pile Driving	
● Impact Pile Driver	300 of within 5 times the depth of the pile, whichever is less
● Vibratory Pile Driver	150 of within 5 times the depth of the pile, whichever is less

Source: *City of Lake Forest Municipal Code* (2025).

4.13.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to noise if it would:

Threshold 4.13.1: Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

Threshold 4.13.2: Result in the generation of excessive groundborne vibration or groundborne noise levels; or

Threshold 4.13.3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

4.13.5.1 City Significance Criteria Summary

Table 4.13.G shows the significance criteria summary matrix. According to the previous criteria, noise and vibration impacts shall be considered significant if any of the following occur as a direct result of the proposed development:

Table 4.13.G: Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime[1]	Nighttime[2]
Off-Site Traffic Noise	Noise-Sensitive	Exterior Noise Level Criteria	≥ 3 dBA CNEL Project Increase & Resulting With Project Noise Level > 60 dBA L_{dn} and < 65 dBA L_{dn} ≥ 1.5 dBA L_{dn} Project Increase & Resulting With Project Noise Level > 65 dBA L_{dn}	
Operational Noise	Noise-Sensitive	Exterior Noise Level Standards	See Table 4.13.E.	
Construction Noise & Vibration	Noise-Sensitive	Noise Level Threshold	80 dBA L_{eq}	N/A
		Vibration Level Threshold (Annoyance)	0.04 in/sec RMS	N/A
		Vibration Level Threshold (Building Damage)	0.3 in/sec PPV	N/A

Source: *City of Lake Forest Municipal Code* (City of Lake Forest 2025).
[1] Daytime = 7:00 a.m. to 10:00 p.m.
[2] Nighttime = 10:00 p.m. to 7:00 a.m.
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
in/sec = inches per second
L_{eq} = equivalent continuous sound level
N/A = no nighttime construction activity is permitted, so no nighttime construction noise level limits are identified.
PPV = peak particle velocity
VdB = vibration velocity decibels

- **Off-Site Traffic Noise:** When both of the following criteria are met at noise-sensitive land uses (e.g., residential, hotels, motels, nursing homes, hospitals, parks, playgrounds and recreation areas, and schools):

- Project traffic will cause a noise level increase of 3 dBA L_{dn} or more on a roadway segment adjacent to a noise-sensitive land use; and existing noise levels are between 60 dBA L_{dn} and 65 dBA $L_{dn.}$

- Project traffic will cause a noise level increase of 1.5 dBA L_{dn} or more on a roadway segment adjacent to a noise-sensitive land use; and existing noise levels are greater than 65 dBA $L_{dn.}$

- **Operational Noise:** If project-related operational (stationary source) noise levels exceed the noise level standards for sensitive land uses as presented in Table 4.13.E.

- **Construction Noise and Vibration:**

  - If project-related construction activities create noise levels that exceed the 80 dBA L_{eq} acceptable noise level threshold at the nearby sensitive receiver locations; or

  - If project-related construction activities generate vibration levels that exceed the City's building damage vibration level threshold of 0.3 inch per second (in/sec) peak particle velocity (PPV), or the *distinctly perceptible* human annoyance vibration level threshold of 0.04 in/sec RMS at nearby sensitive receiver locations.

4.13.6 Project Impacts

Please refer to Section 4.13.9 for a full text description of the regulatory compliance and/or mitigation measures referenced in the analysis below.

Threshold 4.13.1: Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact.

Construction Noise Impacts. This section summarizes potential impacts resulting from the short-term construction activities associated with the development of the proposed project. Based on the reference construction noise levels, the project-related construction noise levels, when the highest reference noise level is operating from the center of primary construction activity nearest the sensitive receiver location, would average 71 dBA L_{eq} at the sensitive receiver locations, and therefore would not exceed the daytime construction noise level threshold of 80 dBA L_{eq} at any receiver location. Compliance with **Regulatory Compliance Measure (RCM) NOI-1** would ensure that construction activities would only occur during the allowed hours within the City's Municipal Code. Therefore, construction-related noise impacts would be less than significant, and no mitigation is required.

Off-Site Traffic Noise Impacts. To assess the off-site transportation CNEL noise level impacts associated with the proposed project operations, the existing (2024) and opening year without and with project scenario traffic volumes were obtained from the *Traffic Impact Analysis for the*

IPT Enterprise Business Center LLC (LSA 2025d). The FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to evaluate highway traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resultant noise levels are weighted and summed over 24-hour periods to determine the L_{dn} values. A summary of off-site traffic noise impacts is presented in Table 4.13.H. To provide a conservative approach, traffic volume distribution based on the traffic impact analysis was applied to the with project scenarios to assess traffic noise due to increased heavy truck trips.

Project-related traffic noise would generate the greatest increase of 3.3 dBA along Enterprise Way. There are no noise sensitive uses along this roadway segment and the resultant noise level would be well below 65 dBA L_{dn}. All other roadway segments would be less than 1 dBA. Noise level increases below 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, project-related traffic would have a less than significant impact on off-site sensitive receptors, and no mitigation is required.

Off-Site Operational Noise Impacts. Adjacent off-site land uses would be potentially exposed to stationary-source noise impacts from the proposed on-site heating, ventilation, and air conditioning (HVAC) equipment, trash bin emptying activities, parking lot activities, and truck deliveries and loading and unloading activities.

A 3-D noise model, SoundPLAN, was used to determine the future noise impacts from project operations to the noise-sensitive uses. The noise model considered site topography, the shielding provided by the proposed on-site building, and a planned 16 ft high, 60 ft long wall, which would be located at the eastern end of the loading docks, west of the proposed trash enclosure. The hourly noise levels associated with the proposed on-site HVAC equipment, trash bin emptying activities, parking lot activities, and truck deliveries and loading and unloading activities were modeled at the surrounding sensitive receptors to range from 50.0 dBA L_{eq} to 52.7 dBA L_{eq}. These levels would be below the City's daytime and nighttime noise standards, and therefore are considered less than significant noise impacts, and no mitigation is required.

Table 4.13.H: Traffic Noise Levels Without and With Proposed Project

Roadway Segment	Existing – No Project		Existing – With Project			Opening Year With Cumulative Projects – No Project		Opening Year With Cumulative Projects – With Project		
	ADT	L_{dn} (dBA) 50 ft from Centerline of Nearest Lane	ADT	L_{dn} (dBA) 50 ft from Centerline of Nearest Lane	Increase from Existing Conditions (dBA)	ADT	L_{dn} (dBA) 50 ft from Centerline of Nearest Lane	ADT	L_{dn} (dBA) 50 ft from Centerline of Nearest Lane	Increase from Opening Year Conditions (dBA)
Bake Parkway west of Commercentre Drive	7,290	64.8	7,380	64.9	0.1	7,590	65.0	7,680	65.0	0.0
Bake Parkway between Commercentre Drive and Dimension Drive	19,850	69.1	19,850	69.1	0.0	21,080	69.4	21,080	69.4	0.0
Bake Parkway east of Dimension Drive	22,040	69.6	22,090	69.6	0.0	23,390	69.9	23,440	69.9	0.0
Commercentre Drive west of Dimension Drive	6,040	56.2	6,490	56.7	0.5	7,590	57.2	7,680	57.3	0.1
Enterprise Way east of Dimension Drive	1,320	50.0	2,310	53.3	3.3	2,670	53.0	3,360	54.5	1.5
Dimension Drive north of Commercentre Drive	6,380	62.0	6,430	62.1	0.1	6,670	62.2	6,820	62.4	0.2
Dimension Drive south of Commercentre Drive	19,640	66.9	19,930	67.0	0.1	21,010	67.2	21,000	67.2	0.0
Lake Forest Drive west of Dimension Drive	7,580	63.9	8,070	64.3	0.4	8,460	64.4	8,950	64.7	0.3
Lake Forest Drive east of Dimension Drive	960	54.9	960	54.9	0.0	1,280	56.2	980	54.6	-1.6
Rancho Parkway north of Lake Forest Drive	14,250	65.5	14,370	65.6	0.1	14,990	65.7	15,110	65.8	0.1

Source: Compiled by LSA (2025).
Note: Shaded cells indicate roadway segments adjacent to the project site.
ADT = average daily traffic
CNEL= Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet

Threshold 4.13.2: Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact.

Construction. Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from project construction activities would cause only intermittent localized effects. The proposed project's construction activities most likely to cause vibration impacts are:

- **Heavy Construction Equipment:** Although all heavy mobile construction equipment has the potential to cause at least some perceptible vibration while operating close to buildings, the vibration is usually short-term and is not of sufficient magnitude to cause building damage.

- **Trucks:** Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem.

Ground-borne vibration levels resulting from construction activities occurring within the project site were estimated using data published in the Caltrans Manual. Construction activities that would have the potential to generate low levels of ground-borne vibration within the project site include mobile equipment activities and pile driving, among others. Using the vibration source level of construction equipment and the construction vibration assessment methodology published by the Caltrans Manual, it is possible to estimate the project vibration impacts.

Based on the reference vibration levels provided by the Caltrans Manual, a large bulldozer represents the peak source of vibration with a reference velocity of 0.089 in/sec PPV at 25 ft. The closest building structures are the industrial buildings (26180 & 26190 Enterprise Way, Lake Forest, California), which are within 10 ft of the northern project construction boundary. If large construction equipment with a reference vibration level of 0.089 in/sec PPV is used within 8 ft of these structures, they would experience vibration levels of up to 0.312 PPV (in/sec). These vibration levels would exceed the 0.3 in/sec PPV threshold. However, with implementation of **RCM NOI-2**, which details construction vibration assessments pursuant to Municipal Code section 11.16.090, construction vibration impacts would be less than significant. Since there are no other receptor locations within 12 ft of the project site, vibration levels at all other buildings would be below the 0.3 in/sec PPV threshold and no construction-related vibration impacts would occur. Therefore, construction impacts would be less than significant, and no mitigation is required.

Operation. The proposed project would not result in vibration impacts related to on-site stationary source operations because the proposed stationary equipment would not generate perceptible vibration levels. In addition, the proposed project would not result in vibration impacts from project-related traffic on site or on the adjacent roadways because the rubber tires and suspension systems of on-road vehicles reduce vibration. Based on a reference

vibration level of 0.076 in/sec PPV, structures greater than 20 ft from the roadways along which project vehicles would be traveling, would experience vibration levels below the standard of 0.3 in/sec PPV. Therefore, vibration levels generated from project-related traffic on site or on the adjacent roadways would be less than significant, and no mitigation is required.

Threshold 4.13.3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the Project area to excessive noise levels?

No Impact. Aircraft flyovers may be audible on the project site due to aircraft activity in the vicinity. The nearest airport to the project site is John Wayne Airport (JWA), a commercial airport approximately 10.8 miles to the west. The project site is well outside the JWA 60 dBA CNEL noise contour.[2] Because the project site is not within the vicinity of a private airstrip or an airport land use plan or within 2 miles of a public airport or public use airport and is outside the 60 dBA CNEL noise contour of JWA, which is 10.8 miles from the project site, the proposed project would not expose people residing or working in the project area to excessive noise levels. There would be no impacts, and no mitigation is required.

4.13.7 Cumulative Impacts

As defined in Section 15355 of the *State CEQA Guidelines*, cumulative impacts refer to the incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The cumulative study area for noise and vibration is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Because noise levels dissipate exponentially with distance from the noise source, noise impacts are localized. Therefore, the cumulative analysis for noise and vibration is focused on the potential cumulative noise and vibration impacts associated with development of the proposed project combined with Western Realco Projects 1 and 2, which are reasonably foreseeable projects that would be located immediately adjacent to the project site and for the purposes of this analysis are assumed to have construction schedules that overlap with the proposed project. As such, a quantitative evaluation of the combined noise and vibration impacts of constructing and operating the proposed project and Western Realco Projects 1 and 2 has been prepared and is presented in this section.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required. As detailed in this section, the proposed project would have no impacts associated with exposing people residing or

[2] John Wayne Airport (JWA). 2022. Annual CNEL Noise Contours. Website: https://www.ocair.com/about/administration/access-noise/reports-resources/ (accessed August 2024).

working in the project area to excessive noise levels within 2 miles of a public airport or public use airport. Therefore, no analysis would be required.

As detailed in this section, the closest residence to the project site is located 470 ft from the center of the project site. Based on the reference construction noise levels, construction noise levels from the proposed project and Western Realco Projects 1 and 2 would be 71 dBA L_{eq} and 68 dBA L_{eq}, respectively, at the sensitive receptor. The cumulative construction noise levels from both the proposed project and Western Realco Projects 1 and 2 would be 72.8 dBA L_{eq} at the sensitive receptor, which is below the construction noise level threshold of 80 dBA L_{eq}. Therefore, implementation of the proposed project, when evaluated in combination with Western Realco Projects 1 and 2, would not contribute to cumulatively considerable construction-related noise impacts in excess of standards established in a general plan or noise ordinance. Therefore, there would be no cumulatively significant construction noise impact, and no mitigation is required.

Hourly noise levels generated by operational activities from Western Realco Projects 1 and 2 were modeled at the closest off-site land uses using SoundPLAN. Operational assumptions were similar to those for the proposed project and were scaled based on the number of docks and estimated trip generation for Western Realco Projects 1 and 2.

The results show that the noise levels generated by the combination of the proposed project and Western Realco Projects 1 and 2 would be below the daytime and nighttime standards of 55 dBA L_{eq} and 50 dBA L_{eq}, respectively, and would not approach thresholds levels at the nearby sensitive uses. Therefore, implementation of the proposed project, when evaluated in combination with Western Realco Projects 1 and 2, would not contribute to a cumulatively considerable operational stationary noise impact in excess of standards established in a general plan or noise ordinance. Therefore, there would be no cumulatively significant operational stationary noise impact, and no mitigation is required.

As previously shown in Table 4.13.H, cumulative traffic noise levels associated with the operation of the proposed project and Western Realco Projects 1 and 2 would increase noise levels by up to 1.0 dBA along Enterprise Way. Noise level increases below 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, implementation of the proposed project, when evaluated in combination with Western Realco Projects 1 and 2, would not contribute to a cumulatively considerable operational traffic noise impact in excess of standards established in a general plan or noise ordinance. Therefore, there would be no cumulatively significant operational traffic noise impact, and no mitigation is required.

As detailed in this section, vibration impacts would not occur at buildings located beyond 12 ft from the edge of construction at the project site. Similarly, vibration impacts associated with Western Realco Projects 1 and 2 would also not extend beyond 12 ft from the edge of construction. There are no buildings that are within 12 ft of both the proposed project and Western Realco Projects 1 and 2. Therefore, implementation of the proposed project, when evaluated in combination with Western Realco Projects 1 and 2, would not contribute to a cumulatively considerable construction vibration impact. Therefore, there would be no cumulatively significant construction vibration impact, and no mitigation is required.

The proposed project would not result in vibration impacts related to on-site stationary source operations because the proposed stationary equipment would not generate perceptible vibration levels. Similarly, the vibration impacts related to on-site stationary source operations from Western Realco Projects 1 and 2 would also be below perceptible vibration levels. Stationary sources do not generate significant vibration levels. Therefore, implementation of the proposed project, when evaluated in combination with Western Realco Projects 1 and 2, would not contribute to a cumulatively considerable on-site stationary source-induced vibration impact. Therefore, there would be no cumulatively significant on-site stationary source-induced impact, and no mitigation is required.

The proposed project would not result in vibration impacts from project-related traffic on-site or on the adjacent roadways because the rubber tires and suspension systems of on-road vehicles reduce vibration. Similarly, and for the same reason, the vibration impacts from on-site and off-site traffic associated with Western Realco Projects 1 and 2 would also remain below impact thresholds. Therefore, implementation of the proposed project, when evaluated in combination with Western Realco Projects 1 and 2, would not contribute to a cumulatively considerable traffic-induced vibration impact. Therefore, there would be no cumulatively significant traffic-induced vibration impact, and no mitigation is required.

4.13.8 Level of Significance Prior to Mitigation

Impacts related to construction noise and vibration would be potentially significant prior to implementation of regulatory compliance measures.

4.13.9 Regulatory Compliance Measures and Mitigation Measures

4.13.9.1 Regulatory Compliance Measures

The following regulatory compliance measures are required to reduce potentially significant impacts related to construction noise and vibration to a less than significant level:

RCM NOI-1 **City of Lake Forest Municipal Code, Section 11.16.060(D).** During construction, construction activities shall be limited to between the hours of 7:00 a.m. and 8:00 p.m. Mondays through Saturdays. No construction shall be permitted outside of these hours or on legal City of Lake Forest holidays, without a specific exemption issued by the City of Lake Forest.

RCM NOI-2 **Pre-Construction Vibration Assessment.** After a specific project equipment list has been determined and prior to the issuance of a building permit, the following actions shall be implemented:

1. A qualified structural engineer, as approved by the Director of Community Development, or designee shall identify all structures that are located within the distances established in Table 2 of Section 11.16.090 of the City's Municipal Code and that have the potential to be affected by ground-borne vibration originating from the construction; and

2. A qualified acoustical engineer shall compile a list of proposed construction equipment and compare to the City's accepted vibration criteria. If it is determined that the proposed equipment would generate vibration levels below the City's standard of 0.3 inches per second (in/sec) peak particle velocity (PPV), no further vibration assessment is necessary. However, if vibration levels would potentially exceed the City's standard of 0.3 in/sec PPV, the Project Applicant shall develop a Vibration Monitoring and Construction Contingency Plan for approval by the Director of Community Development, or designee, to ensure that vibration levels would not exceed the City's accepted vibration damage criteria of 0.3 in/sec PPV. If a Vibration Monitoring and Construction Contingency Plan is deemed necessary, monitoring of vibration during initial construction activities shall be required. Monitoring results may indicate the need for more or less intensive measurements. The Vibration Monitoring and Construction Contingency Plan, at the discretion of the Director of Community Development or designee, shall include the following items as necessary:

    - Identification of structures where monitoring would be conducted;
    - A vibration monitoring schedule;
    - Defined structure-specific vibration limits;
    - Photographic, elevation, and crack surveys to document before and after construction conditions; and
    - Identification of construction contingencies for when vibration levels approach the limits.

    When vibration levels approach the limits specified in Section 11.16.090 of the City's Municipal Code, construction shall be suspended and contingencies identified in the approved Vibration Monitoring and Construction Contingency Plan shall be implemented as necessary to lower vibration levels, which could include shielding or protecting the affected building from potential vibration impacts as a possible alternative to changing construction methods.

4.13.9.2 Mitigation Measures

The proposed project would not result in any significant impacts related to noise and vibration, and no mitigation is required.

4.13.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to noise and vibration.

4.14 POPULATION AND HOUSING

This section evaluates the potential impacts to population and housing conditions from implementation of the proposed project. This section is based in part on the following:

- Southern California Association of Governments' (SCAG) *Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS) Demographics & Growth Forecast Technical Report* (Growth Forecast Technical Report) (SCAG 2024);
- SCAG's *The New Economy and Jobs/Housing Balance in Southern California* (SCAG, April 2001);
- *City of Lake Forest General Plan Housing Element* (City of Lake Forest 2023);
- California Employment Development Department (EDD 2024); and
- United States Census Bureau American Community Survey 2022 1-Year Estimates (United States Census Bureau 2022).

4.14.1 Scoping Process

The Notice of Preparation (NOP) for the proposed project was published in March 2024 and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft Environmental Impact Report (EIR). Four comment letters included comments related to population and housing. These comments pertain to concerns about property value loss, loss of community character, and population loss.

4.14.2 Methodology

Evaluating the potential for project-related activities to impact the City's population and housing relied on data published by the California Economic Development Department (EDD), the Southern California Association of Governments (SCAG), the American Community Survey (ACS), and the United States (U.S.) Census Bureau, as well as information presented in the City's General Plan.

4.14.3 Existing Environmental Setting

4.14.3.1 Population, Housing, and Employment Trends in the City and County

Lake Forest is characterized by urban areas, including single-family, multifamily, and mobile home residential uses and concentrations of commercial, office, and industrial uses. Lake Forest also contains several regional and community parks and open spaces.

In its existing condition, the 8.83-acre project site is currently developed with a 144,906-square-foot (sq ft), two-story tilt-up office/industrial building. The project site does not contain any residential uses.

Lake Forest and Orange County are located within the SCAG planning area, which encompasses a population exceeding 19 million residents in an area of more than 38,000 square miles. SCAG is a

federally designated Metropolitan Planning Organization (MPO)[1] encompassing six counties (i.e., Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties) and 197 local jurisdictions. In 2024, the SCAG Regional Council adopted the 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Growth Forecast Technical Report (SCAG 2024) to predict the most likely growth scenario for the Southern California region in the future. The SCAG RTP/SCS growth forecast is meant to provide a common foundation for regional and local planning, policymaking, and infrastructure provisions within the SCAG region.

The growth forecast for Orange County and Lake Forest in the SCAG RTP/SCS Growth Forecast Technical Report is provided in Tables 4.14.A and 4.14.B. These projections are used as a reference point for discussing population and housing growth throughout this section.

Table 4.14.A: SCAG Population, Households, and Employment Forecasts for Orange County (2019–2050)

Year	Population	Households	Employment
2019	3,191,000	1,069,000	1,805,000
2035	3,299,000	1,196,000	1,942,000
Percent Change (2019–2035)	**3.4%**	**11.9%**	**7.6%**
2050	3,439,000	1,253,000	2,019,000
Percent Change (2019–2050)	**7.8%**	**17.2%**	**11.9%**

Source: 2024–2050 RTP/SCS Demographics & Growth Forecast Technical Report (SCAG 2024). Website: https://scag.ca.gov/sites/main/files/file-attachments/23-2987-tr-demographics-growth-forecast-final-040424.pdf?1712261839 (accessed July 18, 2024).
RTP = Regional Transportation Plan SCS = Sustainable Community Strategy
SCAG = Southern California Association of Governments

Table 4.14.B: SCAG Population, Households, and Employment Forecasts for Lake Forest (2019–2050)

Year	Population	Households	Employment
2019	85,800	29,200	44,700
2035	87,440	31,700	45,800
Percent Change (2019–2035)	**1.9%**	**8.6%**	**2.5%**
2050	87,280	31,800	45,900
Percent Change (2019–2050)	**1.7%**	**8.9%**	**2.7%**

Source: 2024–2050 RTP/SCS Demographics & Growth Forecast Technical Report (SCAG 2024). Website: https://scag.ca.gov/sites/main/files/file-attachments/23-2987-tr-demographics-growth-forecast-final-040424.pdf?1712261839 (accessed July 18, 2024).
RTP = Regional Transportation Plan SCS = Sustainable Community Strategy
SCAG = Southern California Association of Governments

[1] An MPO is a federally mandated and federally funded transportation policymaking organization that is made up of representatives from local government and governmental transportation authorities. In 1962, the United States Congress passed legislation that required the formation of an MPO for any urbanized area with a population greater than 50,000.

Population. As shown in Tables 4.14.A and 4.14.B, according to the Demographics & Growth Forecast Technical Report (SCAG 2024), which was adopted in 2024 by SCAG and is a part of the 2024–2050 RTP/SCS but has not yet been approved by the California Air Resources Board (CARB), Lake Forest's population is anticipated to grow by approximately 1.9 percent between 2019 and 2035 and approximately 1.7 between 2019 and 2050. Orange County's population is expected to grow by 3.4 percent between 2019 and 2035 and by approximately 7.8 percent between 2019 and 2050. Although the 2024–2050 RTP/SCS has not yet been approved by CARB, the population, housing, and employment totals for the City of Lake Forest that were used by SCAG to prepare the demographic and growth forecasts were reviewed and approved by the City.[2]

Age Characteristics. A city's age distribution often shapes its housing demand. According to the City of Lake Forest General Plan Housing Element (2023), different age groups require different accommodations based on lifestyle, family type, income level, and housing preference. Table 4.14.C provides a comparison of Lake Forest's and Orange County's population by age group using data from the 2022 ACS 1-year estimate. As shown in Table 4.14.C, Lake Forest and Orange County have similar proportions of residents in each age group. The largest difference between Lake Forest and Orange County is in the 45 to 64 years age group (29.8 percent and 26.4 percent, respectively). The largest portion of the population of Lake Forest is within the 45 to 64 years age group, and the largest portion of the population of Orange County is within the 25 to 44 years age group. The median age of Lake Forest is also about 1.5 years older than that of Orange County, suggesting that the population of Lake Forest is slightly older overall than that of Orange County.

Table 4.14.C: Lake Forest and Orange County Age Characteristics

Age Group	Lake Forest		Orange County	
	Persons	Percentage	Persons	Percentage
Under 18 Years	15,967	18.6%	654,520	20.8%
18 to 24 Years	7,395	8.6%	292,553	9.3%
25 to 44 Years	22,422	26.3%	857,191	27.1%
45 to 64 Years	25,537	29.8%	830,118	26.4%
65 and Over	14,314	16.7%	516,802	16.4%
Total	**85,635**	**100.0%**	**3,151,184**	**100.0%**
Median Age	41.1		39.5	

Source: American Community Survey 2022 1-Year Estimates, Table S0101 (United States Census Bureau 2022). Website: https://data.census.gov/table?q=lake%20forest,%20california%20and%20orange%20county,%20california%20population%20by%20age%20group (accessed July 18, 2024).

[2] As part of the SoCal Connect (as known as the Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]), every four years the City of Lake Forest reviews and provides comments on projections related to housing, population and employment per Traffic Analysis Zones within the City to the Center for Demographic Research (CDR) who provides information to the Southern California Association of Governments (SCAG). The City also provides the SCAG with information related to existing land uses, entitlements, zoning and general plan land uses. Collectively this information is used in the Demographics & Growth Forecast Technical Report.

Households.[3] As shown in Tables 4.14.A and 4.14.B, Lake Forest's number of households is anticipated to grow by 8.6 percent between 2019 and 2035 and by approximately 8.9 percent between 2019 and 2050. Orange County's number of households is anticipated to grow by 11.9 percent between 2019 and 2035 and by approximately 17.2 percent between 2019 and 2050. These growth projections suggest that households are expected to grow steadily from 2019 to 2050 in both Lake Forest and Orange County.

Employment. As shown in Tables 4.14.A and 4.14.B, according to the 2024–2050 RTP/SCS Growth Forecast Technical Report (SCAG 2024), employment in Lake Forest is anticipated to grow by approximately 2.5 percent between 2019 and 2035 and by approximately 2.7 percent between 2019 and 2050. Employment in Orange County is expected to grow by 7.6 percent between 2019 and 2035 and by approximately 11.9 percent between 2019 and 2050. These growth projections suggest that employment is expected to grow steadily from 2019 to 2050 in both Lake Forest and Orange County.

As of November 2024, Lake Forest had a labor force of 48,300, and Orange County had a labor force of 1,586,000, with approximately 1,800 and 64,100 people unemployed, respectively (EDD 2024).[4] The November 2024 unemployment rate was 3.7 percent for Lake Forest and 4.0 percent for Orange County (EDD 2024).

Jobs/Housing Balance. Jobs/housing balance is a regional concept that encourages the designation and zoning of sufficient vacant land for residential uses with appropriate standards to ensure that adequate housing is available to serve the needs derived from the local employment base. The jobs-to-housing ratio can be used as the general measure of balance between a community's employment opportunities and the housing needs of its residents. Theoretically, a city's jobs/employment ratio (jobs to employed residents) would be 1:1 if the number of jobs in the city equaled the number of employed residents. However, assuming a simple ratio of one job to one household is inappropriate in modern economies that have many households with more than one person in the workforce. According to SCAG's The New Economy and Jobs/Housing Balance in Southern California (SCAG 2001), a balance between jobs and housing in a metropolitan region can more appropriately be defined as a provision of an adequate supply of housing to house workers employed in a defined area (i.e., subregion or community).

SCAG applies the jobs-to-housing ratio at the regional and subregional level as a tool for analyzing the fit between jobs, housing, and infrastructure. The American Planning Association (APA) is an authoritative resource for community-planning best practices, including recommendations for assessing jobs-to-housing ratios. The APA recognizes that an ideal jobs-to-housing ratio will vary

[3] The Southern California Association of Governments forecasts "households" not housing units. As defined by the United States Census Bureau, "households" are equivalent to occupied housing units.

[4] Monthly Labor Force Data for Cities and Census Designated Places, Orange County, November (California Employment Development Department 2024). Website: https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html#CCD (accessed January 20, 2025).

from jurisdiction to jurisdiction. In general, the recommended target for an appropriate jobs-to-housing ratio is 1.5, with a recommended range of 1.3 to 1.7.[5]

Lake Forest is currently within the jobs-to-housing ratio range recommended by the APA. According to the 2024–2050 RTP/SCS Growth Forecast Technical Report (SCAG 2024), Lake Forest had a jobs-to-housing ratio of 1.5 in 2019 and is projected to have a jobs-to-housing ratio of 1.4 in 2035 and 2050. The decrease in the jobs-to-housing ratio suggests that the job growth expected in the region will be less than the expected growth in housing.

4.14.4 Regulatory Setting

Federal, State, and local regulations and programs related to population and housing that are applicable to the proposed project are described below.

4.14.4.1 Federal Regulations

There are no federal regulations that apply to the proposed project with respect to population and housing.

4.14.4.2 State Regulations

There are no State regulations that apply to the proposed project with respect to population and housing.

4.14.4.3 Regional Regulations

Southern California Association of Governments. As the designated MPO for the six-county subregion that includes Orange County, SCAG prepares several plans to address regional growth, including the RTP/SCS. SCAG is mandated by federal and State law to research and draw up plans for transportation, growth management, hazardous waste management, and a regional growth forecast that is the foundation for these plans and regional air quality plans developed by the South Coast Air Quality Management District (SCAQMD). SCAG prepares several plans to address regional growth, including the Regional Comprehensive Plan and Guide, Regional Housing Needs Assessment (RHNA), the Regional Transportation Plan (RTP), the Regional Transportation Improvement Program (RTIP), and the annual State of the Region reports to measure progress toward achieving regional planning goals and policies.

4.14.4.4 Local Regulations

City of Lake Forest General Plan Housing Element. The Housing Element is required by California State law to be a component of every city's General Plan because housing needs are recognized as a statewide concern. As such, the Housing Element of a jurisdiction's General Plan is the only element that is subject to approval by the State. Pursuant to State law, the Housing Element must identify the city's housing needs, the sites that can accommodate these needs, and the policies and programs to assure that the housing units necessary to meet these needs can be provided. The

[5] Weitz, Jerry. 2003. *Planning Advisory Service Report No. 516: Jobs-Housing Balance.* American Planning Association.

primary goal of the Housing Element is to provide a range of housing opportunities for all income groups.

In February 2023, the 2021–2029 Housing Element was adopted as a guide for housing within Lake Forest. The Housing Element provides an indication of the need for housing in the community in terms of housing affordability, availability, adequacy, and accessibility. The Housing Element also provides a strategy to address housing needs and identifies a series of specific housing programs to meet community needs. The following goals are found in the City's Housing Element:

- **Goal 1.0:** Adequate housing to meet the existing and future needs of Lake Forest residents.
- **Goal 2.0:** Maintenance and enhancement of the quality of existing residential neighborhoods.
- **Goal 3.0:** Increased opportunities for home ownership.
- **Goal 4.0:** Promote equal opportunity for all residents to reside in housing of their choice by affirmatively furthering fair housing.

The Housing Element also contains objectives, policies, and programs that are intended to formulate the City's approach to pursuing the production, preservation, and rehabilitation of housing units and to meeting its goals outlined above.

4.14.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to population and housing if it would:

Threshold 4.14.1: Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or

Threshold 4.14.2: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

4.14.6 Project Impacts

Threshold 4.14.1: Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The California Environmental Quality Act (CEQA) requires a discussion of ways in which a project could be growth inducing (see also Chapter 6.0, Other CEQA Considerations). The *State CEQA Guidelines* identify a project as growth inducing if it fosters economic or population growth, or the construction of additional housing either directly or indirectly in the surrounding environment.[6] New employees from commercial or industrial development and new population from residential development represent direct forms of growth.

[6] *State CEQA Guidelines* §15126.2(d).

These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

A project could indirectly induce growth by reducing or removing barriers to growth, or by creating a condition that attracts additional population or new economic activity in an area. Typically, the growth-inducing potential of a project would be considered substantial if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies (e.g., SCAG). Substantial growth impacts could also occur if a project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. Under CEQA, growth inducement in and of itself is not considered detrimental or beneficial. In general, growth induced by a project is considered a significant impact if it can be demonstrated that the potential growth significantly affects the environment in some way.

A project could indirectly induce growth at the local level by developing new or expanded infrastructure, thus reducing or removing the barriers to growth. A project could also indirectly induce growth at the local level by increasing the demand for additional goods and services associated with the increase in project population. For example, this occurs in suburban or rural areas where population growth results in increased demand for services and commodity markets respond to the new population by developing a shopping center or grocery store. This type of growth is, however, a regional phenomenon resulting from introduction of a major employment center or regionally significant housing project. Additional commercial uses may be drawn to the area by the increased number of residents in the area as a result of a project; however, it is expected that any such development would occur consistent with planned growth identified in the General Plan or applicable specific plans.

Construction of the proposed project would provide short-term construction jobs over an approximately 12-month period. The construction jobs would be temporary and would be specific to the variety of construction activities. The workforce would include a variety of construction trade workers, such as grading workers, surveyors, cement finishers, ironworkers, welders, carpenters, electricians, painters, and laborers. Generally, construction workers are only at a job site for the timeframe in which their specific skills are needed to complete that phase of construction. Although the proposed project would increase the number of employees at the project site during construction activities, it is expected that local and regional construction workers would be available to serve the construction needs of the site. Given the relatively short duration of construction, project-related construction workers would not be expected to relocate their places of residence as a consequence of working on the project site; therefore, the proposed project would result in a less than significant impact associated with inducing substantial population growth or demand for housing through increased construction employment, and no mitigation is required.

Once operational, the proposed project would not result in direct population growth because the proposed project is not a residential use or does not include a residential component; and therefore, would not add new residents at the project site. The proposed 165,803 sq ft tilt-up concrete industrial building would generate approximately 187 new jobs in Lake Forest. According to the SCAG 2024–2050 RTP/SCS Growth Forecast Technical Report data summarized in Table 4.14.A and

Table 4.14.B, this represents approximately 17 percent[7] of the job growth anticipated in Lake Forest by 2035 and less than 1 percent[8] of the job growth anticipated in Orange County by 2035. Given that approximately 1,800 and 64,100 people are currently unemployed[9] in Lake Forest and Orange County, respectively, it is logical to assume that the majority of these positions would be filled by existing City or County residents. Therefore, the proposed project would not result in a significant increase to the City's population due to hiring out of area employees that would move to the City to work at the project site. Furthermore, the proposed project is consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. Additionally, the proposed project would be connected to existing municipal utility infrastructure and would not include the construction of new roadways or infrastructure beyond that which would serve only the project site. Therefore, the proposed project would have a less than significant impact relative to the growth of the City's or region's population either directly through the provision of new housing or indirectly through the extension of infrastructure, and no mitigation is required.

Threshold 4.14.2: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project includes the demolition of the existing 144,906 sq ft, two-story office/industrial building and the construction and operation of a new 35-foot-tall, 165,803 sq ft tilt-up industrial building. The proposed project includes a gated truck loading area, truck and auto parking spaces, and new landscaping throughout the site. Under existing conditions, the project site does not contain any residential uses, and neither construction nor operation of the proposed project would displace existing residents on site or from the nearby residential areas. Therefore, the proposed project would not result in the displacement of people or housing and would not require the construction of replacement housing elsewhere. Therefore, there would be no impact, and no mitigation is required.

4.14.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts refer to the incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The cumulative study area for population and housing is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

[7] The anticipated change in employment in Lake Forest from 2019 to 2035 is 1,100 jobs (45,800-44,700 = 1,100). The proposed project would generate approximately 187 jobs, which accounts for 17 percent of the anticipated job growth (187/1,100 = 0.17 x 100 = 17 percent).

[8] The anticipated change in employment in Orange County from 2019 to 2035 is 137,000 jobs (1,942,000-1,805,000 = 137,000). The proposed project would generate approximately 187 jobs, which accounts for 0.14 percent of the anticipated job growth (187/137,000 = 0.0014 x 100 = 0.14 percent).

[9] Civilians over the age of 16 who are not working but are able, available, and actively looking for work according to the California Employment Development Department (EDD).

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have no impact associated with the displacement of substantial numbers of existing people or housing requiring the construction of replacement housing elsewhere.

As detailed in this section, the proposed project would have a less than significant impact associated with inducing unplanned growth, either directly or indirectly. Additionally, all discretionary private development and public works projects within the cumulative study area would be required to evaluate potential impacts on population and housing and implement mitigation measures, as needed. Since all projects within the cumulative study area would be required to implement appropriate mitigation measures, implementation of the proposed project, when evaluated in combination with the development of projects listed in Table 4.A, would not contribute to a cumulatively considerable impact on population and housing. Cumulative impacts to population and housing would be less than significant, and no mitigation is required.

4.14.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to population and housing.

4.14.9 Regulatory Compliance Measures and Mitigation Measures

4.14.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to population and housing.

4.14.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to population and housing, and no mitigation is required.

4.14.10 Level of Significance after Mitigation

The proposed project would result less than significant impacts related to population and housing.

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4.15 PUBLIC SERVICES

This section evaluates the potential impacts to public services within the jurisdiction of the project site due to the implementation of the proposed project. This section is based on multiple data sources, including the following:

- Written correspondence and coordination with public service providers (provided in Appendix I);
- *Public Draft Environmental Impact Report for the 2040 Lake Forest General Plan, SCH# 2019090102* (City of Lake Forest, November 2019); and
- *City of Lake Forest General Plan Recreation and Resources Element* (City of Lake Forest 2020).

This section addresses the following public services (service providers are noted in parenthesis):

- Fire Protection (Orange County Fire Authority [OCFA])
- Police Protection (Orange County Sheriff's Department [OCSD])
- Public Schools (Saddleback Valley Unified School District [SVUSD])
- Parks (City of Lake Forest)
- Public Libraries (OC Public Libraries [OCPL])

4.15.1 Scoping Process

The Notice of Preparation (NOP) for the proposed project was published in March 2024, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the Initial Study NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft Environmental Impact Report (EIR). One comment letter included comments related to public services. This comment pertains to concerns about the need for heightened security.

4.15.2 Methodology

On June 26, 2024, relevant public service providers were sent a written letter and questionnaire describing the proposed project, requesting confirmation about the accuracy of agency-specific data obtained from publicly available sources, such as agency websites, and requesting additional information to assist with evaluating the potential for the proposed project to impact public services. No responses to the letter or questionnaire were received from the public service providers. Therefore, project impacts on public services are based primarily on information obtained from agency websites, including the OCFA, the California Department of Forestry and Fire Protection (CAL FIRE), the OCSD, the United States Census Bureau, the National Center for Education Statistics, the SVUSD, and the OCPL, and from the City of Lake Forest General Plan 2040 and the City of Lake Forest 2040 General Plan EIR (City of Lake Forest, November 2019).

4.15.3 Existing Environmental Setting

4.15.3.1 Fire Protection

OCFA is a Joint Powers Authority responsible for reducing loss of life and property from fire, medical, and environmental emergencies. OCFA serves 1.9 million residents in 24 cities and unincorporated areas in Orange County out of 78 stations within a 586-square-mile service area, including 235,000 acres of wildland.[1] The City contracts with the OCFA for fire protection and emergency services.

In addition to providing fire, emergency medical, and rescue services, OCFA provides a variety of public services, including:

- Receiving and dispatching emergency calls;
- Providing public education programs to schools, businesses, community associations, childcare providers and other members of the community;
- Administering a Reserve Firefighter Program;
- Adopting and enforcing codes and ordinances relative to fire and life safety issues associated with commercial, industrial, and residential development;
- Maintaining a firefighting helicopter used for emergency responses;
- Coordinating the inspection of all commercial buildings, investigating all fires, and enforcing fire code hazardous materials inspections;
- Working with developers and jurisdictional planning departments on development projects impacting fire protection services, from conception through planning process approval;
- Interacting with developers, architects, and engineers to meet the fire protection requirements for buildings and developments by reviewing all architectural blueprints, development plans, and proposals submitted in OCFA's jurisdiction;
- Conducting an inventory program of hazardous materials stored, handled, and used within OCFA's jurisdiction, and maintaining related information on a database accessible to all emergency response agencies in the event of a major emergency;
- Conducting California Fire Code inspections, assisting in reducing risks associated with the use of hazardous materials in the community, and administering the State-mandated Risk Management and Prevention program;

[1] Orange County Fire Authority (OCFA). 2024. *FY 2024/25 Adopted Budget*. July. Website: https://www.ocfa.org/Uploads/Transparency/OCFA%202024-2025%20Adopted%20Budget.pdf (accessed January 20, 2025).

- Investigating fires to determine their cause, preparing arson and hazardous materials cases for the District Attorney's Office, and initiating actions to recover costs for negligently caused fires; and

- Developing and maintaining a fire-safe corridor between the wildland and community developments through fuel modifications and inspections.

Lake Forest is in Division V, which includes Battalion 4. Division V serves the cities of Lake Forest, Laguna Woods, Aliso Viejo, Laguna Hills, Laguna Niguel, and unincorporated areas of Newport Coast, Emerald Bay, and Laguna Beach.[2]

There are three OCFA fire stations that provide service to Lake Forest, including Fire Station Nos. 19, 42, and 54. The project site is located in the service area of Fire Station No. 54, which is located approximately 1.2 miles northeast of the project site at 19811 Pauling Avenue. This fire station's daily staffing includes one captain, one engineer, and two firefighters, and has a total staffing of 12 firefighters. Equipment includes one paramedic assessment unit and one urban search and rescue unit.[3]

In the previous decade, OCFA's average response time[4] for emergency calls remained relatively constant at less than 7 minutes per call. The ratio of firefighters to residents has remained steady over the last 3 years, ranging from 5.86 to 5.94 per 10,000 residents. During the past 10-year time frame, the emergency call load has increased by 89 percent due in part to the City of Santa Ana joining OCFA in April 2012 and the City of Garden Grove joining in August 2019.[5] The vast majority of the calls to the OCFA are associated with the provision of emergency medical services (City of Lake Forest 2019).

4.15.3.2 Police Protection

The Orange County Sheriff's Department (OCSD) provides police protection services throughout Lake Forest. According to the OCSD website, the OCSD has nearly 4,000 sworn and professional staff members.[6] The Southeast Operations Division of the OCSD provide law enforcement services to an area encompassing the southern portion of Orange County, including Lake Forest. The Southeast

2 Orange County Fire Authority (OCFA). n.d.-a. *Operations Division 5.* Website: https://ocfa.org/AboutUs/Departments/OperationsDirectory/Division5.aspx (accessed June 6, 2024).

3 Orange County Fire Authority (OCFA). n.d.-b. Fire Station 54. Website: https://www.ocfa.org/AboutUs/Departments/OperationsDirectory/Division5.aspx (accessed June 6, 2024).

4 OCFA defines response time as the time interval between Dispatch Notification and Arrival on Scene. It includes Dispatch time, Turnout time, and Travel time. Response time goals are established through OCFA policy. Response time performance is generally measured for the first unit on scene (Distribution) and for an Effective Response Force (Concentration). Incident response times are impacted by many variables, including availability of first due units, travel distance, traffic, geography, weather, and street networks.

5 Orange County Fire Authority (OCFA). 2022. Fiscal Year 2022/23 Adopted Budget. Website: https://ocfa.org/Uploads/Transparency/OCFA%202022-2023%20Adopted%20Budget.pdf (accessed June 6, 2024).

6 Orange County Sheriff's Department (OCSD). n.d.-a. About OC Sheriff. Website: https://www.ocsheriff.gov/about-ocsheriff (accessed June 6, 2024).

Operations Division deploys 65 patrol cars during each 24-hour period. This requires approximately 223 staff members, of which 168 are sworn peace officers.[7]

OCSD personnel assigned to Lake Forest include 5 sergeants, 3 investigators, 37 deputies, 1 investigative assistant, 5 community service officers, and 1 crime prevention specialist.[8] Services provided to the City include direct and preventative patrol, a Special Enforcement Team, traffic enforcement, a Homeless Liaison Officer, a deputy assigned to the regional Directed Enforcement Team, School Resource Officers, Bike Patrol, Neighborhood and Business Watch programs, as well as emergency preparedness classes for the community. In addition to these services, the sheriff's department also provides street and regional narcotics suppression programs, a Gang Enforcement Team, Mounted Unit, Special Weapons and Tactics Team (SWAT), Hostage Negotiations, the Drug Use is Life Abuse drug prevention program, and a complement of patrol-trained Reserve Deputy Sheriffs, many of whom volunteer their time for City events (City of Lake Forest 2019). The majority of crimes committed in Lake Forest consist of non-violet property crimes, primarily larceny-theft (City of Lake Forest 2019).

Services to Lake Forest are provided out of the OCSD's Saddleback Station located at 20202 Windrow Drive in Lake Forest, which is 0.8 mile east of the project site. The OCSD/Police Services Department embraces the concept of community-oriented policing, which encompasses the active participation of local government, civic and business leaders, residents, schools, churches, and other public and private agencies.

The OCSD does not use a standard officer-to-population or standard response time objective ratio to measure the adequacy of policing levels in Lake Forest. Instead, the OCSD analyzes demographics, service calls, population, crime trends, and other changing factors to determine the level of police protection services needed. The Federal Bureau of Investigation (FBI) indicates that 1.2 police officers per 1,000 residents is the average ratio for Western-region cities with populations less than 100,000. The current officer-to-resident ratio in Lake Forest is estimated to be 0.61 police officer per 1,000 residents.[9]

Response times to the project site are dependent on various factors, including the location of patrol vehicles at the given moment. Emergency calls receive the quickest response, with alarm calls and non-emergency calls having longer response times. Response times for OCSD for Priority 1 calls (i.e., emergency, life-threatening or serious crimes in progress calls) are within the target response time of 5 minutes.[10]

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7 Orange County Sheriff's Department (OCSD). n.d.-b. Southeast Operations. Website: http://www.ocsd.org/divisions/fieldops/southeast (accessed July 2023).

8 Orange County Sheriff's Department (OCSD). n.d.-c. Lake Forest. Website: https://www.ocsheriff.gov/patrol-areas/lake-forest (accessed June 6, 2024).

9 According to the Orange County Sheriff's Department, there are 52 officers assigned to Lake Forest. According to the United States Census Bureau, 2020 census data, Lake Forest's population in 2020 was 85,858. Therefore, 52 / 85.858 = 0.61.

10 County of Orange. 2023. Fiscal Year 2022-2023 Annual Budget, 060 – Sheriff-Coroner. Website: https://bos.ocgov.com/finance/2023FN/agency/060.pdf (accessed September 13, 2024).

4.15.3.3 Public Schools

The proposed project is located within the Saddleback Valley Unified School District (SVUSD), which serves the cities of Lake Forest, Rancho Santa Margarita, Mission Viejo, Foothill Ranch, Aliso Viejo, Irvine, Trabuco Canyon, and Laguna Hills. SVUSD operates 23 elementary schools, 4 middle schools, 4 comprehensive high schools, and 4 alternative schools.[11] Total enrollment for the SVUSD for the 2023–2024 school year was approximately 23,199 students.[12] Enrollment for all public schools that serve residents of Lake Forest is shown in Table 4.15.A. As of April 2024, Foothill Ranch Elementary School and Ralph A. Gates DLI Magnet Elementary School were at capacity with no availability for additional students while the other 7 schools in Lake Forest had capacity for additional students.[13]

Table 4.15.A: City of Lake Forest Public School Enrollment for 2023–2024 Academic Year

School	Grade Range	Enrollment	Student/ Teacher Ratio
Elementary Schools			
Foothill Ranch Elementary	K–6	1,065	27.04
La Madera Elementary	K–6	602	27.63
Lake Forest Elementary	K–6	688	22.83
Olivewood Elementary	K–6	412	21.63
Ralph A. Gates DLI Magnet Elementary	K–6	908	29.10
Rancho Cañada Elementary	K–6	630	24.26
Santiago STEAM Magnet	K–6	497	27.57
Middle Schools			
Serrano Intermediate	7–8	887	21.95
High Schools			
El Toro High	9–12	1,972	22.15

Source: National Center for Education Statistics. *Search for Public Schools Tool*. Website: https://nces.ed.gov/ (accessed 2/11/2025).

SVUSD collects a developer fee for new development for the purpose of providing adequate school facilities. As of June 17, 2024, the current fees are[14]:

- $5.17 per square foot of assessable space for new residential construction (including additions)
- $0.84 per square foot for retail and services, office, research and development, industrial/ warehouse/manufacturing, hospitals, and commercial/industrial development categories

11 Saddleback Valley Unified School District (SVUSD). 2024b. Saddleback Valley Unified School District Developer Fee Justification Notice. June 17. Website: https://www.svusd.org/uploaded/ SVUSD_ Department_Files/Facilities/Developer_Fee/Justification_School_Fees.pdf (accessed July 23, 2024).

12 National Center for Education Statistics (NCES). 2024. District Directory Information (2023-2024 School Year), District Name: Saddleback Valley Unified. Website: https://nces.ed.gov/ccd/schoolsearch/school_ list.asp?Search=1&DistrictID=0633860&SchoolPageNum=1 (accessed February 11, 2025).

13 Saddleback Valley Unified School District (SVUSD). 2024a. *Residential and Commercial/Industrial Development School Fee Justification Study.* April 4.

14 Ibid.

- $0.367 per square foot hotel/motel
- $0.021 per square foot for storage commercial/industrial development

4.15.3.4 Parks

The Lake Forest Community Services Department coordinates and manages the planning and design of recreation and community facilities throughout Lake Forest. The City's Public Works Maintenance and Landscape Division oversees a maintenance contract with an outside entity for all City park Maintenance. The City maintains 31 parks, totaling approximately 294 acres. In addition, Whiting Wilderness Park encompasses 2,500 acres of natural land in Lake Forest which is maintained by Orange County (OC) Parks. Private parks are also distributed throughout Lake Forest in various Planned Communities. According to the City of Lake Forest General Plan Recreation and Resources Element (City of Lake Forest 2020, Policy RR-1.3), the City determines the need for park space based on its population. The City requires 5 acres of park space per 1,000 residents. The City currently provides 32.5 acres of parkland for every 1,000 people, which exceeds the City's standard.[15]

4.15.3.5 Public Libraries

The Orange County Public Library (OCPL) has a network of 33 libraries throughout Orange County, and two of the OCPL branches are located in Lake Forest. The El Toro Library is located at 24672 Raymond Way, approximately 3.5 miles south of the project site. The Foothill Ranch Library is located at 27002 Cabriole Way, approximately 1.2 miles northeast of the project site.

4.15.4 Regulatory Setting

Federal, State, and local regulations and programs related to public services that are applicable to the proposed project are described below.

4.15.4.1 Federal Regulations

There are no federal regulations that apply to the proposed project with respect to public services.

4.15.4.2 State Regulations

Assembly Bills 2926, 1600, and 2751. To assist in providing facilities to serve students generated from new development projects, the State enacted Assembly Bill (AB) 2926 in 1986, which allows school districts to collect impact fees from developers of new residential, commercial, and industrial developments. Development impact fees are also referenced in the 1987 Leroy Greene Lease-Purchase Act, which requires school districts to contribute a matching share of the costs for the construction, modernization, or reconstruction of school facilities. Subsequent legislation has modified the fee structure and general guidelines. In 1987, the provisions of AB 2926 were expanded and revised by AB 1600, which limits the ability of a school district to levy School Fees unless (i) there is a need for the School Fee revenues generated, and (ii) there is a nexus or relationship between the need for School Fee revenues and the type of development project on

[15] According to the United States Census Bureau 2020 census data, Lake Forest's population in 2020 was 85,858. Therefore, 294 + 2,500 / 85.858 = 32.5.

which the School Fee is imposed. (The requirements of AB 1600 were clarified with the passage in 2006 of AB 2751, which codifies the findings of *Shapell Industries vs. Milpitas Unified School District*.)

Senate Bill 50 and California Education Code Section 17620. Senate Bill (SB) 50 and California Education Code Section 17620. SB 50, the Leroy F. Greene School Facilities Act of 1998, was signed into law on August 27, 1998. It is a program for funding school facilities largely based on matching funds. The approval of Proposition 1A authorized funds for SB 50 in the amount of $9.2 billion, including grants for construction of new schools and modernization of existing schools. The new construction grant provides funding on a 50/50 State and local match basis. The modernization grant provides funding on a 60/40 State and local match basis. Districts that are unable to provide some or all of the local match requirements and are able to meet financial hardship provisions may be eligible for additional State funding. SB 50 (codified as California Education Code Section 17620) allows the SVUSD to levy a fee, charge, dedication, or other requirement against any development project within its boundaries for the purpose of funding the construction or reconstruction of school facilities. The maximum fee amount that school districts can assess is limited by statutes provided in California Government Code Section 65995.

The payment of these fees by a developer serves to mitigate all potential impacts on school facilities that may result from implementation of a project to levels that are less than significant (see California Government Code Section 65996). Stated another way, the provisions of SB 50 provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in the California Environmental Quality Act (CEQA) or other State or local laws. The California Department of Education permits local school districts to increase facility fees subject to Department of Education review and with approval of a nexus study from the school district that demonstrates that costs incurred by the school district for the provision of school facilities and services are higher than Level 1 funding provides. In such an instance, a nexus must be demonstrated in the study between the increase proposed by the local school district and the actual cost of provision of school facilities and services.

California Building Code Title 24. Title 24 of the California Code of Regulations, also known as the California Building Code (CBC or Title 24), contains the design standards that govern the construction of buildings in California to "safeguard life or limb, health, property, and public welfare by regulation and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures and certain equipment." The 2022 Edition of the CBC contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. The 2022 CBC edition became effective January 1, 2023.

California Fire Code. The California Fire Code (CFC) includes regulations for emergency planning, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Several fire safety requirements include: installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

Office of Emergency Services. The State of California passed legislation authorizing the Office of Emergency Services to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

Quimby Act of 1975. The Quimby Act (California Government Code Section 66477) allows the legislative body of a city or county to require by ordinance the dedication of land, the payment of an in-lieu park fee, or a combination thereof, for the approval for a final tract or parcel map. In cases where such dedication or park fee is not obtained through a map, they may be imposed when building permits are issued. The following conditions must be met to comply with the Quimby Act:

- The city or county ordinance must include definitive standards for determining the proportion of a subdivision to be dedicated and the amount of any fee to be paid in lieu thereof.

The legislative body must adopt a general plan containing a recreation element, and any proposed park or recreational facility must be consistent with the principles and standards established in the element.

Chapter 7.38, Dedication of Land for Park Facilities and Payment of in Lieu Fees, of the City of Lake Forest Municipal Code implements the provisions of the Quimby Act. The proposed project is not subject to these regulations because it does not include a subdivision.

4.15.4.3 Regional Regulations

There are no regional regulations that apply to the proposed project with respect to public services.

4.15.4.4 Local Regulations

City of Lake Forest Local Hazard Mitigation Plan. The City's Local Hazard Mitigation Plan (LHMP) is both a reference document and an action plan to serve as the City's long-term roadmap for community resiliency and sustainability. This is achieved through promoting sound policy to protect life, critical infrastructure and facilities, private property, and the environment from various hazards. The LHMP has information and resources to educate readers and decision makers about hazard events and related issues and includes a comprehensive strategy that the City and community members can utilize to improve resiliency in the City. This plan cumulates the process of assessing vulnerabilities, measuring risk, identifying strategies for risk reduction, and assigning responsible parties to carry out appropriate action. This initiative involves a comprehensive study of multiple hazards that could impact the City including natural and human-caused hazards.

City of Lake Forest Municipal Code. The City of Lake Forest Municipal Code includes the following requirements that would apply to the proposed project related to the provision of public services:

- **Section 8.24.010** adopts the 2022 CFC based on the International Fire Code, 2021 Edition, with errata, published by the International Code Council, with appendices and amendments for the

purposes of prescribing regulations governing conditions hazardous to the life and property from fire or explosion.

- **Section 8.02.001** adopts the CBC for the purpose of prescribing regulations for the erection, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment, use, height, area and maintenance of all buildings and structures per California Building Code, 2022 Edition, based on the 2021 International Building Code as published by the International Code Council with the amendments provided in Section 8.02.020.

- **Section 8.02.020** outlines amendments to the 2022 CBC including modifications to design, plan review, permit, and payment of fee requirements.

City of Lake Forest General Plan 2040. The Public Safety Element of the Lake Forest 2040 General Plan contains the following goals and policies related to public services:

Goal PS-2 Fire Safety: A City that is safe and adequately prepared for urban and wildfire emergencies.

Policy PS-2.1 Building Fire Codes: Require that all buildings and facilities within Lake Forest comply with local, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards.

The Public Facilities Element of the Lake Forest 2040 General Plan contains the following goals, policies, and actions related to public services:

Goal PF-8 Community Safety: A community protected from illicit activities and crime by high-quality public safety services, facilities, and technology.

Policy PF-8.3 Department Consultation: Promote coordination between the City of Lake Forest and Police and Fire services during the review of new development applications to ensure that adequate attention is being paid to fire and safety concerns during the design and planning of a project.

Policy PF-8.6 Site Design: Recognize the role of site design in crime prevention and implement best practices into existing plans and new development strategies.

Action PF-8a: The Orange County Fire Authority and City Engineer will review proposed development projects and street networks to evaluate the accessibility for fire engines and other emergency response functions.

4.15.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to public services if it would:

Threshold 4.15.1(i): Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection;

Threshold 4.15.1(ii): Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection;

Threshold 4.15.1(iii): Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools;

Threshold 4.15.1(iv): Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks; or

Threshold 4.1451(v): Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities.

4.15.6 Project Impacts

Threshold 4.15.1(i): **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?**

Less Than Significant Impact. Impacts on fire protection services are considered significant if an increase in population or building area would result in inadequate response times or other performance objectives for fire protection and/or increased demand for services that would require

construction of new fire protection facilities. The following analyzes project-related impacts to fire protection services that could occur with implementation of the proposed project.

Construction associated with the proposed project could increase the potential for accidental on-site fires from the operation of construction equipment, the use of flammable construction materials, and sparks during the removal of existing on-site vegetation. As required by the California Occupational Safety and Health Administration (CAL/OSHA) and California Fire Code requirements, the construction contractor would be required to carefully store flammable materials in appropriate containers during project construction, use construction equipment with spark arrestors, and immediately and completely clean up spills of flammable materials if they occur. In addition, the construction contractor and construction personnel would be trained in emergency response, and fire suppression equipment specific to the construction site would be available and maintained on site for the duration of the construction period. Adherence to existing laws would ensure that the proposed project would not have a significant construction-related impact on fire protection service from OCFA. Therefore, construction-related impacts to fire protection would be minimized and the provision of and/or need for new or physically altered governmental facilities (the construction of which could cause significant environmental impacts) would not be required.

In order to meet OCFA standards and to comply with the California Fire Code (in effect at the time of the application for the building permit), the proposed project would include, but not be limited to, the following safety measures:

- All buildings on the project site would include automatic fire sprinkler systems (per Lake Forest Municipal Code Section 903.2.8, Group R).

- The proposed project would include the installation of seven hydrants throughout the project site.

- Emergency vehicles would be able to enter and exit the project site via the two existing driveways on Enterprise Way and an existing reciprocal access in the northeast corner of the site to the adjacent property.

Once operational, project compliance with requirements set forth in the California Fire Code would provide fire protection for people and structures, as well as emergency medical services. In addition, as discussed in Section 4.17, Transportation and Trafffic, the proposed project would not conflict with a program plan, ordinance, or policy addressing the circulation system, create a significant design hazard due to a geometric design feature or incompatible use, or result in a significant impact to any study area intersections. Therefore, the proposed project would not impair emergency response vehicles, and average response times in the area would remain within acceptable response time limits.

The proposed project would generate 187 new jobs in the City.[16] Due to the large population and the existing workforce within Orange County and the proportion of unemployed individuals within the City (3.7 percent of the labor force) and Orange County (4.0 percent of the labor force) (EDD 2024), it is reasonable to assume that the majority of the new jobs generated by the proposed project would be filled by existing City residents and residents of nearby Cities within Orange County. Therefore, it is not anticipated that the proposed project would result in a significant increase to the City's population due to hiring out of area employees that would move to the City to work at the project site. Furthermore, the proposed project is consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its existing land use and zoning designations. Therefore, the proposed project would not induce a substantial increase in population over that which was envisioned in the build-out of the City's General Plan and would not result in a demand for more fire protection services beyond what was anticipated and planned for. Furthermore, the proposed project would replace an existing use of similar square footage on the same site and is surrounded by buildings of similar land use type and intensity. Therefore, the proposed project's increase in demand for new or expanded fire protection services would be negligible. Additionally, through the execution of mutual aid agreements maintained with neighboring jurisdictions, the City would have access to additional fire protection services to provide assistance, if necessary, during major emergencies.

The proposed project would be required to comply with all OCFA access requirements and California Fire Code requirements. All development projects submitted for review by OCFA must use a fair share approach to mitigate fire service response impacts and facility/equipment needs. Therefore, individual projects would not drive the need for new or upgraded facilities, which could cause a significant impact on the environment. Furthermore, the proposed project would not increase the demand for new or expanded fire protection services and, therefore, would not require the construction of new fire protection facilities or the upgrade of existing facilities, which could cause significant environmental impacts. Additionally, upon review of the proposed project, the OCFA has indicated that the project would have a less than significant impact on fire protection services.[17] Therefore, the proposed project would not generate the need for new or physically altered fire facilities, the construction of which could cause significant environmental impacts, to maintain an acceptable service ratio, response times, or other performance objectives for fire protection. Impacts would be less than significant, and no mitigation is required.

Threshold 4.15.1(ii): Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

[16] Employment estimates for the proposed project were generated using the trip rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (2021) for manufacturing, warehousing, and office which were applied to the respective total square feet of each use.

[17] Orange County Fire Authority (OCFA). Letterman, Todd, Assistant Fire Marshal. December 31, 2024. Personal communication with LSA.

Less Than Significant Impact. Impacts on police protection services are considered significant if an increase in population would result in inadequate response times or other performance objectives for police protection and/or increased demand for services that would require construction of new police protection facilities. The following analyzes project-related impacts to police protection services that could occur with implementation of the proposed project.

Construction activities on the project site have the potential to attract criminals that may be attracted to construction equipment and/or vehicles with gasoline and diesel fuel at the project site, and/or unsecured construction materials. To minimize criminal trespassing, the project site (construction areas) would be fenced, and access points would be locked during non-construction hours. Additionally, construction equipment would be stored in well-lit areas, and smaller equipment would be secured to reduce pilfering by trespassers. Finally, the project site is located in an area already patrolled by the OCSD. Construction of the proposed project would not result in a demand for additional police services or significantly impact existing service ratios or response times.

The proposed project would generate 187 new jobs in the City. Due to the large population and the existing workforce within Orange County and the proportion of unemployed individuals within the City (3.7 percent of the labor force) and Orange County (4.0 percent of the labor force) (EDD 2024), it is reasonable to assume that the majority of the new jobs generated by the proposed project would be filled by existing City residents and residents of nearby cities within Orange County. Therefore, it is not anticipated that the proposed project would result in a significant increase to the City's population due to hiring out of area employees that would move to the City to work at the project site. Furthermore, the proposed project is consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. Therefore, the proposed project would not induce a substantial increase in population over that which was envisioned in the build-out of the City's General Plan and would not result in a demand for more police protection services beyond what was anticipated and planned for. Furthermore, the proposed project would replace an existing use of similar square footage on the same site, is surrounded by buildings of similar land use type and intensity, and is in an area of the city that is currently patrolled by the OCSD. Therefore, the proposed project's increase in demand for new or expanded police services would be negligible. Additionally, through the execution of mutual aid agreements maintained with neighboring jurisdictions, the City would have additional police services to provide assistance during major emergencies.

The proposed project would implement Crime Prevention through Environmental Design (CPTED) techniques that would discourage and or reduce crime from occurring on site. Such CPTED techniques would include, but not be limited to, surface drive aisle/parking lighting, building façade lighting, low-lying landscaping designed to minimize opportunities for concealment, continued maintenance activities on the site, and deadbolts/locks on building exterior doors.

The proposed project would not increase response times by increasing traffic volumes on area roadways to the point where additional significant congestion would occur. As discussed in Section 4.17, Transportation and Traffic, of this EIR, the proposed project would not result in a

significant impact to any study area intersections. As such, traffic from operation of the proposed project would not contribute to or result in a substantial increase in response times for police or emergency vehicles.

As previously stated, the proposed project would not significantly increase the City's population, and the proposed project would not result in a demand for more police protection services beyond what was anticipated and planned for at this location. Any future construction of new or expanded police protection facilities would be subject to project-level environmental review and site-specific mitigation as appropriate in order to ensure significant environmental impacts are avoided or mitigated at the time such development actions are proposed by the City. Therefore, the proposed project would not drive the need for a new police facility or expanded facility, the construction of which could cause significant environmental impacts. Impacts would be less than significant, and mitigation is not required.

Threshold 4.15.1(iii): Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?

Less Than Significant Impact. The proposed project would generate 187 new jobs in the City. Due to the large population and the existing workforce within Orange County and the proportion of unemployed individuals within the City (3.7 percent of the labor force) and Orange County (4.0 percent of the labor force) (EDD 2024), it is reasonable to assume that the majority of the new jobs generated by the proposed project would be filled by existing City residents and residents of nearby cities within Orange County. Therefore, it is not anticipated that the proposed project would result in a significant increase to the City's population due to hiring out of area employees that would move to the City to work at the project site. The project does not include a residential component; therefore, it would not directly generate any schoolchildren, the addition of which could cause negative impacts to existing or future school facilities or programs.

Nevertheless, pursuant to California Education Code Section 17620(a)(1), the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district for the purpose of funding the construction or reconstruction of school facilities. The project applicant would be required to pay such fees to reduce any impacts of the proposed industrial development. As of June 6, 2022, the current fee for SVUSD is $0.84 per square foot of industrial/warehouse/manufacturing space.[18] Pursuant to the provisions of Government Code Section 65995, a project's impact on school facilities is fully mitigated through payment of the requisite school facility development fees current at the time a building permit is issued. The school districts are responsible for implementing the specific methods

[18] Saddleback Valley Unified School District (SVUSD). 2024. Saddleback Valley Unified School District Developer Fee Justification Notice. June 17. Website: https://www.svusd.org/uploaded/SVUSD_Department_Files/Facilities/Developer_Fee/Justification_School_Fees.pdf (accessed July 23, 2024).

for mitigating school impacts with fees received pursuant to the Government Code. These fees would be directed towards maintaining adequate school facilities and programs, which would ensure that any impact to schools that could result from the proposed project would be offset by development fees, and in effect, reduce potential impacts to a less than significant level. Therefore, impacts related to school facilities and programs, which would generate the need for new schools or an expansion of existing schools, the construction of which could cause significant environmental impacts, would be less than significant, and no mitigation is required.

Threshold 4.15.1(iv): Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?

Less Than Significant Impact. The proposed project would generate 187 new jobs in the City. Due to the large population and the existing workforce within Orange County and the proportion of unemployed individuals within the City (3.7 percent of the labor force) and Orange County (4.0 percent of the labor force) (EDD 2024), it is reasonable to assume that the majority of the new jobs generated by the proposed project would be filled by existing City residents and residents of nearby cities within Orange County. Therefore, it is not anticipated that the proposed project would result in a significant increase to the City's population due to hiring out of area employees that would move to the City to work at the project site. The proposed project is consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. Therefore, the proposed project would not significantly increase the population in the City and would not affect the City's parkland standard when compared to existing conditions. Since the project would not significantly increase the City's population, the project would not require the construction of new or expanded recreational facilities.

The nearest City park in proximity to the project site is Nature Park, which is approximately 0.08 mile southeast of the project site. Nature Park includes picnic areas and a walking path that connects to Serrano Creek Trail. Additionally, the Baker Ranch planned community and the Meadows residential community located approximately 0.57 mile north and 0.04 mile east of the project site, respectively, have privately maintained parks that are accessible to the public. From the project site, Nature Park is an approximately 0.3 mile walk while the Meadows' park is an approximately 0.4 mile walk. Due to the project site's proximity to these parks and trail, project generated employees may increase the use of these parks and trail during lunch breaks or after-work hours. However, any increased usage of the nearby parks and trail would be minimal given the relatively low number of employees on the project site. Therefore, the provision of new or physically altered park facilities would not be necessary. Additionally, the proposed project would include two 16-foot by 14-foot patios that could be used by employees and could lessen the usage of existing parks in the vicinity of the project site. Therefore, impacts to parks and recreational facilities, which would generate the need for new or expanded parks and recreational facilities, the construction of

which could cause significant environmental impacts, would be less than significant, and no mitigation is required.

Threshold 4.15.1(v): Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?

Less Than Significant Impact. The proposed project would generate 187 new jobs in the City. Due to the large population and the existing workforce within Orange County and the proportion of unemployed individuals within the City (3.7 percent of the labor force) and Orange County (4.0 percent of the labor force) (EDD 2024), it is reasonable to assume that the majority of the new jobs generated by the proposed project would be filled by existing City residents and residents of nearby cities within Orange County. Therefore, it is not anticipated that the proposed project would result in a significant increase to the City's population due to hiring out of area employees that would move to the City to work at the project site. The proposed project is consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. Therefore, the proposed project would not result in a demand for more services at City-owned facilities, such as libraries, beyond what was anticipated and planned for. This impact would be less than significant, and no mitigation is required.

4.15.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts refer to the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for public services. The cumulative study area for public services is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have a less than significant impact on public services including fire protection, police protection, schools, parks, and other public facilities. Additionally, all discretionary private development and public works projects within the cumulative study area would be required to comply with CAL/OSHA requirements, California Fire Code requirements, and OCFA standards to avoid project-specific impacts related to fire protection services. Similarly, implementation of CPTED techniques and compliance with OCSD standards would avoid cumulative project-specific impacts related to police protection services. New

development would also be required to pay school facility development fees consistent with the Government Code to fully mitigate a project's impact on school facilities. And, in accordance with the City's Municipal Code, residential subdivisions of 51 units or more are required to dedicate parkland in compliance with the City's parkland standard (Section 7.38.040), which would prevent cumulative impacts related to parks. As previously discussed, the City currently provides 32.5 acres of parkland for every 1,000 people, which exceeds the City's standard. In compliance with local, State, and federal standards and requirements, potential impacts on public services would be evaluated and mitigated by each individual private development or public works project. Since all projects within the cumulative study area would be required to implement appropriate mitigation measures to reduce or eliminate project-specific impacts to public resources, implementation of the proposed project, when evaluated in combination with the development of projects listed in Table 4.A, would not contribute to a cumulatively considerable impact on public resources. Cumulative impacts to public resources would be less than significant, and no mitigation is required.

4.15.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to public services.

4.15.9 Regulatory Compliance Measures and Mitigation Measures

4.15.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to public services.

4.15.9.2 Mitigation Measures

The proposed project would not result in potentially significant impacts related to public services, and no mitigation is required.

4.15.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to public services.

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4.16 RECREATION

This section evaluates the potential impacts to recreation from implementation of the proposed project. This section is based in part on the following:

- *City of Lake Forest General Plan Recreation and Resources Element* (City of Lake Forest 2020);
- *Public Draft Environmental Impact Report for the 2040 Lake Forest General Plan, SCH# 2019090102 (EIR)* (City of Lake Forest 2019); and
- Applicable provisions of the City of Lake Forest Municipal Code.

4.16.1 Scoping Process

The Notice of Preparation (NOP) was published in March 2024 for the proposed project, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. No comments related to recreation were received during the public scoping period.

4.16.2 Methodology

Evaluating project-related impacts to parks and other recreational facilities was based on whether the proposed project would cause an increase in use of the existing park and recreational facilities: (1) resulting in a physical deterioration of the existing facilities; or (2) necessitating the construction or expansion of new facilities to serve the project demand. For the purposes of this analysis, "recreational facilities" are defined as parks and designated public areas used for active or passive recreation.

4.16.3 Existing Environmental Setting

The Lake Forest Community Services Department coordinates and manages the planning and design of recreation and community facilities throughout Lake Forest. The City's Public Works Maintenance and Landscape Division oversees a maintenance contract with an outside entity for all City park maintenance. The Orange County Parks Department maintains all County trails and County parks within the City. The City maintains 31 parks, totaling approximately 294 acres. The City classifies parks as community, neighborhood, or mini-parks based on size and characteristics as described below (City of Lake Forest 2019):

- **Community Parks:** Community parks serve neighborhoods and are intended to have a service radius of approximately 1 to 2 miles. These parks are generally over 10 acres in size and include a variety of facilities, such as active recreational facilities (e.g., athletic fields and group picnic areas). In addition, these large parks often include community centers. Baker Ranch Community Park is located approximately 0.55 mile northwest of the project site. The 86-acre Lake Forest Sports Park/Recreation Center is located approximately 0.8 mile east of the project site and is one of the largest sports parks in Orange County, with 57 acres devoted to sports fields and a multifunctional recreation center. Other community parks in Lake Forest include Borrego Park, El

Toro Park, Foothill Ranch Community Park, Heroes Park, Pittsford Park, Serrano Creek Park, and Tamarisk Park.

- **Neighborhood Parks:** Neighborhood parks are smaller than community parks but are typically at least 3 acres in size. Neighborhood parks are often adjacent to schools, greenbelts, open space linkages, or other community open space or recreational facilities to facilitate an integrated open space system. Lake Forest contains numerous neighborhood parks, including Nature Park, which is approximately 0.08 mile southeast of the project site, and Regency Park, which is approximately 0.6 mile southeast of the project site. Other neighborhood parks in Lake Forest include Alton Park, Borrego Canyon Overlook Park, Cherry Park, Concourse Park, Darrin Park, Lake Forest Park, Montbury Park, Mountain View Park, Etnies Skatepark, Peachwood Park, Pebble Creek Park, Portola Hills, Rancho Serrano Park, Ranchwood Park, Rimgate Park, Village Pond Park, and Vintage Park.

- **Mini-Parks:** Mini-parks are generally less than 1 acre in size and are usually established in higher-density areas as a substitute for backyards. The Barker Ranch Dog Park is a mini-park located approximately 0.55 mile northwest of the project site. Other mini-parks in Lake Forest include Cavanaugh Park and Sundowner Park.

In addition to the existing City parks and recreation facilities, residents of the City are able to utilize various regional recreation amenities, including:

- **Regional Parks:** The County of Orange (County) owns and maintains regional recreational parks within and near Lake Forest. Local County parks include Limestone/Whiting Ranch Wilderness Park, Heritage Hill Historical Park, and O'Neill Regional Park. The Limestone/Whiting Ranch Wilderness Park encompasses 2,500 acres of land in Lake Forest.

- **Cleveland National Forest:** The Cleveland National Forest is the southernmost National Forest in California. Consisting of 460,000 acres, the forest offers a wide variety of terrains and recreational opportunities. The Cleveland National Forest is located approximately 3 miles northeast of the project site.

- **Trails and Bikeways:** Lake Forest's trail system includes pedestrian and bike trails within open space corridors and along regional trails. Serrano Creek Trail is the closest trail to the project site, located approximately 0.1 mile to the southeast.

- **Schools:** Public school playgrounds, under the jurisdiction of the Saddleback Valley Unified School District (SVUSD), are open to the public after school hours. Organized sports leagues utilize ball fields through a permit process with the SVUSD. According to the Recreation and Resources Element of the City's General Plan, the City utilizes some school recreational facilities to meet the park goal of 5 acres per 1,000 persons. Up to 50 percent of the school facilities can be used, provided the school facilities are open to the public. Schools under the jurisdiction of the SVUSD that are located in Lake Forest include Foothill Ranch Elementary School, Portola Hills Elementary School, Gates Elementary School, Lake Forest Elementary School, La Madera Elementary School,

Olivewood Elementary School, Rancho Canada Elementary School, Santiago STEAM Magnet Elementary School, Serrano Intermediate School, and El Toro High School.

- **Community Facilities:** The City has a number of community facilities that host many of its recreation and cultural programs. These facilities include City Hall, the Community Center, and the Senior Center. In addition, both the El Toro Library and Foothill Ranch Libraries include a Community Room and a Friends of the Library space, which serve as gathering places for the community.

- **Private Recreational Facilities:** Private facilities in Lake Forest also offer recreational amenities to the residents in the community. There are privately owned recreational facilities open to the public for a user fee, such as the Lake Forest Golf and Practice Center and Serrano Creek Equestrian Center. Additionally, the Baker Ranch residential community and the Meadows residential community have privately maintained parks that are accessible to the public. Although these privately owned facilities do not count towards the City's parkland inventory, the amenities offered by these facilities also help meet residents' recreational needs by providing golf courses, equestrian centers, and pool, basketball, barbecue, and picnic areas.

According to the City of Lake Forest General Plan Recreation and Resources Element (2020), the City determines the need for park space based on its population. The City requires 5 acres of park space per 1,000 residents. The City currently provides 32.5 acres of parkland for every 1,000 people, which exceeds the City's standard.[1]

4.16.4 Regulatory Setting

Federal, State, and local regulations and programs related to recreation that are applicable to the proposed project are described below.

4.16.4.1 Federal Regulations

Americans with Disabilities Act. The Americans with Disabilities Act (ADA) of 1990 (42 United States Code [USC] 12181) prohibits discrimination on the basis of disability in public accommodation and State and local government services. Under the ADA, the Architectural and Transportation Barriers Compliance Board issues guidelines to ensure that facilities, public sidewalks, and street crossings are accessible to individuals with disabilities. Play areas, meeting rooms, park restrooms, and other buildings and park structures must comply with ADA requirements.

4.16.4.2 State Regulations

There are no State regulations that apply to the proposed project with respect to recreation.

4.16.4.3 Local Regulations

There are no local regulations that apply to the proposed project with respect to recreation.

[1] According to the United States Census Bureau,2020 census data, Lake Forest's population in 2020 was 85,858. Therefore, 294 + 2,500 / 85.858 = 32.5.

4.16.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to recreation if it would:

Threshold 4.16.1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

Threshold 4.16.2: Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.16.6 Project Impacts

Threshold 4.16.1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less than Significant Impact. The proposed project does not propose any residential uses and therefore would not directly increase the population of the City. The proposed project would generate 187 new jobs in the City. Due to the large population and the existing workforce within Orange County and the proportion of unemployed individuals within the City (3.7 percent of the labor force) Orange County (4.0 percent of the labor force) (EDD 2024), it is reasonable to assume that the majority of the new jobs generated by the proposed project would be filled by existing City residents and residents of nearby cities within Orange County. Therefore, the proposed project would not generate a significant increase in the City's population. In addition, the proposed project is consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. Because the proposed project would not significantly increase the City's population, the proposed project would not cause an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

It is not possible to determine with any reasonable certainty, the location, frequency or intensity of use project employees may have on public park/recreation facilities. The nearest City park in proximity to the project site is Nature Park, which is approximately 0.08 mile southeast of the project site. Nature Park includes picnic areas and a walking path that connects to Serrano Creek Trail. Additionally, the Baker Ranch residential community and the Meadows residential community located approximately 0.57 mile north and 0.04 mile east of the project site, respectively, have privately maintained parks that are accessible to the public. From the project site, Nature Park is an approximately 0.3 mile walk while the Meadows' park is an approximately 0.4 mile walk. Due to the project site's proximity to these parks and trail, project employees may increase the use of these parks and trail during lunch breaks or after-work hours. However, any increased usage of the nearby parks and trails would be minimal given the relatively low number of employees on the project site, and would not result in substantial physical deterioration of the parks thereby requiring additional

improvements. Additionally, the proposed project would include two 16-foot by 14-foot patios that could be used by employees and could lessen the usage of existing parks in the vicinity of the project site. Therefore, it is unlikely that project employees would generate a significant increase in the use of those parks and/or recreational facilities to a level that would contribute to substantial physical deterioration of those facilities. Therefore, impacts are less than significant, and no mitigation is required.

Threshold 4.16.2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project would not include recreational facilities or develop land uses that would lead to a significant increase in the demand for parks and recreational facilities, which would require the construction or expansion of recreational facilities that might have an adverse effect on the environment. Therefore, there would be no impacts related to the construction or expansion of recreational facilities, and no mitigation is required.

4.16.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for recreation. The cumulative study area for recreational resources is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would not lead to a significant demand for parks and recreational facilities; therefore, the project would have no impact related to the construction or expansion of recreational facilities and would not contribute to a cumulatively considerable impact to the environment from the construction or expansion of recreational facilities.

As stated in this section and further detailed in Section 4.14, Population and Housing, of this Draft EIR, the development of the proposed 165,803 sq ft industrial building is estimated to generate 187 new jobs in the City. The assumption is that a majority of these jobs would be filled by people already living in the City or nearby geographic areas. So, while the proposed project may generate an increase in the use of parks and recreational facilities, given that many of the new employees would already be using City parks and/or recreational facilities, the proposed project would not generate a significant increase in the use of nearby parks and recreational facilities to a level that would contribute to substantial physical deterioration of those facilities.

Implementation of the proposed project in combination with cumulative projects in the City would increase use of existing parks and recreation facilities. However, 4 of the 13 cumulative projects within

the cumulative study area are residential developments and would be required to provide the appropriate amount of parkland or pay the in-lieu fees pursuant to City requirements. In this way, potential impacts on parks and recreational facilities would be evaluated and mitigated by applicable (i.e., residential) projects on the cumulative project list. Therefore, when considered with other projects in the City, development of the proposed project would not contribute a significant cumulative impact related to recreation. Cumulative impacts to recreation would be less than significant, and no mitigation is required.

4.16.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to recreation.

4.16.9 Mitigation Measures

4.16.9.1 Regulatory Compliance Measure

There are no regulatory compliance measures applicable to the proposed project pertaining to recreation.

4.16.9.2 Mitigation Measures

The proposed project would not result in potentially significant impacts related to recreation, and no mitigation is required.

4.16.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to recreation.

4.17 TRANSPORTATION AND TRAFFIC

This section evaluates the potential impacts to transportation and traffic from implementation of the proposed project. This section is based in part on the following:

- *Traffic Impact Analysis* (LSA 2025d) (provided in Appendix J);
- *City of Lake Forest Transportation Analysis Guidelines* (TA Guidelines) (City of Lake Forest 2020); and
- *City of Lake Forest General Plan 2040 Mobility Element* (City of Lake Forest 2020).

4.17.1 Scoping Process

The Notice of Preparation (NOP) was published in March 2024 for the proposed project, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. 59 comment letters included comments related to transportation and traffic. These comments pertain to concerns that the proposed project would increase traffic and congestion, generate truck trips that would cause impacts on nearby residential uses, and cause safety hazards for pedestrians and cyclists on nearby roadways.

4.17.2 Methodology

The analysis of potential impacts to transportation and traffic is based on the site-specific Traffic Impact Analysis[1] (TIA) completed for the proposed project (Appendix J). The TIA is consistent with the objectives and methodologies set forth in the City's Transportation Analysis Guidelines (2020), the 2021 Congestion Management Program (CMP) for Orange County, and applicable provisions of CEQA. The project study area, methodology, and cumulative projects were determined through coordination with the City, prior to the preparation of the TIA.

4.17.2.1 Trip Generation

The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (2021)[2] for Land Use Code 140 (Manufacturing), Land Use Code 150 (Warehousing), and Land Use Code 710 (General Office Building).

4.17.2.2 Vehicle Miles Traveled

Until July 1, 2020, roadway congestion or level of service (LOS) was used as the primary study metric for planning and environmental review of development projects in California. However, Senate Bill (SB) 743 required the Governor's Office of Planning and Research (OPR) to establish a new metric

1 LSA. 2025d. *Traffic Impact Analysis, IPT Enterprise Business Center LLC Project, Lake Forest, California*. August.

2 Institute of Transportation Engineers (ITE). 2021. *Trip Generation Manual,* 11th Edition.

for identifying and mitigating transportation impacts pursuant to the California Environmental Quality Act (CEQA) to meet the State's goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through more active transportation.

California Public Resources Code (PRC) Section 21099(b) states that, upon certification of the revised guidelines for determining transportation impacts, automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment under CEQA. On July 1, 2020, OPR identified vehicle miles traveled (VMT) as the required CEQA transportation metric (not LOS) and is the only legally acceptable threshold for transportation-related environmental impacts pursuant to CEQA. However, because the City still uses LOS in its General Plan for local planning purposes, a thorough discussion about LOS within the project area is provided in the *Traffic Impact Analysis* (Appendix J).

VMT is a measurement of the amount and distance that a person drives, accounting for the number of passengers within a vehicle. Many interdependent factors affect the extent and distance a person might drive. In particular, the type of built environment affects how many places a person can access within a given distance, time, and cost, using different ways of travel (e.g., private vehicle, public transit, bicycling, walking). Typically, low-density development located at great distances from other land uses and in areas with few alternatives to the private vehicle provides less access than a location with high density, a mix of land uses, and numerous ways of travel. Therefore, low-density development typically generates more VMT per capita compared to a similarly sized development located in urban areas. In general, higher VMT areas are associated with more air pollution, including GHG emissions and energy usage, than lower VMT areas. VMT is calculated by multiplying the number of trips generated by a project by the total distance of each of those trips.

Lead agencies have the discretion to set their own thresholds of significance with the goals of the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. On July 21, 2020, the Lake Forest City Council adopted the *City of Lake Forest Transportation Analysis Guidelines* (TA Guidelines) (City of Lake Forest 2020). The TA Guidelines include the screening criteria, VMT analysis methodology, VMT impact thresholds, and VMT mitigation measures.

4.17.3 Existing Environmental Setting

The project site is located at 26200 Enterprise Way in the north-central portion of Lake Forest in Orange County, California. As shown on Figure 3-1, Project Vicinity, in Chapter 3.0, Project Description, regional access to the project site is provided by State Route 241 (SR-241), which is located approximately 0.7 mile north of the project site, and Interstate 5 (I-5), which is located approximately 3.75 miles southwest of the project site.

4.17.3.1 Existing Circulation System

Key roadways in the vicinity of the proposed project are as follows:

- **Bake Parkway** is classified as a Primary Arterial in the City of Lake Forest General Plan 2040 Mobility Element (City of Lake Forest 2020). It is a four-lane, divided roadway north of the

project site. In the project vicinity, the posted speed is 55 miles per hour (mph). Bike lanes (Class II) and sidewalks are provided on both sides of the roadway, and on-street parking is prohibited on both sides of the roadway.

- **Commercentre Drive** is a roadway west of the project site. Commercentre Drive from Alton Parkway to Dimension Drive is classified as a Secondary Arterial in the City of Lake Forest General Plan 2040 Mobility Element, and it is a four-lane, undivided facility with a centered two-way left-turn lane (TWLTL). In the project vicinity, the posted speed is 45 mph. Sidewalks are provided on both sides of the roadway, and on-street parking is prohibited on both sides of the roadway.

- **Enterprise Way** is a two-lane local private roadway with a posted speed of 25 mph. A sidewalk is provided on one side of the roadway, and on-street parking is permitted in select locations along this roadway. Project access is provided via two full-access driveways on Enterprise Way.

- **Dimension Drive** is a four-lane, divided local roadway west of the project site. In the project vicinity, the posted speed is 45 mph. Sidewalks are provided on both sides of the roadway, and on-street parking is permitted in select locations along this roadway, except for recreational vehicles.

- **Lake Forest Drive** is classified as a Primary Arterial in the City of Lake Forest General Plan 2040 Mobility Element. It is a four-lane, divided roadway south and east of the project site. In the project vicinity, the posted speed is 50 mph. Bike lanes (Class II) and sidewalks are provided on both sides of the roadway, and on-street parking is prohibited on both sides of the roadway.

- **Rancho Parkway** is classified as a Primary Arterial in the City of Lake Forest General Plan 2040 Mobility Element. It is a four-lane, divided roadway north of the project site. In the project vicinity, the posted speed is 45 mph. Bike lanes (Class II) and sidewalks are provided on both sides of the roadway, and on-street parking is prohibited on both sides of the roadway.

Local access to the project site for both passenger cars and wheelbase-67 (WB-67) trucks is provided by Enterprise Way, which is accessed from Dimension Drive.

4.17.3.2 Existing Transit System

The study area is currently served by the Orange County Transportation Authority (OCTA) via Route 480, which runs along Dimension Drive and Commercentre Drive near the project site, and Route 177, which runs along Lake Forest Drive. Route 480 is a Metrolink Stationlink Route and provides transportation to and from the Irvine Metrolink Station and Lake Forest via Alton Parkway/Bake Parkway/Lake Forest Drive. OCTA stops are provided at the northwest and southwest corners of the intersection of Dimension Drive/Commercentre Drive – Enterprise Way (Route 480) approximately 800 feet away from the project driveways. Transit facilities are accessible to and from the project site via sidewalks along Enterprise Way.

Route 177 is an OCTA Community Route and provides transportation to and from Foothill Ranch to Laguna Hills via Lake Forest Drive/Muirlands Boulevard/Los Alisos Boulevard. Route 177 has bus

stops at the southwest and northeast corners of the intersection of Lake Forest Drive/Dimension Drive approximately 2,200 feet away from the project driveways. Transit facilities are accessible to and from the project site via sidewalks along Enterprise Way, Dimension Drive, and Lake Forest Drive.

4.17.3.3 Existing Bicycle and Pedestrian System

On-street (Class II) bicycle lanes are provided along Bake Parkway, Lake Forest Drive, and Rancho Parkway. Sidewalks currently exist in the project vicinity on both sides of Bake Parkway, Commercentre Drive, Dimension Drive, Lake Forest Drive, and Rancho Parkway, and along one side of Enterprise Way.

4.17.4 Regulatory Setting

Federal, State, and local regulations and programs related to transportation and traffic that are applicable to the proposed project are described below.

4.17.4.1 Federal Regulations

There are no federal regulations that apply to the proposed project with respect to transportation and traffic.

4.17.4.2 State Regulations

Senate Bill 743. SB 743 was signed in 2013, with the intent to "more appropriately 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 changes the focus of the transportation impact discussion within CEQA environmental review analyses from measuring impacts to drivers, to measuring the impact of driving on the environment. The change is made by replacing the historically and commonly utilized LOS metric with an analysis of VMT. This shift in applicable metrics is expected to better align transportation impact analysis and mitigation outcomes with the State's goals to reduce GHG emissions, encourage infill development, and improve public health through more active transportation. When implemented, "traffic congestion shall not be considered a significant impact on the environment" within a CEQA transportation environmental analysis.

After an extensive public review period, in late 2018, updates to the *State CEQA Guidelines* were finalized and adopted. These changes became effective on December 28, 2018. The updated *State CEQA Guidelines* address the requirements of SB 743 and require lead agencies to assess VMT impacts for projects in Section 15064.3. The updated *State CEQA Guidelines* indicate that "a development project that is not exempt and that results in vehicle miles traveled greater than regional average for the land use type may indicate a significant impact." Mandatory implementation of the VMT metric and application of Section 15064.3 must occur by July 2020, pursuant to the applicable *State CEQA Guidelines*.

On July 21, 2020, the Lake Forest City Council adopted the *City of Lake Forest Transportation Analysis Guidelines* (TA Guidelines). The TA Guidelines include the screening criteria, VMT analysis

methodology, VMT impact thresholds, and VMT mitigation measures. The City's VMT Guidelines have been used to conduct this analysis.

4.17.4.3 Regional Regulations

Orange County Congestion Management Program. OCTA is a multimodal transportation agency that was created in 1991 with the consolidation of seven separate agencies. OCTA serves Orange County residents and travelers by providing: countywide bus and paratransit service; Metrolink rail service; the 91 Express Lanes; freeway, street, and road improvement projects; individual and company commuting solutions; motorist aid services; and regulation of taxi operations. State law requires that a Congestion Management Program (CMP) be developed, adopted, and updated biennially for every county that includes an urbanized area, and requires that it include every city and the county government within that county. As the Congestion Management Agency for Orange County, OCTA is responsible for implementing the Orange County CMP. The CMP describes strategies to address congestion problems in the CMP network, which includes State highways and principal arterials. The CMP Guidelines require analysis of the CMP network and uses level of service standards as a means to measure congestion and to determine how local governments meet CMP standards.

Based on CMP requirements, a Traffic Impact Analysis (TIA) is required for CMP purposes for any proposed development generating 2,400 or more daily trips, with the exception of developments that will directly access a CMP Highway System roadway segment, for which the threshold for requiring a TIA is reduced to 1,600 or more trips per day. The proposed project is estimated to generate a total of 727 daily trips. Therefore, the proposed project does not require a TIA for CMP purposes.

4.17.4.4 Local Regulations

City of Lake Forest General Plan 2040. The Mobility Element of the Lake Forest General Plan 2040 includes the following goals, policies, and actions related to transportation and traffic that would apply to the proposed project:

> **Goal M-1 Regional and Local Roads:** A transportation system that meets and balances local and regional mobility needs.
>
> > **Action M-1b:** As part of the development review process, the Community Development Department and the Public Works Department shall require developers to complete and fund the following:
> >
> > 1. A local transportation analysis to ensure that the site plan incorporates City transportation goals, policies, and standards, that identifies the effects of the project on the local transportation system, and identifies improvements to maintain adopted LOS standards for operations at signalized city-controlled intersections;
> >
> > 2. The project's proportional share of the effects on the City's circulation network through payment of fees; and

3. For local project-related circulation effects requiring improvements that are not included in an adopted fee program, either complete the necessary improvements or pay a proportional share of the cost.

Goal M-5 Bicycle, Pedestrian, and Equestrian Use: Support and promote the use of pedestrian, bicycle, and equestrian facilities.

Policy M-5.1 Promote Non-Vehicular Modes: Promote the provision of non-vehicular circulation modes within Lake Forest.

Policy M-5.2 Pedestrian Access Between Uses: Improve pedestrian access between complementary uses such as residential and commercial areas and seek to increase the number of bridges and/or grade-separated crossings over freeways and major roadways.

Goal M-6 Safety: Provide a safe transportation system for all users.

Policy M-6.3 Site Designs and Safety: Ensure, through the development review process, that development projects follow best design practices to reduce conflicts between multiple travel modes.

Goal M-9 Goods Movement: Accommodate safe goods movement through the City's transportation network.

Policy M-9.1 Goods Movement Along City Arterials: Continue to restrict truck traffic through the City to its arterial roadways in order to facilitate goods movement to regional facilities; continue to prohibit truck traffic on residential streets.

Policy M-9.2 Roadway Design: Maintain roadway design standards along City arterials to facilitate truck access to light industrial, manufacturing, commercial, and mixed-use areas along designated truck routes.

Goal M-10 Funding: Ensure the utilization of various financing methods to improve and provide a fiscally sound transportation system.

Policy M-10.2 New Developments: Ensure that new development projects contribute their appropriate fair share to transportation network improvements and that existing funding commitments are met.

City of Lake Forest Municipal Code. Guidelines and provisions related to traffic and circulation are addressed in Title 12 (Vehicles and Traffic) of the City's Municipal Code and parking is addressed in Title 9 of the City's Zoning Code. Chapter 9.160 (Facility Design Regulations) of the City's Municipal Code includes transportation demand management requirements.

4.17.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project may have a significant adverse impact with respect to transportation and traffic if it would:

Threshold 4.17.1: Conflict with program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;

Threshold 4.17.2: Conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b);

Threshold 4.17.3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or

Threshold 4.17.4: Result in inadequate emergency access.

4.17.6 Project Impacts

Please refer to Section 4.17.9 for full text description of the regulatory compliance and/or mitigation measures referenced in the analysis below.

Threshold 4.17.1: Would the project conflict with program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less Than Significant Impact. The following includes an evaluation of the proposed project's potential to conflict with applicable programs, plans, ordinances, and policies addressing the circulation system, including the Mobility Element of the Lake Forest General Plan 2040. The section begins with a description of the proposed project's trip generating potential compared to existing conditions, followed by a level of service (LOS) analysis, and an analysis of potential impacts to transit, bicycle, pedestrian, and roadway facilities. Table 4.17.A outlines the City General Plan goals and policies related to transportation and traffic that are applicable to the proposed project and evaluates the consistency of the proposed project with these goals and policies.

Trip Generation. Trip generation is the process of estimating the number of vehicles that would likely access the project site. The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition (2021) for Land Use Code 140 (Manufacturing), Land Use Code 150 (Warehousing), and Land Use Code 710 (General Office Building). As further detailed in the TIA, the proposed project is estimated to generate 727 daily trips, including 94 trips (70 inbound and 24 outbound) in the a.m. peak hour and 99 trips (31 inbound and 68 outbound) in the p.m. peak hour in passenger car equivalents (PCEs). As mentioned before, the existing office building on site is currently vacant. Therefore, no trip reductions for the previous uses on site have been applied.

Table 4.17.A: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Goal M-1 Regional and Local Roads: A transportation system that meets and balances local and regional mobility needs.	
Action M-1b: As part of the development review process, the Community Development Department and the Public Works Department shall require developers to complete and fund the following: 1. A local transportation analysis to ensure that the site plan incorporates City transportation goals, policies, and standards, that identifies the effects of the project on the local transportation system, and identifies improvements to maintain adopted LOS standards for operations at signalized city-controlled intersections; 2. The project's proportional share of the effects on the City's circulation network through payment of fees; and 3. For local project-related circulation effects requiring improvements that are not included in an adopted fee program, either complete the necessary improvements or pay a proportional share of the cost.	**Consistent.** As part of the proposed project, off-site improvements would be made at 5 intersections to enhance public safety and address concerns related to large truck turning movements. Based on the results of the Traffic Impact Analysis (TIA), the proposed project would not result in any level of service (LOS) deficiencies or impacts. Therefore, the existing intersections and roadways, including City-designated truck routes, would be able to accommodate all traffic (passenger vehicles and trucks) associated with implementation of the proposed project. The TIA is consistent with the objectives and methodologies set forth in the City's TA Guidelines, the 2021 Congestion Management Program (CMP) for Orange County, and applicable provisions of CEQA. The proposed project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Items 2 and 3 of this action are not applicable to the proposed project. The proposed project would not conflict with these General Plan Policies or actions.
Goal M-5 Bicycle, Pedestrian, and Equestrian Use: Support and promote the use of pedestrian, bicycle, and equestrian facilities.	
Policy M-5.1 Promote Non-Vehicular Modes: Promote the provision of non-vehicular circulation modes within Lake Forest.	**Consistent.** The proposed project would include bike racks (31 spaces total) and pedestrian connections to nearby sidewalks and crosswalks. The proposed project would not conflict with these General Plan Policies.
Policy M-5.2 Pedestrian Access Between Uses: Improve pedestrian access between complementary uses such as residential and commercial areas and seek to increase the number of bridges and/or grade-separated crossings over freeways and major roadways.	
Goal M-6 Safety: Provide a safe transportation system for all users.	
Policy M-6.3 Site Designs and Safety: Ensure, through the development review process, that development projects follow best design practices to reduce conflicts between multiple travel modes.	**Consistent.** The project includes off-site improvements at five intersections to enhance public safety and address concerns related to large truck turning movements, which would be completed consistent with design standards to reduce conflicts between multiple travel modes. By incorporating intersection improvements into the design of the proposed project, the proposed project does not include any geometric design features or incompatible uses that could substantially increase circulation/traffic hazards. The proposed project would not conflict with this General Plan Policy.

Table 4.17.A: General Plan Consistency Analysis

General Plan Goals, Policies, and Actions	General Plan Consistency Analysis
Goal M-9 Goods Movement: Accommodate safe goods movement through the City's transportation network.	
Policy M-9.1 Goods Movement Along City Arterials: Continue to restrict truck traffic through the City to its arterial roadways in order to facilitate goods movement to regional facilities; continue to prohibit truck traffic on residential streets.	**Consistent**. Truck traffic associated with the proposed project would be restricted to arterial roadways, and truck traffic would not be allowed on residential streets. The project site is not located along a City arterial or designated truck route; however, the proposed off-site intersection improvements are located along City arterials and designated truck routes. The off-site improvements are proposed to enhance public safety and address concerns related to large truck turning movements and would be completed consistent with design standards to facilitate truck access. The proposed project is anticipated to generate 727 total daily trips (in passenger car equivalents [PCEs]), which is broken down to 458 daily passenger vehicle trips and 269 daily truck trips (in PCEs). Based on the results of the TIA, the proposed project would not result in any level of service (LOS) deficiencies or impacts. Therefore, the existing intersections and roadways, including City-designated truck routes, would be able to accommodate all traffic (passenger vehicles and trucks) of the proposed project. The proposed project would not conflict with these General Plan Policies.
M-9.2 Roadway Design: Maintain roadway design standards along City arterials to facilitate truck access to light industrial, manufacturing, commercial, and mixed-use areas along designated truck routes.	
Goal M-10 Funding: Ensure the utilization of various financing methods to improve and provide a fiscally sound transportation system.	
Policy M-10.2 New Developments: Ensure that new development projects contribute their appropriate fair share to transportation network improvements and that existing funding commitments are met.	**Consistent.** As detailed in Chapter 3.0, Project Description, the proposed project would include off-site improvements at five intersections within the City to enhance public safety and address concerns related to large truck turning movements. These improvements will be paid by the project Applicant. The proposed project would not conflict with this General Plan Policy.

Source: Mobility Element, City of Lake Forest General Plan 2040.

Level of Service. The City has identified LOS D as the threshold for acceptable intersection operations. The following criteria shall be used to determine if a project would be responsible for LOS deficiencies and whether feasible roadway improvements should be identified to improve performance.

- If, under without project conditions, an intersection operates at LOS D or better and the addition of project trips results in unacceptable LOS (LOS E or F); or

- If, under without project conditions, an intersection operates at LOS E or F and the impact of the development is greater than 0.01 in ICU.

Based on the LOS analysis provided in the TIA (refer to Appendix J), the seven study area intersections are forecast to operate at an acceptable LOS during the a.m. and p.m. peak hours both in Existing (2024) with Project and Opening Year (2027) with Cumulative Projects with Project traffic conditions. Additionally, the project driveways are forecast to operate at satisfactory LOS (B or better) during both the a.m. and p.m. peak hours.

The proposed project would not conflict with any program, plan, ordinance or policy addressing roadways and intersection facilities, or decrease the performance of such facilities.

Bicycle and Pedestrian System. On-street (Class II) bicycle lanes are provided along Bake Parkway, Lake Forest Drive, and Rancho Parkway. Sidewalks currently exist in the project vicinity on both sides of Bake Parkway, Commercentre Drive, Dimension Drive, Lake Forest Drive, and Rancho Parkway and along one side of Enterprise Way. The proposed project would maintain the existing walkways/sidewalks in the vicinity of the project site. In addition, the proposed project would construct an accessible on-site pedestrian path through the parking lot to a paved walkway along the north side of the building that leads to the primary office area in the northwest corner of the building and the secondary office area in the northeast corner of the building. Additionally, the proposed project would provide 31 bicycle racks, including exterior racks along the northwest corner of the building and directly west of the parking stalls along the northern perimeter of the building, as well as indoor bicycle storage/racks on the west side of the first floor of the building.

The Mobility Element of Lake Forest General Plan 2040 includes Goal M-5, which is to support and promote the use of pedestrian, bicycle, and equestrian facilities. By including pedestrian walkways that connect to existing nearby crosswalks and sidewalks and bike racks, the proposed project would support and promote the use of alternate modes of transportation. Implementation of the proposed project would not conflict with plans, programs, and policies regarding pedestrian and bicycle facilities, or decrease the performance of such facilities.

Transit Services. There are no established standards regarding transit LOS that have been adopted by the City or transit agencies. The proposed project would not affect any existing or planned bus stops or sidewalks in the study area or otherwise degrade access to public transit facilities. The proposed project would potentially increase transit ridership by constructing a project with access to nearby transit facilities; however, the existing transit facilities in the nearby proximity to the project site would be able to accommodate the potential increase in ridership. Therefore, implementation of the proposed project would not conflict with plans, programs, and policies regarding transit facilities or decrease the performance of such facilities.

Overall, the proposed project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant, and no mitigation is required.

Threshold 4.17.2: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?

Significant and Unavoidable Impact. On December 28, 2018, the California Office of Administrative Law cleared the revised California CEQA Guidelines for use. Among the changes to the guidelines was removal of vehicle delay and LOS from consideration under CEQA, which was mandated by Senate Bill (SB) 743. As a result, the City of Lake Forest updated its TA Guidelines (July 21, 2020) to require a VMT analysis for CEQA documents.

Per the City's TA Guidelines, there are five types of screening that lead agencies can apply to effectively screen projects from project-level assessment. These are summarized below:

- Small Project Screening (net daily trips less than 100 daily trips)
- Map-Based (Low VMT Area) Screening for Residential and Office/Employment Projects
- Proximity to High-Quality Transit Screening
- Project Type Screening based on Local-Serving Uses
- Affordable Residential Development Screening

The proposed project cannot be screened out as explained below:

- **Small Project Screening:** The proposed project is expected to generate 727 daily trips, which is more than 100 daily trips. Therefore, this screening criterion does not apply.

- **Map-Based (Low VMT Area) Screening for Residential and Office/Employment Projects:** The project site does not fall into the low-VMT area based on Attachment A-2 from the City's VMT Look-Up Table (Excel file). Therefore, this screening criterion does not apply.

- **Proximity to High-Quality Transit Screening:** No major transit stops or stops along a high-quality transit corridor were identified within 0.5 mile of the project site. Therefore, this screening criterion does not apply.

- **Project Type Screening based on Local-Serving Uses:** The proposed project is not a local-serving project. Therefore, this screening criterion does not apply.

- **Affordable Residential Development Screening:** The proposed project is not an affordable residential development. Therefore, this screening criterion does not apply.

Since the proposed project cannot be screened out based on any of the above criteria, a VMT analysis is required. Since the proposed project is not expected to cause a measurable change in trip distribution and travel patterns, the following methodology is consistent with the City's TA Guidelines:

1. Based on the proposed project's location, identify the applicable Lake Forest Transportation Analysis Model (LFTAM) Traffic Analysis Zone (TAZ).

2. Using the VMT Look-Up Table, find the applicable Home-Based Work (HBW) VMT per employee for an office/employment project.

3. Compare LFTAM TAZ VMT data against the applicable VMT threshold (i.e., countywide Home-Based Work [HBW] VMT per employee for an office/employment project).

4. Mitigate the net difference between the LFTAM VMT per employee and the countywide (for employment project) VMT threshold.

The proposed project is located in LFTAM TAZ 45 and is considered a non-residential office/ employment project. Table 4.17.B shows the VMT reduction targets per the latest City TA Guidelines. As shown in Table 4.17.B, the project VMT rate exceeds the City's VMT threshold (Target VMT Rate) by 20 percent and, therefore, the proposed project is required to reduce its VMT by 20 percent.

Table 4.17.B: City of Lake Forest VMT Reduction Targets

VMT Analysis Scenario	VMT Rate	
	VMT	Metric
Countywide VMT Threshold[1]	20.5	VMT/Employee
Project VMT Rate[2]	24.6	VMT/Employee
Above or Below Citywide VMT Threshold	**Above**	
Significant Impact?	**Yes**	
VMT Reduction Required	**4.1 (20%)**	

Source: Compiled by LSA (2025).
[1] Per the City of Lake Forest Transportation Analysis Guidelines (July 2020).
[2] Project VMT rate was from City of Lake Forest SB 743 VMT Look-Up Table, as provided in Appendix G of the TIA.
SB = Senate Bill
VMT = vehicle miles traveled

The proposed project would be required to implement feasible Traffic Demand Management (TDM) measures that would reduce project VMT, as stipulated by **Mitigation Measure (MM) TRA-1**. Providing bike lanes and an enhanced bikeway network, as required by **MM TRA-1**, can increase access to and from transit hubs. This encourages a mode shift from vehicles to bicycles and displaces VMT. According to the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (October 2024) (CAPCOA Handbook), the addition of bike lanes (T-20 Expand Bikeway Network) can provide a maximum VMT reduction of 0.5 percent. Assuming that this TDM measure could achieve the maximum 0.5 percent VMT reduction, the reduction achieved would not reduce the project's VMT to below the City's VMT threshold. Therefore, even with implementation of **MM TRA-1** (addition of bike lanes), the project's VMT impact would be significant and unavoidable.

Threshold 4.17.3: 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 Impact. The design of the proposed project does not include any geometric design features or incompatible uses that could substantially increase circulation/traffic hazards. The proposed project would result in the demolition of an existing 144,906 square-foot (sq ft), two-story office/industrial building and the redevelopment, construction, and operation of a 35-foot-tall, 165,803 sq ft industrial building. Vehicular access to the project site would continue to be provided via two existing driveways on Enterprise Way and an existing shared drive aisle that connects to the adjacent property at the northeast corner of the site. Both existing driveways on Enterprise Way would provide access for circulation for autos, loading and delivery trucks, waste vehicles, and emergency vehicles. Both existing driveways on Enterprise Way can accommodate trucks and would not require widening to accommodate truck turns. Truck circulation would be accommodated from the west and east sides of the building. Loading docks would be located on the southwest side of the proposed building. The proposed project would be required to design, construct, and maintain structures, roadways, and facilities in accordance with applicable standards governing vehicular access.

Additionally, the proposed project would include the following intersection improvements to enhance public safety and address concerns related to large truck turning movements. These off-site improvements would be constructed by the project applicant prior to occupancy of the proposed industrial building:

- **Intersection of Bake Parkway and Commercentre Drive:** Modifications would be made to the traffic signal to accommodate protected eastbound and westbound left-turn phasing (from split phasing). Lane geometrics would be modified for the westbound approach to accommodate dual left-turn lanes and a shared through right-turn lane. Additionally, modifications would be made to the traffic signal equipment.

- **Intersection of Bake Parkway and Dimension Drive:** Modifications would be made to the median to accommodate a 430-foot westbound left-turn lane. Additionally, modifications would be made to the traffic signal equipment.

- **Intersection of Dimension Drive/Commercentre Drive – Enterprise Way:** Modifications would be made to the traffic signal to accommodate protected eastbound and westbound left-turn phasing (from permissive phasing). The curb radius of the southeast corner at this intersection would be modified to accommodate wheelbase-67 (WB-67) truck turns (northbound right turn). Additionally, modifications would be made to the traffic signal equipment.

- **Intersection of Lake Forest Drive and Dimension Drive:** Modifications would be made to accommodate a 250-foot northbound left-turn lane and a 205-foot eastbound left-turn lane. Additionally, modifications would be made to the traffic signal equipment.

- **Intersection of Lake Forest Drive and Rancho Parkway:** Modifications would be made to accommodate a new 225-foot northbound right-turn lane, a 470-foot northbound left-turn lane, and a 440-foot southbound left-turn lane. Additionally, modifications would be made to the traffic signal equipment.

As detailed in the TIA, a stopping sight distance analysis was conducted along Enterprise Way at the project driveways to ensure driver visibility and safety. In the project vicinity, the speed limit along Enterprise Way is 25 mph. As stated in Table 201.1 of the California Department of Transportation (Caltrans) *Highway Design Manual* (HDM),[3] the minimum stopping sight distance[4] is 150 feet for a design speed of 25 mph. There are no sight distance obstructions at the proposed project driveway. The sight distances at the project driveways along Enterprise Way exceed 150 feet looking left and 150 feet looking right. Therefore, the proposed project driveways would meet the minimum sight distance requirements specified in the HDM.

As detailed in the TIA, the AutoTurns Pro (Computer-Aided Design [CAD]) program and Google Earth aerial photos were used to estimate the maneuverability of the inbound and outbound turning movements at the following study area intersections:

- Bake Parkway/Commercentre Drive: northbound right-turn (inbound) and westbound left-turn (outbound)

- Dimension Drive/Commercentre Drive – Enterprise Way: northbound right-turn (inbound) and westbound left-turn (outbound)

- Lake Forest Drive/Dimension Drive: northbound left-turn (inbound), southbound right-turn (inbound), eastbound left-turn (outbound), and eastbound right-turn (outbound)

- Lake Forest Drive/Rancho Parkway: northbound right-turn (outbound) and westbound left-turn (inbound)

The turning movements were determined to be feasible for trucks if the following conditions were met:

1. A truck did not encroach beyond the nearside curb;
2. A truck did not encroach beyond the center median;
3. A truck did not encroach into opposing traffic lanes; or
4. A truck would not conflict with an opposing truck turning left.

A WB-67 truck was evaluated for this analysis. As a result of the WB-67 truck turn templates, the inbound and outbound turning movements at the study area intersections are considered feasible,

[3] California Department of Transportation (Caltrans). 2020. *Highway Design Manual*. July. Website: https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm (accessed June 13, 2024).

[4] According to the Caltrans *Highway Design Manual* (HDM) (dated July 2020), the stopping sight distance is the minimum sight distance along a roadway required to allow a driver to decrease their speed from the design speed to a complete stop.

except for northbound right-turn (inbound) movement at Dimension Drive/Commercentre Drive – Enterprise Way. However, as described above, the proposed project would include a curb radius modification at the southeast corner of Dimension Drive/Commercentre Drive – Enterprise Way to accommodate WB-67 truck turns (northbound right turn). With implementation of this improvement, all inbound and outbound truck turning movements at the study area intersections are considered feasible.

The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts would be less than significant, and no mitigation is required.

Threshold 4.17.4: Would the project result in inadequate emergency access?

Less Than Significant Impact. The proposed project's impacts to emergency access are discussed below.

Construction. The proposed project would require temporary lane closures to complete the proposed intersection improvements and may require temporary lane closures on Enterprise Way for the completion of utility connections. However, the proposed project would be required to comply with the California Manual on Uniform Traffic Control Devices[5] (CA MUTCD), which provides uniform standards and specifications for all official traffic control devices in California. Compliance with standards included in the CA MUTCD would ensure that any temporary lane closures that may result from the proposed project would not result in inadequate emergency access at the project site or in the project vicinity. . Therefore, construction of the proposed project would not physically impair or otherwise interfere with emergency access in the project vicinity. Impacts related to emergency access in the project vicinity during project construction would be less than significant, and no mitigation is required.

Operation. Similar to existing conditions, access to and from the project site once the project is operational would be provided via the two existing driveways on Enterprise Way and an existing reciprocal access in the northeast corner of the site to the adjacent property. Implementation of the proposed project would increase the number of trucks operating near the site and would generate an increase in the amount and volume of traffic on local and regional roadway networks. In accordance with the California Fire Code, the project applicant is required to design, construct, and maintain structures, roadways, and facilities to maintain appropriate emergency/evacuation access to and from the project site. Entrances and exits to and from parking and loading facilities would be marked with appropriate directional signage. All site access points and driveway aprons would be designed and constructed to adequate widths for public safety pursuant to the Orange County Fire Authority (OCFA). Site design and compliance with standard and emergency OCFA and City requirements, such as the size and location of fire access routes and fire truck turning radii, would allow for proper site evacuation, if necessary, during project operations. Therefore, the project would not result in inadequate emergency

[5] California Department of Transportation (Caltrans). 2014. *California Manual on Uniform Traffic Control Devices.* Revised January 11, 2024.

access during project operation, impacts would be less than significant, and no mitigation is required.

4.17.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts are the incremental effects of an individual project when viewed in connection with the effects of past, current, and probable future projects within the cumulative impact area for land use and planning. The cumulative study area for transportation and traffic is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

The proposed project would result in a less than significant impact related to conflicts with a program, plan, ordinance, or policy addressing the circulation system, roadway design hazards, and emergency access. However, based on the latest City's TA Guidelines, the project VMT rate exceeds the City's VMT threshold (Target VMT Rate) by 20 percent. The proposed project would be required to implement TDM measures as specified in **MM TRA-1** (addition of bike lanes), to promote alternative transportation within the intent of reducing VMT. According to the CAPCOA Handbook (October 2024), the addition of bike lanes (T-20 Expand Bikeway Network) can provide a maximum VMT reduction of 0.5 percent. Assuming that this TDM measure could achieve the maximum 0.5 percent VMT reduction, the reduction achieved would not reduce the project's VMT impact to below the City's VMT threshold. Therefore, even with implementation of **MM TRA-1**, the proposed project would result in a significant and unavoidable transportation impact related to VMT.

Other past, present, and reasonably foreseeable projects would be required to comply with existing City General Plan goals, policies, and actions; California Fire Code requirements; and standard and emergency OCFA and City requirements to provide project-specific transportation facilities that accommodate pedestrian, bicycle, and vehicle travel and that meet the City's design requirements to avoid increasing hazards due to a geometric design feature and/or ensure adequate emergency access to and within the project site. In this way, potential transportation impacts would be evaluated and mitigated to a less than significant level by each cumulative project and would not individually contribute to a cumulatively considerable impact on transportation or traffic.

Therefore, when the proposed project is considered with the cumulative projects identified in Table 4.A, it would not result in cumulatively considerable conflicts with transportation policies governing the circulation system, create roadway design hazards, or create emergency access impacts.

However, as stated above, even with implementation of mitigation, the proposed project would result in a significant and unavoidable transportation impact related to VMT. Of the 13 cumulative projects listed in Table 4.A in Chapter 4.0, the Western Realco Projects (Projects 3 and 4 in Table 4.A) are located within the same TAZ as the proposed project. The TAZ zone associated with the

proposed project and Projects 3 and 4 is above the countywide threshold for VMT, and all projects within this TAZ zone would contribute to higher VMT rates within the TAZ zone. The proposed project would have a significant project-specific impact on VMT and when considered with the other cumulative projects, particularly those within the same TAZ, the proposed project would have a cumulatively considerable impact on VMT. There are no feasible mitigation measures that can reliably guarantee that VMT can be reduced below the City's threshold; therefore, the proposed project would have a cumulatively significant and unavoidable transportation impact related to VMT even with implementation of mitigation.

4.17.8 Level of Significance Prior to Mitigation

Prior to mitigation, the proposed project would result in a potentially significant transportation and traffic impact related to VMT.

4.17.9 Regulatory Compliance Measures and Mitigation Measures

4.17.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to transportation and traffic.

4.17.9.2 Mitigation Measures

The following mitigation measure is required to reduce impacts related to VMT.

MM TRA-1 **Bike Lanes.** Prior to issuance of a certificate of occupancy for the proposed industrial building, the project Applicant shall retain a licensed Civil Engineer by the State of California to prepare Civil Street Improvements and Signing & Striping Plans (collectively Construction Plans) for the implementation of bike lanes in both directions on Commercentre Drive between Alton Parkway and Dimension Drive. These bike lanes on Commercentre Drive would connect the proposed project site on Enterprise Way to the existing bike lanes on Alton Parkway, which eventually connects to the Irvine Transportation Center, a multi-model transit hub including Metrolink and Amtrak commuter train services and OCTA bus services.

Based on a preliminary design assessment, the Construction Plans shall include an asphalt slurry seal of Commercentre Drive to modify the existing lane striping for the addition of standard striped bike lanes and green bike markings. The project Applicant shall use these Construction Plans to obtain a Public Works Encroachment Permit to construct said improvements for bike lanes on Commercentre Drive. The construction of said improvements shall be completed per the plans and to the satisfaction of the Public Works Department. The project Applicant shall use these Construction Plans to obtain a Public Works Encroachment Permit to construct said improvements for bike lanes on Commercentre Drive.

4.17.10 Level of Significance after Mitigation

As discussed above, even with implementation of **MM TRA-1**, the proposed project would result in a significant and unavoidable transportation and traffic impact related to VMT.

4.18 TRIBAL CULTURAL RESOURCES

This section evaluates the potential impacts to tribal cultural resources from implementation of the proposed project. This section is based in part on the following:

- Consultations between the City of Lake Forest (City) and Native American tribal government(s) conducted pursuant to Assembly Bill (AB) 52;
- *City of Lake Forest General Plan Recreation and Resources Element* (City of Lake Forest 2020); and
- *Cultural Resources Assessment* (BCR Consulting 2021).

4.18.1 Scoping Process

The Notice of Preparation (NOP) for the proposed project was published in March 2024, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. One comment letter included comments related to tribal cultural resources. This comment pertains to concerns about the possibility of buried archaeological resources in the project area, stating that this potential necessitates, at a minimum, monitoring by qualified archaeologists and culturally related Native Americans during ground disturbance within undisturbed soil areas.

Additionally, the letter received from the Native American Heritage Commission (NAHC) (March 21, 2024) outlines the City's tribal consultation requirements under AB 52 and Senate Bill (SB) 18. The NAHC recommended the City consult with Native American tribes and analyze impacts and include mitigation for tribal cultural resources in the EIR.

4.18.2 Methodology

The methodology used to address potential impacts to Tribal Cultural Resources (TCRs) included the notification of tribal governments as detailed in Section 4.18.3.2. Subsequent confidential contact between the City and the consulting tribal governments was conducted to obtain information relative to tribal concerns and develop appropriate mitigation to address any potential impacts.

4.18.3 Existing Environmental Setting

The area that is now Lake Forest was prehistorically occupied by Native Americans. This area is primarily within the traditional territory of the Gabrielino Band of Mission Indians and along the boundary of the traditional territory of the Juaneño Band of Mission Indians (Juaneño).

The project site is situated within the traditional boundaries of the Juaneño. The term Juaneño derives from Mission San Juan Capistrano and refers to Takic speakers associated with that mission. Although early studies separated the Juaneño and Luiseño based on linguistic differences, more recent work has alleged that the two groups actually represent a single ethnic nationality. The Juaneño were originally studied using ethnography, particularly during the early 20th century,

although their decimation through acculturation and disease has necessitated supplementing any social analysis with archaeological data. The Juaneño were seminomadic hunter-gatherers who subsisted on seasonably available plant and animal resources. Plants utilized for food were heavily relied upon and included acorn-producing oaks, as well as seed-producing grasses and sage. Animal protein was commonly derived from rabbits and deer in inland regions, while coastal populations supplemented their diets with fish, shellfish, and marine mammals (BCR Consulting 2021).

4.18.3.1 Sacred Lands File Search

The City requested a Sacred Lands File (SLF) Search and Native American Contact List from the NAHC on April 11, 2024. In its response on April 24, 2024, the NAHC indicated that the record search results were negative. However, because the absence of specific site information in the SLF does not indicate the absence of cultural resources in the project area, NAHC identified methodologies and contacts for conducting required AB 52 tribal consultation. The NAHC recommended that 21 Native American individuals representing the Gabrielino, Gabrielino Tongva, Juaneño, La Jolla, Pala, Santa Rosa, and Soboba groups be contacted for information regarding cultural resources that could be affected by the proposed project.

4.18.3.2 Native American Consultation

On June 3, 2024, the City provided notice of the proposed project to the Native American contacts provided by the NAHC and the tribes that had previously requested such notice, and consulted with the Native American tribes that requested consultation in response to the notice, pursuant to provisions of AB 52. Notices were sent to the following Native American tribes/entities[1]:

- Gabrieleno Band of Mission Indians - Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino/Tongva Nation
- Gabrielino-Tongva Tribe
- Juaneño Band of Mission Indians
- Juaneño Band of Mission Indians Acjachemen Nation – Belardes
- Juaneño Band of Mission Indians Acjachemen Nation 84A
- La Jolla Band of Luiseno Indians
- Pala Band of Mission Indians
- Pauma Band of Luiseno Indians
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseno Indians

On June 12, 2024, the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation) acknowledged receipt of the City's consultation request and requested a consultation with the City to discuss the project and the surrounding location in further detail. City staff, including Amy Stonich and Jennifer Mansur, held a tribal consultation on July 25, 2024, with the Kizh Nation (Andrew Salas, Chairman of

[1] Multiple contacts were made to some tribes (based on NAHC contact list). The City mailed 25 letters in total.

the Kizh Nation, and Matthew Teutimez, Tribal Biologist**).** During the consultation, the Kizh Nation requested additional details regarding the grading activities that were completed during development of the existing building.

City staff completed additional research to address the Kizh Nation's request for information and on August 2, 2024, City staff provided the following information to the Kizh Nation's Administrative Specialist via email: The project involves demolishing a vacant 144,906-square-foot industrial building and constructing a new 165,803-square-foot industrial building at 26200 Enterprise Way. The site was part of the "Pacific Business Park," approved by the County of Orange in 1987. Based on information in EIR 421, the mass grading for the project was expected to include 1,000,000 cubic yards of cut and fill material, with a maximum cut depth of 85 feet and fill depth of 35 feet. The email included the Cultural Resources Section of EIR 421 and a Paleontology and Archaeology report prepared as part of EIR 421 as attachments. Additionally, the email stated that site grading information that predates the existing development is not available. No additional responses or requests for consultation under AB 52 were received during the consultation period for the proposed project and tribal consultation concluded on May 11, 2025.

4.18.4 Regulatory Setting

Federal, State, and local regulations and programs related to tribal cultural resources that are applicable to the proposed project are described below.

4.18.4.1 Federal Regulations

Archaeological Resources Protection Act. The Archaeological Resources Protection Act was enacted in 1979 with the purpose of securing the protection of archaeological resources and sites on public lands and Native American lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals.

Native American Graves Protection and Repatriation Act. The Native American Graves Protection and Repatriation Act (NAGPRA) was enacted on November 16, 1990, to address the rights of lineal descendants, Indian tribes, and Native Hawaiian organizations to Native American cultural items, including human remains, funerary objects, sacred objects, and objects of cultural patrimony. The NAGPRA assigned implementation responsibilities to the Secretary of the Interior. The National NAGPRA program provides support for the following activities:

- Publishing notices for museums and federal agencies in the Federal Register;
- Creating and maintaining databases, including the Culturally Unidentifiable Human Remains Inventories (CUI) Database;
- Making grants to assist museums, Indian tribes, and Native Hawaiian organizations in fulfilling NAGPRA;
- Assessing civil penalties on museums that fail to comply with provisions of the act;

- Providing staff support to the NAGPRA Review Committee and for the Annual Report to Congress;
- Providing technical assistance to federal agencies where there are excavations and discoveries of cultural items on federal and Indian lands;
- Promulgating implementing regulations; and
- Providing technical assistance through training, website information, reports prepared for the Review Committee, supporting law enforcement investigations, and direct personal service.

The National Park Service has compliance obligations for parks, separate from the National NAGPRA Program. National NAGPRA is the omnibus program, the constituent groups all of which are Federal agencies, museums that receive federal funds, tribes and Native Hawaiian organizations, and the public. On private lands, excavations or discoveries are governed first by local or state laws, but human remains or cultural items removed from private or state land may be subject to NAGPRA as a holding or collection, depending on who has control of them.

4.18.4.2 State Regulations

Native American Heritage Commission. In 1976, the California State Government passed Assembly Bill (AB) 4239, creating the Native American Heritage Commission (NAHC). The NAHC is responsible for identifying and categorizing Native American cultural resources as well as preventing damage to designated sacred sites and associated artifacts and remains. Legislation passed in 1982 authorized the NAHC to identify a Most Likely Descendant (MLD) when Native American remains are found outside the boundaries of a designated cemetery. An MLD has the authority to make recommendations in regard to the treatment and disposition of the discovered remains.

California Public Resources Code Sections 5097.9–5097.991. California Public Resources Code (PRC) Sections 5097.9–5097.991 provide protection to Native American historical and cultural resources (including sanctified cemeteries, places of worship, religious sites, or sacred shrines) and sacred sites, and gives the NAHC enforcement authority.

Specifically, California PRC Section 5097.98 outlines procedures that must be followed in the event that human remains are discovered. The County Coroner shall make a determination within 2 working days from the time the person responsible for the excavation, or designee, notifies the County Coroner of the discovery or recognition of the human remains. If the County Coroner identifies the remains to be of Native American origin or has reason to believe that the remains are those of Native American origin, the County Coroner must contact the California NAHC within 24 hours. The NAHC representative will then alert a Native American MLD to conduct an inspection of the site and to determine the following course of treatment and action. Additionally, *State CEQA Guidelines* Section 15064.5 sets forth a procedure if human remains are found on land outside of federal jurisdiction.

Health and Safety Code Section 7050.5. Section 7050.5 of the California Health and Safety Code protects Native American burials, remains, and associated grave artifacts in the event they are

discovered in any location other than a designated cemetery. The Health and Safety Code mandates the immediate stop of excavation in the site as well as any adjacent or overlying area where the remains or associated items are found and provides for the sensitive disposition of those remains. Should remains be discovered, the County Coroner must determine 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 designee, in the manner provided in PRC Section 5097.98.

Assembly Bill 52. Effective July 1, 2016, AB 52 created a new environmental resource (tribal cultural resources) that must be considered under CEQA. AB 52 requires Lead Agencies evaluate a project's potential to impact "tribal cultural resources" which may include "… [s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources."

AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a project if they have requested notice of projects proposed within that area. Consultation may include discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe. Consultation must be conducted in good faith between the tribal government and the lead agency and is deemed concluded when either the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource (should a significant effect exists) or when a party concludes that mutual agreement cannot be reached.

4.18.4.3 Regional Regulations

There are no regional regulations that apply to the proposed project with respect to tribal cultural resources.

4.18.4.4 Local Regulations

City of Lake Forest General Plan 2040. The Recreation and Resources Element of the City's General Plan (2020) includes various goals and policies related to tribal cultural resources. Goals, policies, and actions applicable to the proposed project include:

> **Goal RR-3 Cultural Resources:** A community that values its history and preserves its cultural features to bolster community identity and protect sensitive resources.
>
> > **Policy RR-3.1 Preservation**: Protect areas containing significant historic, archaeological, and paleontologic resources, as defined by the California Public Resources Code.

Policy RR-3.3 Development: Ensure that human remains are treated with sensitivity and dignity, and ensure compliance with the provisions of California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.

Policy RR-3.4 Tribal Consultation: Consult with Native American tribes that may be impacted by proposed development, as necessary, and in accordance with state, local, and tribal intergovernmental consultation requirements.

Action RR-3a: City staff shall require applicants for future proposed ground disturbing projects to provide a technical cultural resources assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified archaeologist meeting Secretary of the Interior Standards and certified by the County of Orange. If resources are known or reasonably anticipated the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provide a treatment plan for potential resources that includes data to be collected, requires professional identification, other special studies as appropriate, requires curation at an accredited museum such as the John D. Cooper Center operated by the County of Orange for artifacts meeting significance criteria, requires a comprehensive final mitigation compliance report including a catalog of specimens with museum numbers and an appendix containing a letter from the museum stating that they are in possession of the materials.

Action RR-3b: Require all new development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Director of Community Development shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Community Development Director; and

- If human remains are discovered during any ground disturbing activity, work shall stop until the Director of Community Development and the Orange County Coroner have been contacted. If the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants shall be consulted; and work may only resume when appropriate measures have been taken and approved by the Community Development Director.

Action RR-3d: Require all development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of a paleontological resource:

- If construction or grading activities result in the discovery of significant prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Director of Community Development shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Director of Community Development.

4.18.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to tribal cultural resources if it would:

Threshold 4.18.1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

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

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

4.18.6 Project Impacts

Please refer to Section 4.18.9 for full text description of the regulatory compliance and/or mitigation measures referenced in the analysis below.

Threshold 4.18.1(a): **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: 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 with Mitigation Incorporated. As detailed in Section 4.5, Cultural Resources, a cultural records search was completed on June 16, 2021, at the South Central Coastal Information

Center (SCCIC) of the California Historical Resources Information System at California State University, Fullerton. It included a review of all prehistoric and historic archaeological sites within a 0.5-mile radius of the project site, as well as a review of known cultural resource surveys and excavation reports in that area. The California State Historic Resources Inventory (HRI), National Register of Historic Places (National Register), California State Historical Landmarks (SHL), California State Points of Historical Interest (SPHI), and various local historical registers were examined. The SCCIC records search identified one previously recorded cultural resource (a prehistoric lithic scatter) within the project site. However, according to previous studies, the knoll where the cultural resource was identified was systematically excavated in 1988 and removed by subsequent development/construction excavation in 1994 (BCR Consulting LLC 2021). Furthermore, through site development, the project site has been subject to over excavation and compaction that has disturbed sediments beyond depths at which encountering buried cultural resources is likely.

The project site is occupied by a modern building and parking lot. The existing building was developed in 1999. Since the building is less than 50 years old, it is not considered to be of historical significance as defined by CEQA. Removal of the existing building as part of the proposed project would not impact any significant elements of the built environment.

Native American consultation was conducted by the City in compliance with AB 52. As part of the consultation process, a review of the SLF by the NAHC, indicated that the results of the file search were negative. However, because the absence of specific site information in the SLF does not indicate the absence of cultural resources in the project area, NAHC identified methodologies and contacts for conducting the required AB 52 tribal consultation. The NAHC recommended that 21 Native American individuals representing the Gabrielino, Gabrielino Tongva, Juaneño, La Jolla, Pala, Santa Rosa, and Soboba groups be contacted for information regarding cultural resources that could be affected by the proposed project. The City provided notice of the proposed project via certified mail to Native American tribal contacts provided by the NAHC as well as local Native American tribal representatives that previously requested to be notified of future projects proposed by the City in compliance with AB 52. The Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation) responded to the City's notice.

At the request of the Kizh Nation, the City conducted research into grading activities that were completed during development of the existing building. Based on review of available documents/ records, the City was able to confirm that mass grading of the site occurred during development of the Pacific Business Park Project, which was approved by the County of Orange in 1987. In addition to providing the information above, the City provided the Kizh Nation with a copy of the Cultural Resources Section of EIR 421, and the Paleontology and Archaeology report prepared as part of EIR 421 via email to the Kizh Nation's Administrative Specialist on August 2, 2024. **Mitigation Measures (MM) TCR-1** and **MM TCR-2** have been included in this environmental document to minimize potential impacts related to the unanticipated discovery of tribal cultural resources. **MM TCR-1** requires Native American tribal monitoring of ground-disturbing activities associated with project construction, and **MM TCR-2** requires adherence to procedures for the treatment of unanticipated tribal cultural resources if discovered during construction.

No information regarding specific known tribal cultural resources on the project site was provided to the City. Furthermore, no human remains are known to be on the project site or are anticipated to be discovered during project construction. However, in the unlikely event that human remains or funerary/ceremonial objects are discovered during construction of the proposed project and are of Native American origin, the remains may be considered a tribal cultural resource. If human remains or funerary/ceremonial objects are encountered during construction, the Construction Contractor would be required to implement **MM TCR-3**, which requires compliance with PRC 5097 and the State's Health and Safety Code Section 7050.5 for the treatment of human remains or funerary/ceremonial objects.

Based on the findings of the *Cultural Resources Assessment* and AB 52 consultation, no known tribal cultural resources listed or eligible for listing in the California Register of Historical Resources (California Register) or in a local register exist within the project site, and there are no known tribal cultural resources on the project site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource defined as 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 or in a local register of historical resources as defined in PRC Section 5020.1(k). Nevertheless, implementation of **MM TCR-1, MM TCR-2,** and **MM TCR-3**, are required to address the potential impacts to unanticipated tribal cultural resources, human remains, and associated funerary or ceremonial objects, the implementation of which would reduce impacts to less than significant.

Threshold 4.18.1(b): **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of 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.**

Less Than Significant with Mitigation Incorporated. As noted above, a cultural resources record search, an SLF search through the NAHC, and AB 52 Native American consultation were conducted for the proposed project. The purpose of these efforts was to identify known tribal cultural resources on or near the project site. No on-site cultural resources were identified as part of the records search.

Consultation occurred with the Kizh Nation on July 25, 2024. As discussed above, the Kizh Nation requested additional details regarding the grading activities that were completed during development of the existing building. Based on review of available documents/records, the City was able to confirm that mass grading of the site occurred during development of the Pacific Business

Park Project, which was approved by the County of Orange in 1987. The City shared these findings with the Kizh Nation along with copies of the Cultural Resources Section of EIR 421 prepared for the Pacific Business Park Project, and the Paleontology and Archaeology report prepared as part of EIR 421. Mitigation Measures (**MM TCR-1**, **MM TCR-2**, and **MM TCR-3** described further below) have been included in this environmental document to minimize potential impacts related to the discovery of unanticipated tribal cultural resources, human remains, and associated funerary or ceremonial objects.

An archaeological pedestrian field survey of the project site was conducted on May 13, 2021, as part of the *Cultural Resources Assessment* completed for the proposed project. No cultural resources, including tribal cultural resources, were discovered within the project site during the field survey. Furthermore, the project site has been subject to over excavation and compaction that has disturbed sediments beyond depths at which buried cultural resources are likely. Therefore, encountering unknown buried cultural resources, including tribal cultural resources, during project construction is unlikely. However, in the unlikely event that unanticipated tribal cultural resources are discovered during construction of the proposed project, **MM TCR-2** would be implemented, which requires construction activities to be halted in the vicinity of the find until the find can be assessed for significance by the Kizh monitor and/or Kizh archaeologist. With implementation of **MM TCR-2**, potential impacts to previously unanticipated tribal cultural resources would be less than significant.

No human remains are documented/known to be on the project site. Furthermore, the project site has been previously disturbed including over excavation and compaction during development of the existing building. Therefore, the likelihood of discovering unknown human remains during construction of the proposed project is extremely low. However, in the unlikely event that human remains or funerary/ceremonial objects are discovered during construction of the proposed project and are of Native American origin, the Construction Contractor would be required to implement **MM TCR-3**, which requires compliance with PRC 5097 and the State's Health and Safety Code Section 7050.5 for the treatment of human remains or funerary/ceremonial objects. If human remains are Native American in origin, the remains may be considered a tribal cultural resource.

At the completion of project construction, the proposed project would not result in further disturbance of native soils on the project site and, therefore, project operations would have no potential to impact previously undiscovered tribal cultural resources or human remains.

With implementation of **MM TCR-1**, **MM TCR-2**, and **MM TCR-3,** the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource defined as 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 that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Impacts would be less than significant with mitigation incorporated.

4.18.7 Cumulative Impacts

As defined in Section 15355 of the *State CEQA Guidelines*, cumulative impacts refer to the incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The cumulative study area for cultural resources is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have no impact on historical resources as defined in Public Resources Code Section 5020.1(k). Because the proposed project would have no impact on historical resources, it would not contribute to a cumulatively considerable impact on historical resources. Therefore, there would be no cumulatively significant impact on historical resources, and no mitigation is required.

As detailed in this section, there are no tribal cultural resources, including archaeological resources or human remains, known to occur on the project site. In the unlikely event that unanticipated cultural resources or human remains are discovered during construction of the proposed project, with implementation of **MM TCR-1**, **MM TCR-2**, and **MM TCR-3**, potential impacts related to previously undiscovered tribal cultural resources would be less than significant. Additionally, all discretionary private development and public works projects within the cumulative study area would be required to comply with CEQA and implement applicable regulatory compliance and mitigation measures. In this way, potential impacts on tribal cultural resources would be evaluated and mitigated by each individual private development or public works project. If there were any potential for significant impacts to tribal cultural resources, an investigation would be required to determine the nature and extent of the resources and identify appropriate mitigation measures for each project. When resources are assessed and/or protected as they are discovered, impacts to these resources would be reduced to less than significant. In addition, future development projects would be required to consult with the appropriate tribes and identify proper mitigation to address any potentially significant impacts to tribal cultural resources in the area.

Since all projects within the cumulative study area would be required to implement appropriate regulatory compliance measures and mitigation measures to avoid or mitigate impacts to tribal resources, implementation of the proposed project, when evaluated in combination with the development of projects listed in Table 4.A, would not contribute to a cumulatively considerable impact on tribal cultural resources. Cumulative impacts to tribal cultural resources would be less than significant, and no mitigation is required.

4.18.8 Level of Significance Prior to Mitigation

No impacts to historical resources would occur. Impacts to unanticipated tribal cultural resources would be potentially significant prior to mitigation.

4.18.9 Regulatory Compliance Measures and Mitigation Measures

4.18.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to tribal cultural resources.

4.18.9.2 Mitigation Measures

The following mitigation measures are required to reduce potentially significant impacts related to the discovery of unanticipated tribal cultural resources to a less than significant level:

TCR-1 **Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities**.

A. 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 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. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor 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 later of the following (1) written confirmation to the Kizh 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) prior to approval of final building permit, a determination and written notification by the Kizh 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 Kizh TCRs.

TCR-2 **Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funeral/Non-Ceremonial)**.

A. Upon discovery of any TCRs, 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 Kizh monitor and/or Kizh archaeologist. 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.

TCR-3 **Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects**.

A. Native American human remains are defined in Public Resources Code (PRC) 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC Section 5097.98, are also to be treated according to this statute.

B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then PRC 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.

C. Human remains and grave/burial goods shall be treated alike per California PRC Section 5097.98(d)(1) and (2).

D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.

E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

4.18.10 Level of Significance after Mitigation

Potentially significant impacts would be reduced to a less than significant level after mitigation. Therefore, with implementation of **MM TCR-1**, **MM TCR-2**, and **MM TCR-3**, the proposed project would not result in any significant impacts related to tribal cultural resources.

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4.19 UTILITIES AND SERVICE SYSTEMS

This section evaluates the potential impacts to utilities and service systems from implementation of the proposed project. This section is based in part on the following:

- *Air Quality, Greenhouse Gas, and Energy Impact Report* (Air Quality/GHG/Energy Analysis) (LSA 2025a) (provided in Appendix C);
- *Preliminary Water Quality Management Plan* (Kier & Wright 2024b) (provided in Appendix G);
- *Preliminary Hydrologic & Hydraulic Drainage Report* (Kier & Wright 2023a) (provided in Appendix G);
- *City of Lake Forest General Plan Update Existing Conditions Report* (City of Lake Forest 2018); and
- *City of Lake Forest Public Draft Environmental Impact Report for the 2040 Lake Forest General Plan*, SCH# 2019090102 (City of Lake Forest 2019).

This section addresses the following utilities (service providers are noted in parentheses):

- Electricity (Southern California Edison [SCE])
- Solid Waste (Frank R. Bowerman Landfill and Orange County Waste & Recycling [OCWR])
- Wastewater and Potable Domestic Water (Irvine Ranch Water District [IRWD])
- Fire Flow (Orange County Fire Authority [OCFA])
- Stormwater Drainage (Orange County Flood Control District [OCFCD]) and City of Lake Forest)
- Telecommunications (AT&T, Cox Communications, Frontier Communications, HughesNet, Lake Forest DirectTV, and Planet Dish)

4.19.1 Scoping Process

The Notice of Preparation (NOP) for the proposed project was published in March 2024, and public Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft EIR. No comments related to utilities and service systems were received during the public scoping period.

4.19.2 Methodology

The impact analysis presented in this utilities and service system section evaluates potential physical impacts of the proposed project on utilities and service systems and considers whether the proposed project would result in the need for additional infrastructure and supplies based on data and adopted

planning documents obtained through service provider websites, the City of Lake Forest General Plan, and the City of Lake Forest 2040 General Plan Environmental Impact Report.

4.19.3 Existing Environmental Setting

4.19.3.1 Wastewater

Wastewater from the project site is treated by the Irvine Ranch Water District (IRWD). The IRWD is a multiservice agency responsible for providing domestic water service, sewage collection and treatment, water recycling, and urban runoff treatment in Central Orange County, California. The IRWD provides sewer treatment to more than 390,000 residential customers per year in the cities of Irvine, Tustin, Lake Forest, Newport Beach, and Costa Mesa in addition to unincorporated areas of Orange County. Wastewater is removed via the sanitary sewer system, which consists of approximately 1,100 miles of sewer lines ranging in size from 4 inches to 60 inches in diameter, 102,000 sewer connections, and 12 miles of force mains across IRWD's 181-square-mile service area.[1]

The IRWD operates two treatment plants and two ocean outfalls, in addition to multiple programs to meet the needs of its member agencies and the requirements of the Clean Water Act (CWA) and applicable National Pollutant Discharge Elimination System (NPDES) permits. Collected wastewater is pumped to one of two treatment plants owned and operated by the IRWD: the Michelson Water Recycling Plant (MWRP) or the Los Alisos Water Recycling Plant.

The MWRP is located approximately 9.5 miles west of the project site and provides treatment of wastewater generated by the project site. The MWRP Phase 2 expansion project, which was completed in 2014, increased the capacity of the MWRP by 7 million gallons per day (mgd) and MWRP currently has a production capacity of 28 mgd.[2] About 25 percent of the IRWD's current water supply is recycled water, which provides landscape irrigation for 80 percent of the IRWD's business and community customers including parks, school grounds, and golf courses. The MWRP Phase 2 Expansion allows the IRWD to continue providing water to meet the community's needs while decreasing the IRWD's dependence on imported potable water. Based on flow-monitoring information, approximately 20.3 mgd are currently being conveyed to the MWRP for treatment.[3] Therefore, the MWRP is currently operating at approximately 72.5 percent of its daily design capacity.

4.19.3.2 Water

The project site receives domestic and recycled water service from the IRWD. IRWD is one of the largest water districts in Orange County, serving approximately 132 square miles, including the entire City of Irvine and portions of Tustin, Santa Ana, Costa Mesa, Newport Beach, and Lake Forest. IRWD's potable water infrastructure inside the borders of the City consists of nearly 250 miles of potable

1 Irvine Ranch Water District (IRWD). 2018a. *IRWD Sewer System Management Plan*. June.

2 Irvine Ranch Water District (IRWD). n.d. Michelson Water Recycling Plant (MWRP). Website: https://www.irwd.com/construction/michelson-water-recycling-plant (accessed February 24, 2025).

3 Irvine Ranch Water District (IRWD). 2018b. *IRWD Sewer System Management Plan 2018 Appendices*. Website: https://www.irwd.com/images/pdf/water-sewer/irwd_sewer_system_management_plan appendices.pd (accessed June 11, 2024).

water lines. Due to the major elevation changes within the district, IRWD uses 15 pressure zones to deliver water to customers (City of Lake Forest 2019).

IRWD's water supplies include groundwater, imported water from the Metropolitan Water District of Southern California (Metropolitan) purchased through the Municipal Water District of Orange County (MWDOC), recycled water, and local surface water. Approximately 56 percent of IRWD's water supplies come from local groundwater wells in the Orange County Groundwater Basin, and local groundwater makes up approximately 80 percent of IRWD's supplies. Imported water makes up less than 20 percent (Delta, Bay-Delta) in Northern California through the State Water Project (SWP), and from the Colorado River through the Colorado River Aqueduct (CRA). IRWD meets approximately 25 percent of the service area's water demands with recycled water.[4]

The IRWD's total water demand in 2020 was 87,683 acre feet per year (afy). IRWD projections assume a reasonably available water volume of 178,727 afy in 2025 through 2040, which represents a surplus of 91,044 afy based on water demands in 2020. IRWD's supplies remain relatively unchanged between normal, single-dry, and five-year drought scenarios. The total water supplies available to IRWD are anticipated to meet the projected water demands of existing and planned uses through 2040 under a single dry-year condition and over five years of consecutive drought, as well as in normal-year conditions.[5]

4.19.3.3 Fire Flow

The Orange County Fire Authority (OCFA) is responsible for fire suppression within the City and ensures proper fire water supply and rate. The OCFA relies on the area's infrastructure, including the adequacy of nearby water supplies to suppress fire. Thus, the City has adopted the 2022 California Fire Code (CFC) (Section 8.24.010 of the City of Lake Forest's Municipal Code) with amendments (Section 8.24.020 of the City of Lake Forest's Municipal Code) that list the minimum required fire flow and flow durations. Fire flow is the flow rate of water supply (measured in gallons per minute [gpm]) available for firefighting measured at 20 pounds per square inch (psi) of pressure. Available fire flow is the total water flow available at the fire hydrants, also measured in gpm.

4.19.3.4 Storm Drains

The City owns and operates the stormwater control systems in Lake Forest, which were previously owned and operated by the OCFCD.

Existing conditions on the project site include 1.6 acres (19 percent) of pervious surface area and 6.8 acres (81 percent) of impervious surface area[6]. Under existing conditions, stormwater runoff drains to various curb inlets throughout the existing surface parking lot where it is then routed out to the public storm drain system, which outfalls to Serrano Creek southwest of the project site at the end of Prism Place. Serrano Creek flows into San Diego Creek Reach 2, which flows into San Diego

[4] Irvine Ranch Water District (IRWD). 2021. *2020 Urban Water Management Plan.* June.

[5] Ibid.

[6] Street easements within the 8.83-acre project site have been excluded from the project's drainage area. Therefore, for the purposes of the Water Quality analysis within this EIR, the project's drainage area totals 8.4 acres.

Creek Reach 1, which flows into Newport Bay, which discharges into the Pacific Ocean (Kier & Wright 2023a).

4.19.3.5 Solid Waste

OCWR owns and operates three landfills in Orange County that accept municipal solid waste: (1) Frank R. Bowerman Landfill in Irvine, which accepts commercial waste only; (2) Olinda Alpha Landfill in Brea, which accepts both public and commercial waste; and (3) Prima Deshecha Landfill in San Juan Capistrano, which also accepts both public and commercial waste. All three landfills are Class III and only accept non-hazardous municipal solid waste.

Regular trash pickup is provided by the City of Lake Forest through a contract with CR&R, Inc. CR&R provides and manages non-hazardous waste collection facilities at several locations throughout Orange County and collects solid waste, green waste (i.e., grass, tree, and shrub clippings), and items for recycling. The company provides three different carts for automated collection of waste, recyclables, and green waste.

The Frank R. Bowerman Landfill is the closest OCWR landfill to the project site, located approximately 3 miles northwest of the project site, and would be expected to provide solid waste disposal for the construction and operation of the proposed project. The Frank R. Bowerman Landfill is permitted to receive a daily maximum of 11,500 tons per day (tpd) and receives an average of approximately 8,500 tpd. The landfill has enough projected capacity to serve residents and businesses until approximately 2053.[7] The closest household hazardous waste collection center to the project site is in Irvine, approximately 5 miles west of the project site.

4.19.3.6 Electricity

According to the most recent data available, in 2023, California's electricity was generated primarily by natural gas (36.56 percent), solar (17.03 percent), wind (11.17 percent), large hydroelectric (11.70 percent), and nuclear (9.34 percent). Total electric generation in California in 2023 was 281,140 gigawatt-hours (GWh), which is down 2.2 percent from the 2022 total generation of 287,220.[8]

The project site is within the service territory of SCE, which provides services through a grid of transmission lines and related facilities. SCE provides electricity to more than 15 million people in a 50,000-square-mile area of Central, Coastal, and Southern California. According to the CEC, total electricity consumption in the SCE service area in 2022 was 85,870 GWh (31,604 GWh for the residential sector and 54,266 GWh for the non-residential sector). Total electricity consumption in Orange County in 2022 was 20,243.7 GWh (20,243,721,856 kilowatt-hours [kWh]).[9]

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7 OC Waste & Recycling (OCWR). n.d. Frank R. Bowerman Landfill. Website: https://oclandfills.com/landfills/active-landfills/frank-r-bowerman-landfill (accessed June 12, 2024).

8 California Energy Commission (CEC). 20245a 2023 Total System Electric Generation. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2023-total-system-electric-generation (accessed February 24, 2025).

9 CEC. 2025b. Electricity Consumption by Entity. Website: http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed February 24, 2025).

4.19.3.7 Natural Gas

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[10]

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000 sq mi service area throughout Central and Southern California, from Visalia to the Mexican border.[11] According to the CEC, total natural gas consumption in the SoCalGas service area in 2022 was 5.03 billion therms (944 million therms for the commercial sector and 1.6 billon therms for the industry sector). Total natural gas consumption in Orange County in 2022 was 572.4 million therms (572,454,744 therms).[12]

4.19.3.8 Telecommunications Facilitates

Telephone, television, and internet services are offered by a variety of providers in Lake Forest, including AT&T, Cox Communications, Frontier Communications, HughesNet, Lake Forest DirectTV, and Planet Dish. Cox Communications is currently the only non-satellite TV service provider in Lake Forest. Satellite internet providers include ViaSat, Hughesnet, and Starlink. These services are privately operated and offered to each location in Lake Forest for a fee defined by the provider. The project site is served by existing telephone, cable, and internet services along Enterprise Way.

4.19.4 Regulatory Setting

Federal, State, and local regulations and programs related to utilities and service systems that are applicable to the proposed project are described below.

4.19.4.1 Federal Regulations

Clean Water Act. In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Known today as the Clean Water Act (CWA), Congress has amended this act several times. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit program. Important CWA sections are:

10 CEC. 2021c. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed February 2025).

11 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: https://www3.socalgas.com/about-us/company-profile (accessed February 2025).

12 CEC. 2020b. Gas Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx and http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed February 2025).

- Sections 303 and 304 require states to promulgate water quality standards, criteria, and guidelines and have those standards approved by the United States Environmental Protection Agency (USEPA).

  Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality criteria necessary to support those uses. Water quality criteria are set concentrations or levels of constituents (e.g., lead, suspended sediment, and fecal coliform bacteria) or narrative statements that represent the quality of water that support a particular use. Because California had not established a complete list of acceptable water quality criteria for toxic pollutants, the USEPA Region IX established numeric water quality criteria for toxic constituents in the form of the California Toxics Rule (CTR).

  When designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the CWA requires identifying and listing that water body as impaired. Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, nonpoint, and natural sources that a water body may receive without exceeding applicable water quality standards (often with a "factor of safety" included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body.

  The State Water Resources Board (SWRCB), in compliance with Section 303(d) of the CWA, prepared the 2020/2022 proposed list of impaired water bodies in California. The SWRCB approved the 2020/2022 California Integrated Report (CWA Section 303(d) List/305(b) Report on May 11, 2022. The 303(d) list includes a priority schedule for the development of TMDL implementation for each contaminant impacting the water body. The current list of impairments for the project site receiving waters are provided in Section 4.10.3.3 of Section 4.10, Hydrology and Water Quality.

- Section 401 Certification requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the act. (This is most frequently required in tandem with a Section 404 permit request and is discussed further below.)

- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the United States. The USEPA delegated the implementation and administration of the NPDES program to the California State Water Resources Control Board (SWRCB). The SWRCB established nine Regional Water Quality Control Boards (RWQCBs). The SWRCB enacts and enforces the federal NPDES program and all water quality programs and regulations that cross regional boundaries. The nine RWQCBs enact, administer, and enforce all programs, including NPDES permitting, within their jurisdictional boundaries. Section 402(p) requires permits for discharges of stormwater from industrial, construction, and Municipal Separate Storm Sewer Systems (MS4s). To comply with the MS4 permits, storm water pollution controls must be implemented for construction and operational

activities that discharge either directly to surface waters or indirectly through separate municipal storm drains. Pollution control is achieved by establishing engineering measures that have been designed, tested, and successfully implemented throughout the past decades, such as detention basins and sediment traps, during both the construction period and the operational phases of a project.

Direct discharges of pollutants into waters of the United States are not allowed except in accordance with the NPDES program established in Section 402 of the CWA.

- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the United States Army Corps of Engineers (USACE).

  Pursuant to Section 404 of the CWA, the USACE regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in the USACE regulations). The USACE typically regulates as non-wetland waters of the United States any body of water displaying an ordinary high water mark (OHWM). To be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. A project-specific discussion regarding Section 404 issues is provided in Section 4.4, Biological Resources, in this Draft EIR.

Safe Drinking Water Act. The Safe Drinking Water Act (SDWA) (42 USC Section 300f et seq.) is intended to protect public health by regulating the nation's public drinking water supply. The Federal SDWA authorizes the USEPA to set national standards for drinking water to protect against both naturally occurring and man-made contaminants. The USEPA was required to establish primary regulations for the control of contaminants that affected public health and secondary regulations for compounds that affect the taste, odor, and aesthetics of drinking water. Under the provisions of the SDWA, the California Department of Health Services (DHS) has the primary enforcement responsibility. Title 22 of the California Administrative Code establishes DHS authority, and stipulates State drinking water quality and monitoring standards.

4.19.4.2 State Regulations

California Integrated Waste Management Act of 1989. The California Integrated Waste Management Act of 1989 (Public Resources Code [PRC] Division 30), enacted through AB 939 and modified by subsequent legislation, required all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by 2000 (PRC §41780). The State determines compliance with this mandate to "divert" 50 percent of generated waste (which includes both disposed and diverted waste) through a complex formula. This formula requires cities and counties to

conduct empirical studies to establish a "base year" waste generation rate against which future diversion is measured. The actual determination of the diversion rate in subsequent years is arrived at through deduction, not direct measurement: instead of counting the amount of material recycled and composted, the city or county tracks the amount of material disposed at landfills, then subtracts the disposed amount from the base year amount. The difference is assumed to be diverted (PRC §41780.2).

Senate Bill 1016. As previously identified, the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) requires each jurisdiction to divert 50 percent of its solid waste from being disposed of in landfills. The new per capita disposal measurement system (Senate Bill [SB] 1016, Wiggins, Chapter 343, Statutes of 2008) became effective January 1, 2009. It builds on AB 939 compliance requirements by implementing a simplified measure of local jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator: the per capita disposal rate, which uses only two factors: a jurisdiction's population and its disposal as reported by disposal facilities. SB 1016 changes how each jurisdiction's progress is measured to reach the 50 percent goal for diverting waste from landfills. This measurement is no longer determinative of compliance. For the California Integrated Waste Management Board (CIWMB) and jurisdictions to more properly focus on successful program implementation, SB 1016 shifts from the historical emphasis on using calculated generation and estimated diversion to using annual disposal as a factor when evaluating jurisdictions' program implementation.

Solid Waste Reuse and Recycling Access Act. The Solid Waste Reuse and Recycling Access Act requires areas in development projects to be set aside for collecting and loading recyclable materials. The act required California Department of Resources Recycling and Recovery (CalRecycle) to develop a model ordinance for adoption by any local agency relating to adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own to govern adequate areas in development projects for collection and loading of recyclable materials.

California Green Building Standards Code. The California Green Building Standards Code (CALGreen Code) became effective for all projects beginning after January 1, 2011. Section 4.408, Construction Waste Reduction Disposal and Recycling, of the CALGreen Code mandates that in the absence of a more stringent local ordinance, a minimum of 50 percent of non-hazardous construction and demolition debris must be recycled or salvaged.

California Code of Regulations Titles 14 and 27. These parts of the California Code of Regulations require energy-efficient practices as part of solid and hazardous waste handling and disposal.

Senate Bill 1374. SB 1374 requires that the annual report submitted to the California Department of Resources Recycling and Recovery (CalRecycle) include a summary of the progress made in diversion of construction and demolition waste materials. In addition, SB 1374 required that CalRecycle adopt a model ordinance suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition waste materials from landfills by March 1, 2004. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CalRecycle's model by default. However, adoption of such an ordinance may be considered by

CalRecycle when determining whether to impose a fine on a jurisdiction that has failed to implement its Source Reduction and Recycling Element (SRRE).

Assembly Bill 1327, California Solid Waste Reuse and Recycling Access Act of 1991. Signed into law in 1991, AB 1327 added Chapter 18 to Part 3 of Division 30 of the PRC. Chapter 18 required the California Integrated Waste Management Board (CIWMB) to develop a model ordinance for adoption of recyclable materials in development projects. Local agencies were then required to adopt the model, or ordinances of their own, in order to govern adequate areas for collection and loading of recyclable materials in development projects by September 1, 1993. If a local agency had not adopted a model ordinance by that date, the CIWMB model would be adopted and enforced by the local agency.

Assembly Bill 75. AB 75, passed in 1999, took effect on January 1, 2000. This bill adds new provisions to the PRC, mandating that State agencies develop and implement an Integrated Waste Management Plan (IWMP); it also mandates that community service districts providing solid-waste services report disposal and diversion information to the city, county, or regional agency in which the community service district is located.

Assembly Bill 341. AB 341, enacted in 2011 and begun in 2012, changes the due date of the State agency waste management annual report to May. The bill makes a legislative declaration that it is the policy goal of the State of California that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020.

Urban Water Management Planning Act. The Urban Water Management Planning Act (UWMP Act) (California Water Code [CWC], Division 6, Part 2.6, §10610 et seq.) was enacted in 1983. The UWMP Act applies to municipal water suppliers (e.g., the IRWD) because it provides water service directly to more than 3,000 connections. The UWMP Act requires these suppliers to update their UWMP every 5 years to demonstrate an appropriate level of reliability in supplying anticipated short-term and long-term water demands during normal, dry, and multiple dry years.

Senate Bill 901: Water Supply and Demand Reliability Assessment (California Water Code Section 10910). SB 901, which was signed into law on October 16, 1995, requires every urban water supplier to identify as part of its UWMP the existing and planned sources of water available to the supplier over a prescribed five-year period. SB 901 requires additional information to be included as part of an urban water management plan if groundwater is identified as a source of water available to the supplier. Provisions of SB 901 would require an urban water supplier to include in the plan a description of all water supply projects and programs that may be undertaken to meet total project water use. As part of this assessment, the public water system is required to indicate whether its total projected water supplies available during normal, single-dry, and multiple-dry water years will meet the project demand associated with the proposed project, in addition to the public water system's existing and planned uses.

California Water Conservation in Landscaping Act, Government Code §65591 et seq. Pursuant to the Water Conservation in Landscaping Act of 2006 (Government Code 65591 et seq.), cities and counties in California are required to adopt a water efficient landscape ordinance. Local ordinances are

intended to reduce water use for landscaping and irrigation purposes and encourage the use of recycled and reclaimed water for these purposes. The California Department of Water Resources maintains a Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations [CCR] 490 23 et seq.) after which local jurisdictions can model their ordinances.

California Water Recycling in Landscaping Act, Government Code §65601 et seq. The California Water Recycling in Landscaping Act promotes the efficient use of water through the development of water recycling facilities. This act stipulates that landscape design, installation, and maintenance should be water efficient, and the use of potable domestic water for landscaped areas is considered a waste or unreasonable use of water if recycled water is available that meets the conditions described in Section 13550 of the CWC.

Title 24 of the California Code of Regulations. Energy and water consumption by new buildings in California is regulated by the California Green Building Standard Standards Code, embodied in California Code of Regulations (CCR) Title 24. Title 24 provides efficiency standards for new construction and the rehabilitation of both residential and nonresidential buildings, including building energy consumption, water conservation, and operational efficiencies. Title 24 regulates building energy consumption for heating, cooling, ventilation, water heating, and lighting with regard to both electricity and natural gas, while also regulating water consumption through the installation of efficient plumbing fixtures. The efficiency standards apply to both new construction and rehabilitation of both residential and nonresidential buildings. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed Title 24 Building Code requirements. The 2022 Standards went into effect January 1, 2023, following approval by the California Building Standards Commission.

4.19.4.3 Regional Regulations

Metropolitan Water District 2020 Regional Urban Water Management Plan. The MWD's 2020 Regional UWMP lists and describes the various uses, demand, supplies, target reductions, and compliance measures for 26 member agencies. These include 14 cities, 11 municipal water districts, and one county water authority serving approximately 19 million people in Southern California. The 2020 Regional UWMP found that under the current supply demands for a multiple-dry-year scenario (i.e., drought conditions), the MWD would have sufficient supply to meet the projected growing demand for water from 2025 to 2045. The MWD is currently working to develop programs to increase its water supply and create a large surplus during multiple-dry-year scenarios to ensure that water demands will still be addressed during emergency drought situations.

4.19.4.4 Local Regulations

City of Lake Forest Municipal Code. The following City of Lake Forest Municipal Code section is relevant to utilities and service systems:

> **Section 8.02.001, Adoption of the California Building Code:** This section adopts and incorporates by reference the California Building Code (CBC), 2022 Edition (which includes the California Green Building Standards [CALGreen] Code).

City of Lake Forest General Plan 2040. The Public Facilities Element of the Lake Forest General Plan 2040 includes the following goals, policies, and actions relevant to utilities and service systems:

Goal PF-2 Growth Management: A community that has planned for orderly, and efficient growth by preparing for the increased need for public services and facilities to serve existing and future users.

Goal PF-5 Storm Drain System: A community with an efficient, attractive, and environmentally sound storm drain.

Policy PF-5.3 Stormwater Runoff: Encourage that stormwater be directed towards permeable surfaces to allow for more percolation of stormwater into the ground.

Policy PF-5.4 Stormwater Capture: Encourage the use of professionally designed stormwater capture methods to aid in the reuse of rain water for non-potable uses in compliance with applicable State regulations.

Policy PF-5.6 Stormwater Treatments: Promote Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site. The facilities shall be sized to meet regulatory requirements.

Action PF-5b: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

Action PF-5c: Promote the use of LID strategies in new development and redevelopment projects, including but not limited to the use of canopy trees and shrubs, vegetated swales, and permeable paving.

Action PF-5d: Require new development to mitigate increases in stormwater peak flows and/or volume. Mitigation measures, such as LID strategies, should take into consideration impacts on adjoining lands in the City.

Goal PF-6 Energy Management: A community with adequate power, provided through economically and environmentally sustainable means.

Policy PF-6.2 New Development: Continue to require new development and redevelopment to provide verification from energy utilities that states they are able to accommodate the additional demand for service.

Policy PF-6.5 Conservation: Promote conservation strategies during design, construction, and maintenance of facilities.

4.19.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to utilities and service systems impacts if it would:

Threshold 4.19.1: 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;

Threshold 4.19.2: Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;

Threshold 4.19.3: Not 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;

Threshold 4.19.4: 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; or

Threshold 4.19.5: Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

4.19.6 Project Impacts

Threshold 4.19.1: 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.

Less Than Significant Impact. The IRWD provides domestic and recycled water service to the project site through an existing 12-inch-diameter domestic water main in Enterprise Way. The proposed project would connect to the existing water main in Enterprise Way and would utilize existing 6-inch and 8-inch water lines on the project site. All connections to the existing water lines would be reviewed and approved by the City's Public Works Department and IRWD, as applicable.

Because the proposed project would redevelop an existing vacant site, it would increase the demand for water compared to existing conditions. A discussion of water use during construction and operation of the proposed project is provided below.

Construction. Short-term demand for water may occur during demolition, excavation, grading, and construction activities on site. Water demand for soil watering (fugitive dust

control), cleanup, masonry, painting, and other activities would be temporary and would cease once construction is complete. Overall, short-term demolition and construction activities would require minimal water and are not expected to have any adverse impacts on the existing water system or available water supplies. Therefore, impacts associated with short-term demolition and construction activities would not require or result in the construction of new water treatment facilities or the expansion of existing facilities, and construction of the proposed project would not require the need for new or expanded water entitlements. Construction impacts associated with new or expanded water facilities would be less than significant, and no mitigation is required.

Operation. The proposed project would connect to the existing water main in Enterprise Way and would utilize existing 6-inch and 8-inch water lines on the project site. Any water line improvements would be funded and constructed by the developer, built to IRWD standards, and offered for dedication to IRWD. The existing building is currently vacant and unused; therefore, the proposed project would increase water demand at the project site compared to existing conditions. According to water demand factors included in the California Emissions Estimator Model (CalEEMod) emissions model, the proposed project is estimated to demand approximately 107,410 gallons per day (gpd) or 120 afy of water. As required of all new development in California, the proposed project would comply with State law regarding water conservation measures, including pertinent provisions of Title 24 of the CCR regarding the use of water-efficient appliances, which are adopted in the City of Lake Forest's Municipal Code Section 8.02.001 by reference.

The IRWD's total water demand in 2020 was 87,683 afy. IRWD projections assume a reasonably available water volume of 178,727 afy in 2025 through 2040, which represents a surplus of 91,044 afy based on water demands in 2020. IRWD's supplies remain relatively unchanged between normal, single-dry, and five-year drought scenarios. The total water supplies available to IRWD are anticipated to meet the projected water demands of existing and planned uses through 2040 under a single dry-year condition and over five years of consecutive drought, as well as in normal year conditions.[13] Therefore, because the potable water demand associated with the proposed project would only represent less than one percent of the surplus water supply in the IRWD's service area in 2025 through 2040 under the worst-case scenario,[14] the proposed project would not necessitate new or expanded water facilities, and the IRWD would be able to accommodate the increased demand for potable water.

Therefore, given that the proposed project would comply with the IRWD's standard requirements for facility planning and that adequate water distribution facilities would exist to serve the proposed project, the proposed project would not require the relocation or construction of new or expanded facilities, and no mitigation is required.

13 Irvine Ranch Water District (IRWD). 2021. *2020 Urban Water Management Plan.* June.

14 120 afy / 91,044 afy = 0.0013 x 100 = 0.13 percent

Wastewater.

Less Than Significant Impact. Wastewater collection for the proposed project would be provided by the IRWD, and treatment of wastewater generated by the proposed project would be provided by IRWD's Michelson Water Recycling Plant (MWRP), which is located approximately 9.5 miles west of the project site. The proposed project would reuse an existing on-site sewer service lateral connecting to the sewer main in Enterprise Way.

Construction. No significant increase in wastewater flows is anticipated as a result of construction activities on the project site. Sanitary services during construction would be provided by portable toilet facilities, which use vehicles to transport waste off-site for treatment and disposal. Therefore, during construction, potential impacts to wastewater treatment and wastewater conveyance infrastructure would be less than significant, and no mitigation is required.

Operation. The proposed project would reuse an existing on-site sewer service lateral that connects to the 8-inch diameter vitrified clay pipe (VCP) sewer main in Enterprise Way. All connections to the existing wastewater lines would be reviewed and approved by the City's Public Works Department and IRWD, as applicable. Additionally, as detailed below under Threshold 4.19.3, the IRWD's MWRP has sufficient capacity to serve the proposed project in addition to its existing commitments. Therefore, the proposed project would not require, nor would it result in, the construction of new wastewater treatment or collection facilities or the expansion of existing facilities other than those facilities to be constructed on site. Therefore, impacts related to the construction of wastewater treatment or collection facilities are less than significant, and no mitigation is required.

Storm Water Drainage.

Less Than Significant Impact. The capacity of the downstream storm drain network depends on peak discharge rates entering the system. In the existing condition, stormwater runoff drains to various curb inlets throughout the existing surface parking lot where it is then routed out to the public storm drain system which outfalls to Serrano Creek southwest of the project site at the end of Prism Place.

Existing conditions on the project site include 1.6 acres (19 percent) of pervious surface area and 6.8 acres (81 percent) of impervious surface area.[15] The proposed project would decrease the pervious surface area to 0.9 acre (11 percent) and increase impervious surface area to 7.5 acres (89 percent). An increase in impervious area would increase the volume of stormwater runoff during a storm. As discussed in Section 4.10, Hydrology and Water Quality, the proposed project would include three modular wetland systems and three underground detention chambers to reduce site discharge during the 100-year, 24-hour peak runoff rate by 40 percent. The proposed drainage facilities would be designed in compliance with the North Orange County MS4 Permit as

[15] Street easements within the 8.83-acre project site have been excluded from the project's drainage area. Therefore, for the purposes of the Water Quality analysis within this EIR, the project's drainage area totals 8.4 acres.

detailed in **Regulatory Compliance Measures** (**RCM) WQ-3** and **RCM WQ-4**, provided in Section 4.10, Hydrology and Water Quality. Therefore, peak discharge would not adversely affect the capacity of downstream networks, and construction or expansion of stormwater drainage facilities would not be required. Therefore, impacts to stormwater drainage facilities would be less than significant, and no mitigation is required.

Electric Power.

Less Than Significant Impact. The proposed project includes a new on-site electrical system that would connect to the existing SCE lines surrounding the project site. A new transformer is proposed on the northwest side of the proposed structure next to Enterprise Court.

Construction. Short-term construction activities would be limited to providing power to the staging area and portable construction equipment and would not substantially increase demand for electricity. Heavy equipment used for construction is primarily powered by diesel fuel. Given the demand for electricity during construction would be limited and the availability of existing power lines adjacent to the project site, there would not be a need to construct new or alter existing electric transmission facilities. Impacts to regional electricity supplies would be less than significant, and no mitigation is required.

Operation. According to demand factors included in the CalEEMod emissions model, the proposed project is estimated to demand approximately 865,996.0 kilowatt-hours (kWh) or 0.8 GWh/yr of electricity with the implementation of energy efficiency measures and sustainability features as required by the Title 24 of the California Building Code (CBC). According to the CEC, total electricity consumption in the SCE service area in 2022 was 85,870 GWh (31,604 GWh for the residential sector and 54,266 GWh for the non-residential sector), while total electricity consumption in Orange County in 2022 was 20,243.7 GWh (20,243,721,856 kWh).[16] Therefore, the increased electricity demand associated with the proposed project would be less than 0.01 percent of SCE's total electricity demand and operation of the proposed project would increase the annual electricity consumption in Orange County by less than 0.01 percent.[17] Service providers utilize projected demand forecasts in order to provide an adequate supply or plan for surplus in the service area. As discussed in Section 4.6, Energy, there are sufficient planned electricity supplies in the SCE service area for estimated net increases in energy demands through 2030.

Because the proposed project would only represent a small fraction of electricity demand in SCE's service area, the project would meet Title 24 requirements, and there would be sufficient electricity supplies available, energy demand for the proposed project would be less than significant, and no mitigation is required.

The supply and distribution network within the area surrounding the project site would remain essentially the same as currently exists, with the exception of on-site improvements

16 CEC. 2025b. Electricity Consumption by Entity. Website: http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed February 24, 2025).

17 0.8 GWh per year/85,870 GWh per year = 0.000009 x 100 = 0.0009 percent

to reconfigure existing infrastructure to serve the proposed project. The proposed project would not increase electrical demand beyond existing projections from the local electricity provider, and the project site is within a developed service area with existing demand. Therefore, the proposed project would not require the construction of any physical improvements related to the provision of electricity service that would result in significant environmental impacts, and the proposed project's impacts would be less than significant, and no mitigation is required.

Natural Gas.

No Impact. The proposed project would not include the use of natural gas during construction or operation. Therefore, there would be no impacts associated with the relocation or construction of new or expanded natural gas facilities and no mitigation is required.

Telecommunications Facilities.

Less Than Significant Impact. Existing telephone, cable, and internet services existing along Enterprise Way would serve the proposed project during both construction and operation. The project developer would be responsible for constructing adequate telecommunication facility extensions within the project site. The construction and expansion of these facilities would occur on site during the site preparation and earthwork phases and so the physical impacts of providing telecommunication facilities within the project site have been considered in each of the topical sections in the EIR. Therefore, the proposed impacts associated with the relocation or construction of new or expanded telecommunication facilities and impacts would be less than significant, and no mitigation is required.

Threshold 4.19.2: 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 Impact. As previously discussed, IRWD provides water service to the project site. IRWD's 2020 UWMP determined that the total water supplies available to IRWD are anticipated to meet the projected water demands of existing and planned uses through 2040 under a single dry-year condition and over five years of consecutive drought, as well as in normal year conditions.[18] The IRWD's total water demand in 2020 was 87,683 afy and IRWD projections assume a reasonably available water volume of 178,727 afy in 2025 through 2040, which represents a surplus of 91,044 afy based on water demands in 2020. IRWD's supplies remain relatively unchanged between normal, single-dry, and five-year drought scenarios. The UWMP, which identifies water system improvements necessary to meet future water demand, did not identify any deficiencies in the vicinity of the project site.

The project is consistent with the City's General Plan land use designation for the project site and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. According to water demand factors included in the CalEEMod

[18] Irvine Ranch Water District (IRWD). 2021. *2020 Urban Water Management Plan*. June.

emissions model, the proposed project is estimated to demand approximately 107,410 gpd or 120 afy of water. Therefore, because the potable water demand associated with the proposed project would represent less than one percent of the surplus water supply in the IRWD's service area in 2025 through 2040 under the worst-case scenario,[19] IRWD would have adequate capacity to serve the proposed project. In addition, the proposed project would be required to coordinate with the OCFA to assess fire flow requirements and comply with them as part of the project. Based on the above, IRWD would have sufficient water supply to support the proposed project during normal, dry, and multiple dry years, and implementation of the proposed project would not require new or expanded entitlements for water supplies. Impacts related to water supply would be less than significant, and no mitigation is required.

Threshold 4.19.3: 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 Impact. The proposed project would generate domestic wastewater associated with sinks and toilets to serve the employees at the proposed project. As discussed above, wastewater collection for the proposed project would be provided by the IRWD, and treatment of wastewater generated by the proposed project would be provided by IRWD's MWRP, which is located approximately 9.5 miles west of the project site. The proposed project would connect to an existing on-site sewer service lateral connecting to the sewer main in Enterprise Way.

Planned growth under the City's General Plan would increase the generation, collection, and treatment of wastewater. The proposed project is consistent with the City's General Plan land use designation for the project site and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. According to wastewater generation factors included in the CalEEMod emissions model, the proposed project is anticipated to generate approximately 105,046 gpd or 117.7 afy of wastewater, which represents approximately 0.38 percent of the MWRP treatment capacity of 28 mgd. The MWRP is currently treating an average of 72.5 percent of its maximum capacity on a daily basis; therefore, the MWRP has sufficient capacity to serve the proposed project in addition to its existing commitments. Impacts related to wastewater treatment would be less than significant, and no mitigation is required.

Threshold 4.19.4: 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 Impact. Regular trash pickup is provided by the City of Lake Forest through a contract with CR&R, Inc. CR&R provides and manages hazardous waste collection facilities at several locations throughout Orange County and collects solid waste, green waste (i.e., grass, tree, and shrub

[19] 120 afy / 91,044 afy = 0.0013 x 100 = 0.13 percent

clippings), and items for recycling. The company provides three different receptacles for automated collection of waste, recyclables, and green waste.

The vast majority (90 percent) of landfill disposed from the City of Lake Forest in 2017 (the latest year of information available) went to the Frank R. Bowerman Sanitary Landfill (City of Lake Forest 2018). The Frank R. Bowerman Landfill is permitted to receive a daily maximum of 11,500 tons per day (tpd) and receives an average of approximately 8,500 tpd. The landfill has enough projected capacity to serve residents and businesses until approximately 2053.[20]

Construction activities occurring on the project site would generate solid waste; however, the proposed project would be required to comply with the CALGreen Code, which requires that at least 65 percent of non-hazardous construction and demolition waste from non-residential construction operations be recycled and/or salvaged for reuse (Section 4.408 of the 2022 CALGreen Code), thus reducing the input of solid waste to the receiving landfills. Solid waste generated by construction activities associated with the proposed project would not cause the capacity at the Frank R. Bowerman Landfill to be exceeded.

Based on the CalEEMod outputs, the proposed project is estimated to generate approximately 156 tons per year or 855 pounds of solid waste per day during operation. The increase in solid waste generated by the proposed project would constitute approximately 0.01 percent of the average daily capacity (3,000 tpd) at the Frank R. Bowerman Landfill. Therefore, solid waste generated by the proposed project would not cause the capacity at the Frank R. Bowerman Landfill to be exceeded. As such, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate its solid waste disposal needs. Therefore, the proposed project would not generate solid waste in excess of State or local standards, or otherwise impair the attainment of solid waste reduction goals. Impacts would be less than significant, and no mitigation is required.

Threshold 4.19.5: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. Solid waste disposal practices in California are governed by multiple federal, State, and local agencies that enforce legislation and regulations ensuring that landfill operations minimize impacts to public health and safety and the environment. The project site is located within OCWR's service area. An important part of OCWR's mission is to apply sound environmental practices to ensure compliance with these regulations. Additionally, OCWR has an adopted Countywide Integrated Waste Management Plan (CIWMP) that requires countywide facilities to meet the 15-year capacity requirements. OCWR is also obligated to obtain a Solid Waste Facilities Permit, a Storm Water Discharge Permit, and permits to construct and operate gas management systems and meet Waste Discharge Requirements. The Local Enforcement Agency (LEA), the South Coast Air Quality Management District (SCAQMD), and the RWQCB enforce landfill regulations related

[20] OC Waste & Recycling (OCWR). n.d. Frank R. Bowerman Landfill. Website: https://oclandfills.com/landfills/active-landfills/frank-r-bowerman-landfill (accessed June 12, 2024).

to health, air quality, and water quality, respectively. The proposed project would not inhibit OCWR's compliance with the requirements of each of the governing bodies.

Additionally, the proposed project would participate in citywide recycling programs in accordance with SB 1016 to reduce demands for landfill space. Per the requirements of the CALGreen Code, a minimum of 65 percent of debris would be diverted to a material recycling facility during construction, thus reducing the input of solid waste to the receiving landfills. During project operation, the proposed project would participate in industrial recycling programs for paper, cardboard, and plastics as encouraged by Action RR-6c of the City's General Plan. Compliance with federal, State, and local statutes and regulations related to solid waste, including OCWR's CIWMP and agency permits, AB 341, SB 1016, and the CALGreen Code would ensure that impacts associated with regulations related to solid waste would be less than significant, and no mitigation is required.

4.19.7 Cumulative Impacts

As defined in Section 15355 of the *State CEQA Guidelines*, cumulative impacts refer to the incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The cumulative study area for utilities and service systems is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

Cumulative impacts are addressed only for those thresholds that would result in a project-related impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular threshold, by definition, it would not contribute to a cumulative impact. Therefore, no analysis would be required.

As detailed in this section, the proposed project would have a less than significant impact on utilities and service systems in consideration of compliance with existing laws, ordinances, regulations, and standards. Utilities and service systems within the City are sized based on growth projections provided in the City's General Plan. The majority of the cumulative projects included in Chapter 4.0, Table 4.A are consistent with applicable General Plan land use designations and zoning designations and therefore have been considered in the projections used to determine appropriate sizing for utilities and service systems. Therefore, similar to the proposed project, cumulative projects that are consistent with site zoning and applicable land use designations would be accommodated by existing utilities and service systems and would not require new or expanded services. Additionally, all discretionary private development and public works projects within the cumulative study area would be required to comply with CEQA. In this way, potential impacts on utilities and service systems would be evaluated and mitigated to less than significant by each individual private development or public works project. Since all projects within the cumulative study area would be required to implement appropriate mitigation measures to ensure adequate supply/service capacity and infrastructure for each individual project, the environmental effects of which would be evaluated and mitigated, as necessary, in project specific environmental assessments, implementation of the proposed project, when evaluated in combination with the development of projects listed in Table 4.A, would not contribute to a cumulatively considerable impact on utilities and service systems. Cumulative impacts to utilities and service systems would be less than significant, and no mitigation is required.

4.19.8 Level of Significance Prior to Mitigation

Potential adverse impacts related to stormwater drainage facilities would be significant prior to implementation of regulatory compliance measures. The proposed project would result in less than significant impacts related to utilities and service systems.

4.19.9 Regulatory Compliance Measures and Mitigation Measures

4.19.9.1 Regulatory Compliance Measures

Regulatory Compliance Measures (RCMs) WQ-3 and **RCM WQ-4**, as detailed in Section 4.10, Hydrology and Water Quality, are required to reduce potentially significant impacts related to stormwater drainage facilities to a less than significant level.

4.19.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to utilities and service systems, and no mitigation is required.

4.19.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to utilities and service systems.

4.20 WILDFIRE

This section evaluates the potential impacts to wildfire from implementation of the proposed project. This section is based in part on the following:

- Federal, State, and local policies;
- *City of Lake Forest General Plan Public Facilities Element* (City of Lake Forest 2020);
- *City of Lake Forest General Plan Public Safety Element* (City of Lake Forest 2022);
- *City of Lake Forest 2040 General Plan Existing Conditions Report* (City of Lake Forest, October 2018);
- *Local Hazard Mitigation Plan* (County of Orange and Orange County Fire Authority [OCFA] 2021);
- *Fire Hazard Severity Zone* (FHSZ) maps (California Department of Forestry and Fire Protection [CAL FIRE] 2024);
- Fire and Resource Assessment Program, *California Fire Perimeters 2022* (CAL FIRE 2022);
- Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map No. 06059C0316J. Map Revised December 3, 2009 (FEMA 2009); and
- *Geotechnical Investigation Proposed Warehouse 26200 Enterprise Way, Lake Forest, California for Black Creek Group* (Geotechnical Investigation) (Southern California Geotechnical 2021a).

4.20.1 Scoping Process

The Notice of Preparation (NOP) for the proposed project was published in March 2024 and Scoping Meetings were held on April 3, 2024, and April 24, 2024. The City of Lake Forest (City) received 120 comment letters during the public review period of the NOP. For a copy of the NOP comment letters received, refer to Appendix A of this Draft Environmental Impact Report (EIR). Two comment letters included comments related to wildfire. These comments pertain to concerns about increased fire risk and fire hazards.

4.20.2 Methodology

The potential wildfire-related impacts from project-related activities were evaluated qualitatively based on information provided in documents and maps obtained from the City of Lake Forest General Plan, the OCFA Local Hazard Mitigation Plan, and CAL FIRE.

4.20.3 Existing Environmental Setting

Fire environments are dynamic systems and include many types of environmental factors and site characteristics. Fires can occur in any environment where conditions are conducive to ignition and fire movement. Areas of naturally vegetated open space typically provide conditions that may be

favorable to wildfire spread. The three major components of the fire environment are topography, climate, and vegetation (fuels). The state of each of these components and their interactions with each other determines the potential characteristics and behavior of a fire at any given moment.

A wildfire is a nonstructural fire that occurs in vegetative fuels. Wildfire generally does not include prescribed or controlled fires set by firefighters to manage fuel loads in fire-prone landscapes. Wildfire ignition sources may include: lightning, improperly managed campfires, cigarettes, arson, sparks from automobiles, lawnmowers, and maintenance equipment, and other sources. It is important to note that wildland fire may transition to urban fire if structures are receptive to ignition. Structure ignition depends on a variety of factors and can be prevented through a layered system of protective features including fire-resistive landscapes adjacent to structure(s), application of known ignition-resistive materials and methods, and suitable infrastructure for firefighting purposes. Understanding the existing wildland vegetation and urban fuel conditions on and adjacent to the site is necessary to understand the potential for fire within and around the project site.

The California Department of Forestry and Fire Protection (CAL FIRE) has classified lands within State Responsibility Areas into Fire Hazard Severity Zones (FHSZs). Fire Hazard Severity Zones include the following classifications: Moderate, High, and Very High. FHSZs have been developed using a model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior including fire history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers, terrain, and typical fire weather for the area. As part of this mapping system, lands where CAL FIRE is responsible for wildland fire protection are generally located in unincorporated areas and are classified as State Responsibility Areas (SRAs). Where local fire protection agencies (e.g., OCFA) are responsible for wildfire protection, the lands are classified as Local Responsibility Areas (LRAs). CAL FIRE currently identifies the project site as an LRA (CAL FIRE 2024).

According to the CAL FIRE VHFHSZ and LRA map for the City of Lake Forest, the project site is in a non-VHFHSZ. The nearest VHFHSZs are located approximately 0.6 mile southwest of the project site in the undeveloped area east of the intersection of Bake Parkway and Crescent Bay Drive and 0.8 mile northeast of the project site along Serrano Creek and terminate near the State Route 241 (SR-241) center median (CAL FIRE 2024).

The following sections discuss the characteristics of the project site on a regional scale, as well as the site characteristics, local climate, and fire history within and immediately surrounding the site. The intent of evaluating conditions at this macro-scale is to provide a better understanding of the regional fire environment, which is not constrained by property boundary delineations.

4.20.3.1 Topography

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread up-slope and slower fire spread down-slope in the absence of wind. Flat terrain tends to have little effect on fire spread, resulting in fires that are driven by wind.

Lake Forest consists of a transition zone between an elevated coastal terrace and the Santa Ana Mountains. The western portion of the City, on the coastal terrace, is approximately 200 feet above mean seal level (amsl). The City's elevation is progressively higher and steeper to the east,

eventually reaching elevations above 1,500 feet amsl along the ridgeline of the Santa Ana Mountains (City of Lake Forest 2018).

The project site is relatively flat with site elevations ranging from 710 feet amsl along the eastern property line to 690 feet amsl along the west corner of the site, which amounts to a gentle 3 percent slope downward from east to west. The eastern and southern boundaries of the project site have slopes that ascend 10 to 15 feet from the project site to the adjacent property (Southern California Geotechnical 2021a).

4.20.3.2 Climate

Lake Forest has a Mediterranean climate with moderate, dry summers. The average July high temperature in Lake Forest is 90 degrees Fahrenheit, and the average January low temperature is 44 degrees Fahrenheit. The City receives about 19 inches of rain per year (City of Lake Forest 2018).

Fires can be an issue during the summer and fall, before the rainy period, especially during dry Santa Ana wind events. The seasonal Santa Ana winds can be particularly strong in the vicinity of the project site. Although Santa Ana events can occur at any time of the year, they generally occur during the autumn months, although the last few years have resulted in spring (April–May) and summer events as well. Santa Ana winds may gust up to 75 miles per hour (mph) or higher. This phenomenon markedly increases the wildfire danger and intensity in the project site vicinity by drying out and preheating vegetation (fuel moisture of less than 5 percent for 1-hour fuels is possible) as well as accelerating oxygen supply, and thereby making possible the burning of fuels that otherwise might not burn under cooler, moister conditions.

4.20.3.3 Fuels (Vegetation)

The project site and surrounding areas are primarily developed and disturbed with some landscaped areas that support non-native/ornamental plant species.

4.20.3.4 Fire History

Fire history is an important component in analyzing wildfire susceptibility. Fire history data provide valuable information regarding fire spread, fire frequency, most vulnerable areas, and significant ignition sources, among others. In turn, this understanding of why fires occur in an area and how they typically spread can then be used for pre-planning and designing defensible communities.

Fire history at the project site and surrounding area was determined by referencing the Fire and Resources Assessment Program (FRAP) database. The FRAP summarizes fire perimeter data dating to the late 1800s; the FRAP maps used for this analysis focus on 1950–2023. These data provide a summary of recorded fires and can be used to show whether large fires have occurred in the project site area, which is one indication of the likelihood of fires occurring at the project site in the future. These data suggest that Lake Forest has consistently experienced wildfires from 1970 to 2020, although there have been no recorded fires that have burned onto any portion of the project site. The FRAP map indicates that the project site is within an area historically prone to wildland fires (CAL FIRE 2022).

4.20.4 Regulatory Setting

Federal, State, and local regulations and programs related to wildfire that are applicable to the proposed project are described below.

4.20.4.1 Federal Regulations

National Fire Protection Association (NFPA) Code 1710. Code 1710 of the NFPA provides the minimum requirements for the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by career fire departments.

National Incident Management System (NIMS). The NIMS provides a systematic, proactive approach to guide government agencies, nongovernmental organizations, and the private sector to work together to prevent, report, recover from, and mitigate the effects of fire incidents, regardless of cause, size, location, or complexity, to reduce the loss of life and property harm to the environment. The City participates in NIMS, which improves its ability to prepare for and respond to potential incidents and hazard scenarios.

4.20.4.2 State Regulations

CAL FIRE and Resources Assessment Program. CAL FIRE publishes maps that predict the threat of fire for each county within the State. LRAs, SRAs, and Federal Responsibility Areas (FRAs) are classified as either VHFHSZ or non-VHFHSZ based on factors including fuel availability, topography, fire history, and climate. The 2024 Strategic Fire Plan for California was generated by CAL FIRE to provide guidelines and objectives to account for associated fire impacts.

California Fire Code (CFC). The CFC includes regulations for emergency planning, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations, distribution, and spacing. Several fire safety requirements include installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Strategic Fire Plan. This statewide plan is a strategic document that guides fire policy for much of California. The plan is aimed at reducing wildfire risk through pre-fire mitigation efforts tailored to local areas through assessments of fuels, hazards, and risks.

California State Hazard Mitigation Plan (SHMP). The purpose of the SHMP is to significantly reduce deaths, injuries, and other losses attributed to natural and human-caused hazards in California. The SHMP provides guidance for hazard mitigation activities emphasizing partnerships among local, State, and federal agencies as well as the private sector.

California Government Code. California Government Code Section 51175 defines VHFHSZs and designates lands considered by the State to be a very high fire hazard. California Government Code Section 51189 directs the Office of the State Fire Marshal to create building standards for wildland fire resistance. The Government Code includes measures that increase the likelihood of a structure withstanding intrusion by fire (e.g., building design and construction requirements that use fire-

resistant building materials) and provides protection of structure projections (e.g., porches, decks, balconies, and eaves) and structure openings (e.g., attics, eave vents, and windows).

California Public Resources Code (PRC). The State's Fire Safe Regulations are set forth in PRC Section 4290, which include the establishment of SRAs. PRC Section 4291 sets forth defensible space requirements, which are applicable to anyone that "… owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush covered lands, grass-covered lands, or land that is covered with flammable material" (§4291(a)).

Assembly Bill 337. Per Assembly Bill (AB) 337, local fire prevention authorities and CAL FIRE are required to identify VHFHSZs in LRAs. Standards related to brush clearance and the use of fire-resistant materials in Fire Hazard Severity Zones (FHSZs) are also established.

California Code of Regulations (CCR), Title 8 (Industrial Relations). In accordance with CCR Title 8 §1270 and §6773 (Fire Prevention, and Fire Protection and Fire Equipment), the California Occupational Safety and Health Administration (Cal/OSHA) establishes fire suppression service standards. The standards range from fire hose size requirements to the design of emergency access roads.

California Code of Regulations, Title 14 (Natural Resources). Division 1.5 (Department of Forestry and Fire Protection), Title 14 of the CCR establishes a variety of wildfire preparedness, prevention, and response regulations.

California Code of Regulations, Title 19 (Public Safety). Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.

California Code of Regulations, Title 24 (California Building Standards Code). The CFC is set forth in Part 9 of the Building Standards Code. The CFC, which is pre-assembled with the International Fire Code (IFC) by the International Code Council (ICC), contains fire-safety building standards referenced in other parts of Title 24.

California Health and Safety Code Section 13000 et seq. and California Building Code (CBC). State fire regulations are set forth in §13000 et seq. of the California Health and Safety Code, which is divided into "Fires and Fire Protection" and "Buildings Used by the Public." The regulations provide for the enforcement of the CBC and mandate the abatement of fire hazards. The California Health and Safety Code establishes broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

California Health and Safety Code Division 11 (Explosives). Division 11 of the California Health and Safety Code establishes regulations related to a variety of explosive substances and devices, including high explosives and fireworks. Section 12000 et seq. establishes regulations related to explosives and explosive devices, including permitting, handling, storage, and transport (in quantities greater than 1,000 pounds).

California Health and Safety Code Division 12.5 (Buildings Used by the Public). Division 12.5 establishes requirements for buildings used by the public, including essential services buildings, earthquake hazard mitigation technologies, school buildings, and post-secondary buildings.

California Residential Code Section R337. Section R337 establishes minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within an SRA or any Wildland Urban Interface (WUI) Fire Area to resist the intrusion of flame or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses. This section regulates materials and construction methods for exteriors susceptible to wildfire exposure.

California Building Code (CBC), Chapter 7A. Chapter 7A applies to building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a WUI Fire Area. This section of the CBC establishes minimum standards for features such as fire retardant-treated wood and wood shingles, surface treatment protection, ignition-resistant construction, roof coverings and gutters, vents, exterior walls and coverings, exterior porch ceilings, underfloor protection, exterior windows, skylights, and doors, decking, and accessory structures.

Executive Order N-04-19. On January 9, 2019, Governor Newsom announced Executive Order (EO) N-04-19, which requires State agencies to identify innovative and sustainable solutions to address the State's wildfire crisis, such as upgraded fire detection technology.

Executive Order N-05-19. On January 9, 2019, Governor Newsom also announced EO N-05-19, which requires CAL FIRE and other State agencies to compile policy and regulatory recommendations concerning wildfire mitigation, emphasizing environmental sustainability and public health. EO N-05-19 requires the incorporation of socioeconomic analysis when conducting risk management of wildfires and mandates that agencies identify geographic areas with populations that are more vulnerable to the impacts of wildfires.

4.20.4.3 Regional Regulations

OCFA Fire Master Plans for Commercial & Residential Development, Guideline B-09. Guideline B-09 of the 2023 Fire Master Plans for Commercial & Residential Development establishes general guidelines pertaining to the installation and maintenance of fire department access roadways, access walkways to and around buildings, and hydrant quantity and placement as required by the 2022 CFC and CBC, and as amended by local ordinance. The proper installation and maintenance of fire access roadways, the proper sitting of hydrants, adequate water supply, and proper access to structures are essential in enabling effective emergency response and firefighting operations.

County of Orange and OCFA Local Hazard Mitigation Plan (2021). This plan identifies risks and vulnerabilities, establishes hazard mitigation strategies, describes emergency organization, task assignments, and general procedures, and provides for coordination of response in the event of an emergency. This plan does not identify specific emergency response or evacuation routes.

4.20.4.4 Local Regulations

City of Lake Forest Local Hazard Mitigation Plan. The City's Local Hazard Mitigation Plan (LHMP) is both a reference document and an action plan to serve as the City's long-term roadmap for community resiliency and sustainability. This is achieved through promoting sound policy to protect life, critical infrastructure and facilities, private property, and the environment from various hazards. The LHMP has information and resources to educate readers and decision makers about hazard events and related issues and includes a comprehensive strategy that the City and community members can utilize to improve resiliency in the City. This plan cumulates the process of assessing vulnerabilities, measuring risk, identifying strategies for risk reduction, and assigning responsible parties to carry out appropriate action. This initiative involves a comprehensive study of multiple hazards that could impact the City including natural and human-caused hazards.

Unified County of Orange and Orange County Operational Area Emergency Operations Plan. The Unified County of Orange and Orange County Operational Area (OA) Emergency Operations Plan (EOP), adopted in February 2019, describes the emergency organization and provides guidance and procedures to prepare for and respond to natural, technological, conflict-related, and human-caused incidents creating situations requiring a coordinated response. The EOP includes evacuation procedures and responsibilities. The City is a member of the Orange County Operation Area and the Orange County Emergency Management Organization which both provide mutual aid to communities via the Orange County Sheriff's Department, Orange County Fire Authority and the State of California Office of Emergency Services.

Lake Forest General Plan 2040. The Public Safety Element of the Lake Forest 2040 General Plan identifies the following goals, policies, and actions related to wildfire and fire protection services:

> **Goal PS-2 Fire Safety:** A City that is safe and adequately prepared for urban and wildfire emergencies.
>
> > **Policy PS-2.1 Building Fire Codes.** Require that all buildings and facilities within Lake Forest comply with local, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards.

The Public Safety and Public Facilities Elements of the Lake Forest 2040 General Plan identify the following policies and actions related to wildfire and fire protection services:

> **Policy PF-8.3 Department Consultation**. Promote coordination between the City of Lake Forest and Police and Fire services during the review of new development applications to ensure that adequate attention is being paid to fire and safety concerns during the design and planning of a project.
>
> > **Action PF-8a**: The Orange County Fire Authority and City Engineer will review proposed development projects and street networks to evaluate the accessibility for fire engines and other emergency response functions.

4.20.5 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the *State CEQA Guidelines*. Based on these thresholds, implementation of the proposed project would have a significant adverse impact with respect to wildfires if it is located in or near State Responsibility Areas or lands classified as very high fire severity zones and would:

Threshold 4.20.1: Substantially impair an adopted emergency response plan or emergency evacuation plan;

Threshold 4.20.2: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;

Threshold 4.20.3: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or

Threshold 4.20.4: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff post-fire slope instability, or drainage changes.

4.20.6 Project Impacts

Threshold 4.20.1: Would the project impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. According to CAL FIRE VHFHSZs in the LRA map for Lake Forest, the project site is in a non-VHFHSZ. The nearest VHFHSZs are located approximately 0.6 mile southwest of the project site in the undeveloped area east of the intersection of Bake Parkway and Crescent Bay Drive and 0.8 mile northeast of the project site along Serrano Creek and terminate near the SR-241 center median (CAL FIRE 2024).

Construction. The project site is within 1 mile of a VHFHSZ, but is not located in or near an SRA, as defined by CAL FIRE. The City of Lake Forest General Plan Public Safety Element (2022) does not officially designate any specific evacuation routes within the City. In the event an evacuation of all or part of the City during construction of the proposed project, the City would implement procedures contained in the Emergency Operations Plan (EOP) to notify residents and business owners of evacuation orders in affected areas and law enforcement would identify the appropriate routes and assist construction personnel and residents leaving the City in accordance with the City's recently adopted Local Hazard Mitigation Plan (LHMP).

Roads that are used as response corridors and evacuation routes usually follow the most direct path to or from various parts of the community. To depart from the project site in the event of an emergency, the main corridors utilized would be Enterprise Way, Dimension Drive, Bake Parkway,

and Lake Forest Drive, which provide access to Interstate 5 (I-5) and SR-241. The proposed project does not include any emergency facilities, nor would it serve as an emergency evacuation route. Construction activities would be confined to the project site. Project construction would not require full or partial road closures or detours. All large construction vehicles entering and exiting the site would be guided by the use of personnel using signs and flags to direct traffic. Therefore, construction activities would not impact vehicle flow. Additionally, as detailed in the Traffic Assessment completed for the proposed project (LSA 2025d), construction of the proposed project would not result in significant congestion or significantly impair the operations of nearby roadways and intersections during the construction period.

Because the proposed project does not include any emergency facilities, does not serve as an emergency evacuation route, and construction activities would not impact the use of roadways near the project site, the proposed project would not physically impair or otherwise interfere with emergency response or evacuation in the project vicinity. Therefore, construction of the proposed project would have a less than significant impact associated with impairments to an adopted emergency response plan or emergency evacuation plan, and no mitigation is required.

Operation. As noted above, the project site is within 1 mile of a VHFHSZ but is not located in or near an SRA, as defined by CAL FIRE. The proposed project includes the demolition of an existing 144,906 sq ft, two-story office/industrial building and the development of a 35-foot-tall, 165,803 sq ft industrial building.

The proposed project would provide emergency access to and from the project site via two existing driveways on Enterprise Way. All structures and internal circulation paths within the project site would be developed in accordance with the City and OCFA emergency access standards. The proposed project would also be required to comply with all applicable codes and ordinances for emergency vehicle access, which would ensure that emergency vehicles have adequate access to, from, and within the project site.

The City of Lake Forest General Plan Public Safety Element (2022) does not officially designate any specific evacuation routes within the City. Similar to during construction, in the event an evacuation of all or part of the City occurs during operation of the proposed project, the City would implement procedures contained in the Emergency Operations Plan (EOP) to notify residents and business owners of evacuation orders in affected areas and law enforcement would identify the appropriate routes and assist employees and residents leaving the City in accordance with the City's recently adopted LHMP.

Roads that are used as response corridors and evacuation routes usually follow the most direct path to or from various parts of the community. In the event of an emergency, vehicles would evacuate the project site via Enterprise Way, Dimension Drive, Bake Parkway, and Lake Forest Drive, which provide access to I-5 and SR-241. The proposed project does not include any emergency facilities, nor is the project site or area serve as an emergency evacuation route. According to the Traffic Assessment (LSA 2025d), the proposed project is not anticipated to result in any substantial traffic queuing along Enterprise Way or Dimension Drive, or on the project site during project operation.

Therefore, the additional traffic that would be generated by the proposed project would not significantly impair the evacuation of surrounding areas in the event of an emergency.

Because the project site is not located in a VHFHSZ or in or near an SRA, does not serve as an emergency evacuation route, and would not impair the evacuation of surrounding areas in the event of an emergency, operation of the proposed project would have a less than significant impact associated with an impairment of an adopted emergency response plan or emergency evacuation plan, and no mitigation is required.

Threshold 4.20.2: Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less Than Significant Impact. Topography influences the movement of air, thereby directing a fire course. For example, if the percentage of uphill slope doubles, the rate of spread in wildland fire will likely double (County of Orange & Orange County Fire Authority 2015). Wind events magnify the risks of wildfire and have the potential to expose inhabitants of the City to elevated pollutant concentrations.

As stated previously, the project site is not located in a VHFHSZ or in an SRA. The nearest VHFHSZ is 0.8 mile northeast of the project site. The project site is located in a developed portion of Lake Forest and the proposed project would replace an existing development on site. The project site is relatively flat with site elevations ranging from 710 feet amsl along the eastern property line to 690 feet amsl along the west corner of the site, which amounts to a gentle 3 percent slope downward from east to west. The eastern and southern property boundaries are at a lower elevation than the adjacent properties, which results in a 10- to 15-foot increase in elevation at the property boundary. This minor elevation change across a short distance does not constitute a slope for the purposes of assessing wildfire risks. The topography of the site does not constitute significant slopes, and there are no significant slopes within the vicinity of the site.

As previously stated, the project site is not located in a VHFHSZ. The closest VHFHSZ to the project site is the Santa Ana Mountains, which are approximately 0.8 mile to the northeast and separated from the project site by densely developed areas as well as by SR-241. Furthermore, adjacent roadways that surround the project site, including Bake Parkway, Enterprise Way, and Lake Forest Drive, would serve as fire breaks in the unlikely event of the uncontrolled spread of a wildfire. Therefore, there is a low likelihood that wildfires would spread to the project site. The proposed project would also adhere to applicable building and fire codes, which would reduce the wildfire risk at the project site.

As stated previously, the project site is not located in a VHFHSZ or in an SRA. Despite the VHFHSZ 0.8 mile to the northeast of the project site, the uncontrolled spread of a wildfire in the vicinity of the project site is unlikely due to existing non-combustible development and roadways, specifically SR-241. Impacts of downwind pollutant concentrations from a wildfire to occupants as a result of the proposed project would be negligible. Therefore, due to slope, prevailing winds, location, and other factors, the proposed project would not exacerbate wildfire risks. Although the City has

experienced wildfires, based on the analysis provided above, the likelihood of wildfires affecting the project site or immediate project vicinity is minimal. Impacts would be less than significant, and no mitigation is required**.**

Threshold 4.20.3: Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less Than Significant Impact. As described above, the proposed project is not located in a VHFHSZ or in an SRA. The proposed project includes the development of an industrial building, surface parking lot, on-site utility infrastructure, and landscaping. In the absence of any significant potential for on-site or adjacent wildfire hazard, the proposed project would not need to incorporate fire protection infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other non-existing utilities) that may themselves exacerbate fire risk.

Utility and infrastructure improvements included as part of the proposed project are described in Chapter 3.0, Project Description. These improvements include the replacement of the existing on-site water distribution system, the installation of new on-site underground gas, cable, and telephone utility lines, and the installation of underground detention basins and modular wetland systems.

The proposed project does not include any changes to public or private roadways that would exacerbate fire risk or that would result in impacts to the environment. Although utilities, including water facilities, sewer facilities, storm drain lines, and power lines would be modified and/or extended throughout the project site, these improvements would be underground and would not exacerbate fire risk. All utility lines, pipes, utility junction boxes, and transformers would be located underground. Project design and implementation of utility improvements would be reviewed and approved by the City's Public Works Department as part of the project approval process to ensure the proposed project is compliant with all applicable fire codes, design standards, and regulations.

Because the installation of all project-related utility improvements would be implemented in an urbanized setting in accordance with the current California Building Code, California Fire Code, and applicable local ordinances, impacts related to the installation or maintenance of infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts to the environment would be less than significant, and no mitigation is required.

Threshold 4.20.4: Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff post-fire slope instability, or drainage changes?

Less Than Significant Impact.

Landslides. Landslides and other forms of mass wasting, including mudflows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking but can also occur as a result of erosion and

downslope runoff caused by rain following a fire. According to the Geotechnical Investigation completed for the proposed project (Southern California Geotechnical 2021a), there is no evidence of landslides in the project vicinity. Additionally, the project site does not lie within a designated Landslide Hazard Zone. Further, as stated previously, the project site is not located in a VHFHSZ, or in or near an SRA. In the extremely unlikely event that a wildfire should spread to the project site, it would not expose any on-site slopes to erosion and potential failure because the project site does not contain any steep slopes that are prone to landslides. The proposed project would not expose people or structures to significant risks, including downslope landslides, as a result of runoff, post-fire slope instability, or drainage changes. There would be no impact to project occupants or nearby residents or workers related to post-wildfire landslide risks, and no mitigation is required.

Flooding. According to the Federal Emergency Management Agency (FEMA) Flood Hazard Map, the project site is located within Zone X (Area with Minimal Flood Hazard) (FEMA 2009). Zone X designates areas of minimal flood risk, the areas between the limits of the base flood and the 0.2 percent annual chance flood or 500-year flood.

Serrano Creek is located approximately 0.1 mile southeast of the project site. Existing development surrounds the Serrano Creek Channel on both sides. Northeast of SR-241, Serrano Creek runs throughout a VHFHSZ (CAL FIRE 2022). A fire northeast of the project site could trigger increased downstream sediment movement, which could raise the elevation of potential flooding along Serrano Creek in the vicinity of the project site. In the event that the upper Serrano Creek watershed were to experience a major fire, it is expected that the County would implement emergency Best Management Practices (BMPs) in Whiting Ranch Wilderness Park (wattles, sandbags, etc.) to limit the amount of additional sedimentation that enters Serrano Creek. Such measures would allow Serrano Creek to hydraulically convey any minor increases in sediment loads without increasing the risk of flooding on the project site.

In the unlikely event that a wildfire should spread to the project site, it is not expected that the proposed project would contribute any additional runoff or sedimentation to Serrano Creek or other downstream drainages. This is due to the lack of steep slopes that are prone to landslide or erosion on the project site and the fact that the project's drainage improvements would manage the rate and volume of on-site runoff and reduce the potential for increased sediment loads and flooding conditions in downstream storm drain facilities and/or Serrano Creek. Therefore, downslope or downstream flooding as a result of runoff, post-fire slope instability, or drainage changes would not expose occupants or structures to significant risks. Impacts to project occupants related to post-wildfire flooding risks would be less than significant, and no mitigation is required.

4.20.7 Cumulative Impacts

As defined in Section 15130 of the *State CEQA Guidelines*, cumulative impacts refer to the incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The cumulative study area for wildfire is described in Chapter 4.0; the cumulative project list is provided in Chapter 4.0, Table 4.A, and a map of the cumulative project locations is provided in Chapter 4.0, Figure 4-1.

As detailed in this section, the proposed project would result in less than significant impacts related to wildfire. Additionally, all discretionary private development and public works projects within the cumulative study area would be required to comply with CEQA. In this way, potential impacts related to wildfire would be evaluated and mitigated by each individual project. Additionally, all discretionary private development and public works projects within the cumulative study area would be required to adhere to City, County, State, and federal regulations designed to reduce and/or avoid impacts related to wildfire including flooding hazards and landslides after a wildfire event. Since all projects within the cumulative study area would be required to implement appropriate mitigation measures and adhere to applicable regulations, implementation of the proposed project, when evaluated in combination with the development of projects listed in Table 4.A, would not contribute to a cumulatively considerable impact related to wildfire. Cumulative impacts related to wildfire would be less than significant, and no mitigation is required.

4.20.8 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to wildfire.

4.20.9 Regulatory Compliance Measures and Mitigation Measures

4.20.9.1 Regulatory Compliance Measures

There are no regulatory compliance measures applicable to the proposed project pertaining to wildfire.

4.20.9.2 Mitigation Measures

The proposed project would not result in significant impacts related to wildfire, and no mitigation is required.

4.20.10 Level of Significance after Mitigation

The proposed project would result in less than significant impacts related to wildfire.

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5.0 ALTERNATIVES

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant impacts of the project, and evaluate the comparative merits of the alternatives" (*State CEQA Guidelines*, Section 15126.6). This chapter identifies potential alternatives to the IPT Enterprise Business Center LLC Project (proposed project), evaluates the potential impacts of each alternative, and compares the potential impacts of each alternative against the proposed project's impacts, as required by CEQA.

Key provisions of the *State CEQA Guidelines* on alternatives (Section 15126.6[b] through [f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly (15126.6[b]).

- The specific alternative of 'no project' shall also be evaluated along with its impact (15126.6[e][1]). The 'no project' analysis shall discuss the existing conditions at the time the Notice of Preparation is published, and at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (15126.6[e][2]).

- The range of alternatives required in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making. 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 (or the site is already owned by the proponent) (15126.6[f]).

- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (15126.6[f][2][A]).

- If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location (15126.6[f][2][B]).

- An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative (15126.6[f][3]).

Pursuant to the guidelines stated above, a range of alternatives to the proposed project is considered and evaluated in this EIR. These alternatives were developed in the course of project planning and environmental review. The discussion in this section provides:

1. A description and analysis of impacts for each of the alternatives considered;

2. Comparative analysis of each alternative that focuses on the potentially significant unavoidable environmental impacts of the proposed project, e.g., vehicle miles traveled (VMT) (the purpose of this analysis is to determine whether alternatives are capable of eliminating or reducing the significant environmental impacts of the project to a less than significant level); and

3. Conclusions regarding the alternative's: (1) ability to avoid or substantially lessen the significant unavoidable impacts of the project; (2) ability to attain the project objectives (as stated below); and (3) merits compared to the merits of the proposed project.

5.2 PROPOSED PROJECT

As described in Chapter 3.0, Project Description, of this EIR, the proposed project would result in the demolition of an existing 144,906-square-foot (sq ft), two-story office/industrial building and redevelopment, construction, and operation of a 35-foot (ft) tall, 165,803 sq ft tilt-up concrete industrial building with truck and auto parking spaces, and new landscaping throughout the site. Although the future tenant has not been determined yet, the proposed project includes a mix of office, manufacturing, and warehouse space. Approximately 10,000 sq ft could serve as office space, with up to 65,000 sq ft proposed for manufacturing use, and the remainder to be utilized for warehouse use. A maximum of 23 usable dock high doors, a gated truck loading area, a 16 ft high, 65 ft long wall located at the eastern end of the loading docks, west of the proposed trash enclosure, and up to 262 parking spaces for passenger vehicles would be provided for this proposed use. Additionally, the proposed project includes off-site improvements that would be constructed by the project developer prior to occupancy of the proposed industrial building to enhance public safety and address concerns related to large truck turning movements at the following intersections: Bake Parkway and Commercentre Drive, Bake Parkway and Dimension Drive, Dimension Drive/Commercentre Drive – Enterprise Way, Lake Forest Drive and Dimension Drive, and Lake Forest Drive and Rancho Parkway.

5.2.1 Project Objectives

As discussed in Section 3.9, Project Objectives, in Chapter 3.0, of this EIR, the following project objectives have been established to aid decision-makers in their review of the proposed project and its associated environmental impacts:

1. Provide a permitted land use that is consistent with the General Plan land use and zoning designation and that helps fulfill the demands of businesses and residents in the City of Lake Forest;

2. Re-envision an existing underutilized office/industrial property to build a new financially and environmentally sustainable building;

3. Re-envision an existing underutilized office/industrial property to provide a building type that is flexible and accommodating to a variety of permitted land uses to extend the useful life of the building;

4. Provide industrial development that is attractive and minimizes conflicts with the surrounding existing land uses;

5. Provide employment opportunities and facilitate job-creation for the residents of Lake Forest and surrounding communities to reduce the need for members of the local workforce to commute outside the area for employment;

6. Redevelop an underutilized site for improvement and enhanced contribution to the City of Lake Forest's fiscal benefits; and

7. Cluster land uses in proximity to other similar industrial/commercial uses and close to access points of the State highway system, such as State Route 241, to reduce traffic congestion on surface streets and reduce local air pollution emissions from vehicle sources.

5.2.2 Project-Related Impacts

As described in Chapter 4.0, Existing Environmental Setting, Environmental Analysis, Impacts, and Mitigation Measures, of this EIR, the proposed project would result in no impacts related to the following environmental factors: agriculture and forestry resources, land use and planning, and mineral resources. The proposed project would result in less than significant impacts related to the following environmental factors: aesthetics, biological resources (with implementation of regulatory compliance measures), cultural resources (with implementation of regulatory compliance measures), energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality (with implementation of regulatory compliance measures), population and housing, public services, recreation, transportation, utilities and service systems, and wildfire. The proposed project would result in less than significant impacts with implementation of mitigation related to the following environmental factors: air quality, geology and soils, noise, and tribal cultural resources. Refer to Chapter 4.0 of this EIR for a description of the required regulatory compliance measures and prescribed mitigation measures.

The proposed project would result in significant and unavoidable impacts related to the following environmental factors: Transportation and Traffic, and Greenhouse Gas Emissions. As discussed in Section 4.17, Transportation and Traffic, of this EIR, the proposed project's VMT rate would exceed the City of Lake Forest's (City) VMT threshold (Target VMT Rate) by 20 percent. In accordance with the Lake Forest Municipal Code, the proposed project is required to implement feasible Traffic

Demand Management (TDM) measures that would reduce project VMT, as stipulated by **Mitigation Measure (MM) TRA-1**. Providing bike lanes and an enhanced bikeway network, as required by **MM TRA-1**, can increase access to and from transit hubs. This encourages a mode shift from vehicles to bicycles and displaces VMT. According to the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (December 2021) (CAPCOA Handbook), the addition of bike lanes (T-20 Expand Bikeway Network) can provide a maximum VMT reduction of 0.5 percent. Assuming this TDM measure could achieve the maximum 0.5 percent VMT reduction, the reduction achieved would not reduce the project's VMT to below the City's VMT threshold. Therefore, even with implementation of **MM TRA-1** (addition of bike lanes), the proposed project would result in a significant and unavoidable impact related to VMT.

As discussed in Section 4.8, Greenhouse Gas Emissions, of this EIR, the proposed project would not result in any significant impacts related to mass emissions of GHG, and no mitigation is required. However, as described above, the proposed project would result in a significant and unavoidable impact related to VMT. As such, the proposed project would not contribute to its "fair share" of emission reductions required to support SB 743 and the goals of the 2022 Scoping Plan related to VMT. Because the proposed project would conflict with the plans and policies adopted for the purpose of reducing the emissions of GHGs, including the 2022 Scoping Plan, the proposed project would result in a significant and unavoidable cumulatively considerable impact related to GHG emissions.

5.3 ALTERNATIVES INITIALLY CONSIDERED BUT REJECTED FROM FURTHER CONSIDERATION

Section 15126.6(c) of the *State CEQA Guidelines* suggests that EIRs identify any alternatives that were considered by the Lead Agency but were rejected during the scoping process and briefly explain the reasons underlying the Lead Agency's determination. In evaluating an appropriate range of alternatives to the proposed project, a number of alternatives were considered and rejected for differing reasons by the City of Lake Forest. Variables that were considered in determining feasible alternatives included, but were not limited to, site suitability, economic viability, available infrastructure, general plan consistency, environmental impacts, and consistency with the project objectives.

The following is a discussion of the development alternatives considered during the environmental review process and the reasons they were not selected for detailed analysis in this Draft EIR.

5.3.1 Alternative Sites

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant impacts of the project. The key question and first step in the analysis is whether any of the significant impacts of the project would be avoided or substantially lessened by relocating the project. Only locations that would avoid or substantially lessen any of the significant impacts of the project need be considered for inclusion in the EIR (*State CEQA Guidelines*, Section 15126.6[f][2][A]). 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 applicant can reasonably acquire, control, or otherwise have access to the alternative site (*State CEQA Guidelines*, Section 15126.6[f][1]). If it is determined that no feasible alternative locations exist, the EIR must disclose the reasons for this conclusion (*State CEQA Guidelines*, Section 15126.6[f][2][B]).

No alternative locations where the proposed project could be undertaken are analyzed in the Draft EIR. Key objectives of the proposed project include re-envisioning an existing underutilized property to develop a new financially stable building that fulfills the demands of businesses and residents in the City and provides employment opportunities for the residents of Lake Forest and surrounding communities. The Applicant/Developer does not own or control any other property in the vicinity of the project site that would be suitable for development of the proposed project or that would meet the proposed project objectives including redevelopment of an existing underutilized property. Additionally, the City has not identified any currently underutilized/vacant properties within the project vicinity with a Light Industrial land use and zoning designation that would allow for the implementation of a project with similar uses and square footage. Furthermore, development of the proposed project on an alternative site would likely result in many of the same environmental impacts as development of the proposed project on the project site. Therefore, this alternative was rejected from further consideration.

5.3.2 Reduced Daily Trip Alternative

An alternative that could be screened out of a project-level assessment based on the City's Traffic Analysis Guidelines would eliminate the project's significant and unavoidable VMT impact and was therefore considered. To be screened out of a project-level assessment, the alternative would need to satisfy the "Small Project Screening" criteria. To satisfy the "Small Project Screening" criteria, the alternative would need to result in less than 110 daily trips. If the alternative resulted in less than 110 daily trips, it could be screened out of a VMT analysis, and would be presumed to have a less than significant VMT impact. Potential developments on the project site that could meet this criteria include: (1) development of a maximum 64,060 sq ft building with a warehouse use; (2) development of a maximum 23,165 sq ft building with a manufacturing use; or (3) development of a maximum 10,100 sq ft building with an office use. Development of one of these smaller buildings would also incrementally reduce impacts associated with Air Quality, Greenhouse Gas Emissions, Noise, and Transportation andTraffic. However, development of buildings of this size would yield a very low land coverage that would not justify the relation between land value, building construction costs, and potential revenue, resulting in an unfeasible project. Additionally, tenants required to support the smaller building sizes and assumed uses are not present in the market to facilitate the required financial viability. Finally, development of this alternative would not meet the majority of the project objectives. Therefore, for the reasons above this alternative was rejected from further consideration.

5.4 ALTERNATIVES UNDER CONSIDERATION

Section 21100 of the Public Resources Code (PRC) and Section 15126 of the *State CEQA Guidelines* require an EIR to identify and discuss a No Project Alternative and a reasonable range of alternatives to the proposed project that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant environmental impacts. Based on the criteria listed above, the following three alternatives have been determined to represent a reasonable range

of alternatives that have the potential to feasibly attain most of the basic objectives of the proposed project but that may avoid or substantially lessen any of the significant impacts of the proposed project. Therefore, the alternatives considered in this EIR include the following:

- **Alternative 1 – No Project Alternative:** CEQA requires analysis of a "No Project" Alternative. 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. According to *State CEQA Guidelines* Section 15126.6(e)(3)(C), the lead agency should proceed to analyze the impacts of the No Project Alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. Under Alternative 1, the No Project Alternative, the project site would remain in its current condition. No development of a new building, site improvements, or ground disturbance would occur. Under Alternative 1, the No Project Alternative, the existing underutilized office/ industrial building would remain in place and would remain vacant, consistent with existing conditions.

- **Alternative 2 – Previous Use and Associated Site Development Permit Alternative.** Under Alternative 2, the existing office/industrial building would be occupied by office uses consistent with the existing Site Development Permit. No modifications would be made to the exterior of the building, parking, or landscaping. The existing office/industrial building would remain in place and no construction (aside from interior tenant improvements) or ground-disturbing activities would occur.

- **Alternative 3 – Reduced Project Alternative.** Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent. All building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new 35 ft tall 124,352.25 sq ft tilt-up concrete industrial building would be constructed. The building would include 7,500 sq ft of office space, 48,750 sq ft of manufacturing space, and 68,102.25 sq ft of warehouse space. The additional available square footage at the project site that would result from the decreased building square footage would be designated for vehicle and truck parking. Consistent with the proposed project, Alternative 3 would include a gated truck loading area, truck and auto parking spaces, and new landscaping throughout the site.

For the purpose of this analysis, it is assumed that all of the alternatives would comply with applicable federal, State, and local regulations, policies, and ordinances. The alternatives are further described below and their potential impacts compared to those of the proposed project.

5.4.1 Alternative 1: No Project Alternative

5.4.1.1 Description

In accordance with Section 15126.6(e) of the *State CEQA Guidelines*, the "No Project" Alternative should evaluate the existing conditions of the site at the time the Notice of Preparation is published as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community

services. Under Alternative 1, the project site would remain in its current condition. No development of a new building, site improvements, or ground disturbance would occur. The project site would continue to be occupied by the existing 144,906 sq ft, two-story tilt-up office/industrial building and associated parking and landscaping. The existing building would remain vacant, consistent with existing conditions.

The potential impacts associated with Alternative 1 are described below. As discussed, Alternative 1 would avoid all of the construction-related impacts of the proposed project but would not meet the majority of the project objectives. No regulatory compliance measures or mitigation measures would be required for Alternative 1.

5.4.1.2 Environmental Analysis

Aesthetics. Under Alternative 1, no new development would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping consistent with the project site's existing General Plan land use designation and zoning. As such, Alternative 1 would not conflict with applicable zoning or other regulations governing scenic quality. Because no new building would be constructed on the project site, public views of and from the project site would remain unchanged. As such, Alternative 1 would not result in impacts to scenic vistas or scenic highways. The project site is currently developed with an office/ industrial building and associated surface parking, which produce light and glare from the on-site lighting. Because Alternative 1 would not include demolition activities, construction activities, construction of a new building, or intensification of the on-site lighting sources, Alternative 1 would not result in new impacts related to light and glare. Therefore, although the proposed project would result in less than significant impacts related to aesthetics, impacts under Alternative 1 would be less than the proposed project because no development would occur on site.

Agriculture and Forestry Resources. Under Alternative 1, no new development would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping consistent with the project site's existing General Plan land use designation and zoning. As such, Alternative 1 would not convert farmland to a non-agricultural use, conflict with existing zoning for an agricultural use or Williamson Act contract, conflict with existing zoning for forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use. Consistent with the proposed project, Alternative 1 would not result in impacts related to agriculture or forestry resources.

Air Quality. Alternative 1 would not require demolition of the existing on-site building or surface parking, grading, or construction and would not change or increase the intensity of the existing on-site use. Additionally, because the existing office/industrial building would remain vacant under Alternative 1, this alternative would not increase vehicle trips to and from the project site as compared to existing conditions. Therefore, no additional air pollutant emissions related to grading, construction, additional vehicle trips, or operational uses would be generated under Alternative 1, and no mitigation would be required. Therefore, although the proposed project would result in less than significant impacts to air quality with implementation of mitigation measures, impacts under Alternative 1 would be less than the proposed project because no construction would occur on site and no operational emissions would be generated.

Biological Resources. Alternative 1 would not require any demolition activities or the removal of any vegetation or trees. Therefore, Alternative 1 would not result in adverse effects to special-status plant and/or wildlife species including nesting birds protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Additionally, Alternative 1 would not result in impacts to riparian habitat, other sensitive natural communities, or state or federally protected wetlands as none of these resources are present at the project site. Similarly, Alternative 1 would not conflict with any local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted habitat conservation plan as there are no applicable local policies or habitat conservation plans involving the project site. Therefore, although the proposed project would result in less than significant impacts to biological resources with implementation of regulatory compliance measures, impacts under Alternative 1 would be less than the proposed project because no vegetation would be removed and no construction would occur on site.

Cultural Resources. Alternative 1 would not require any buildings be demolished or constructed on the project site and no other construction, such as grading or site work would occur. Therefore, Alternative 1 would not cause a substantial adverse change in the significance of a historical resources. Additionally, Alternative 1 would not have the potential to disrupt previously unknown human remains or result in the discovery of previously unknown archaeological resources. No impacts related to cultural resources would occur under Alternative 1. Therefore, although the proposed project would result in less than significant impacts to cultural resources with implementation of regulatory compliance measures, impacts under Alternative 1 would be less than the proposed project as no disturbance/construction would occur on the project site.

Energy. Alternative 1 would not require any buildings be demolished or constructed on the project site and no other construction, such as grading or site work would occur. Because the existing office/industrial building would remain vacant under Alternative 1, this alternative would not increase vehicle trips to and from the project site as compared to existing conditions and no operational uses would occur. As such, Alternative 1 would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, although the proposed project would result in less than significant impacts related to energy, impacts under Alternative 1 would be less than the proposed project because no construction or operational uses would occur.

Geology and Soils. Alternative 1 would not require any buildings be demolished or constructed on the project site and no other construction, such as grading or site work would occur. Therefore, Alternative 1 would have no impacts related to geology and soils, and no mitigation would be required. Therefore, although the proposed project would result in less than significant impacts related to geology and soils with implementation of mitigation measures, impacts under Alternative 1 would be less than the proposed project as no construction or ground disturbance would occur.

Greenhouse Gas Emissions. Alternative 1 would not require any buildings be demolished or constructed on the project site and no other construction, such as grading or site work would occur. Alternative 1 would not change or increase the intensity of the existing on-site use. Additionally, because the existing office/industrial building would remain vacant under Alternative 1, Alternative 1 would not increase vehicle trips to and from the project site as compared to existing conditions or

result in VMT impacts. Therefore, no additional greenhouse gas emissions related to grading, construction, additional vehicle trips, or operational uses would be generated under Alternative 1. Additionally, Alternative 1 would not result in an impact related to VMT and would not conflict with the policies and plans implemented for the purposes of reducing greenhouse gas emissions, including the 2022 Scoping Plan and the 2020–2024 and 2024–2050 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). As such, Alternative 1 would not result in a significant and unavoidable cumulatively considerable impact related to GHG emissions. Therefore, impacts under Alternative 1 would be less than the proposed project because Alternative 1 would not generate construction or operational emissions or result in impacts related to VMT.

Hazards and Hazardous Materials. Alternative 1 would not require any buildings be demolished or constructed on the project site and no other construction, such as grading or site work would occur. Because the existing office/industrial building would remain vacant under Alternative 1, no operational uses would occur. Alternative 1 would not result in any impacts associated with being included on a hazardous materials site pursuant to Government Code Section 65962.5, being located within an airport land use plan or within two miles of a public airport, or exposing people or structures to a significant risk of loss, injury or death involving wildland fires as the project site is not located in an area impacted by any of these hazards. Because the project site would remain vacant and no construction or ground-disturbing activities would occur, Alternative 1 would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; and would not interfere with adopted emergency response or evacuation plans. Therefore, although the proposed project would result in less than significant impacts related to hazards and hazardous materials, impacts under Alternative 1 would be less than the proposed project because no construction or operational uses would occur.

Hydrology and Water Quality. Alternative 1 would not require any buildings be demolished or constructed on the project site and no other construction, such as grading or site work would occur. Because the existing office/industrial building would remain vacant under Alternative 1, no operational uses would occur. Alternative 1 would not result in any impacts associated with impeding or redirecting flood flows as the project site is located within an area of minimal flood hazard. Since no construction or ground-disturbing activities would occur, Alternative 1 would not result in any impacts associated with construction period water quality standards, erosion or siltation, or polluted runoff. Additionally, Alternative 1 would not result in operation period impacts related to water quality standards, erosion or siltation, flooding, inundation, exceeding the capacity of stormwater drainage systems, polluted runoff, or compliance with a water quality control plan or sustainable groundwater management plan as the project site would remain developed consistent with existing conditions. Therefore, although the proposed project would result in less than significant impacts related to hydrology and water quality with implementation of regulatory compliance measures, impacts under Alternative 1 would be less than the proposed project because no construction or new operational uses would occur.

Land Use and Planning. Under Alternative 1, no new development would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping consistent with the project site's existing General Plan land use designation and zoning. As such, Alternative 1 would not result in the physical division of an established community or 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 as the existing land use is consistent with the project site's General Plan land use designation and zoning. Consistent with the proposed project, Alternative 1 would not result in impacts related to land use and planning.

Mineral Resources. Under Alternative 1, no new development would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping consistent with the project site's existing General Plan land use designation and zoning. Alternative 1 would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site as there are no known mineral resources in the vicinity of the project site. Consistent with the proposed project, Alternative 1 would not result in impacts related to mineral resources.

Noise. Alternative 1 would not require any buildings be demolished or constructed on the project site and no other construction, such as grading or site work would occur. Because the existing office/industrial building would remain vacant under Alternative 1, no operational uses would occur. Because no construction or ground-disturbing activities would occur and no operational uses would occur, Alternative 1 would not result in the generation of a substantial temporary or permanent increase in ambient noise levels nor would it result in the generation of excessive ground-borne vibration or ground-borne noise levels. Additionally, Alternative 1 would not result in impacts associated with excessive noise levels associated with being located in the vicinity of a private airstrip or airport, and no mitigation would be required. Therefore, although the proposed project would result in less than significant impacts related to noise and vibration, impacts under Alternative 1 would be less than the proposed project because no construction or operational uses would occur.

Population and Housing. Under Alternative 1, no new development or construction would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping and the building would remain vacant consistent with existing conditions. Alternative 1 would not result in substantial direct or indirect population growth beyond that planned for the city, county, or region, and would not result in the displacement of housing or people necessitating the construction of housing elsewhere. Therefore, although the proposed project would result in less than significant impacts related to population and housing, impacts under Alternative 1 would be less than the proposed project because no construction or operational uses would occur.

Public Services. Under Alternative 1, no new development would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping and the building would remain vacant consistent with existing conditions. Alternative 1 would not result in the need for additional fire or police staffing or services, or the need for any new physically altered governmental facilities including schools, parks, or other public facilities. Therefore, although the proposed project would result in less than significant impacts related to public services,

impacts under Alternative 1 would be less than the proposed project because no construction or operational uses would occur.

Recreation. Under Alternative 1, no new development or construction would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping, and the building would remain vacant consistent with existing conditions. Alternative 1 would not increase the use of existing parks or recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated nor would it require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Therefore, although the proposed project would result in less than significant impacts related to recreation, impacts under Alternative 1 would be less than the proposed project because no construction or operational uses would occur.

Transportation. Under Alternative 1, no new development or construction would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping, and the building would remain vacant consistent with existing conditions. Alternative 1 would not change or increase the intensity of the existing on-site use, and because the existing office/industrial building would remain vacant, Alternative 1 would not increase vehicle trips to and from the project site as compared to existing conditions. Alternative 1 would not conflict with any regulations addressing the circulation system, result in impacts related to VMT, substantially increase hazards due to a geometric design feature or incompatible uses, or result in inadequate emergency access. Because the proposed project has a significant and unavoidable impact related to transportation, specifically VMT, impacts under Alternative 1 would be less than those associated with the proposed project because there would be no construction or operational uses generating transportation or VMT impacts under Alternative 1.

Tribal Cultural Resources. Alternative 1 would not require any buildings be demolished or constructed on the project site and no other construction, such as grading or site work would occur. Because no construction or new development would occur, Alternative 1 would not have the potential to cause a substantial adverse change in the significance of a tribal cultural resource, and no mitigation would be required. Therefore, although the proposed project would result in less than significant impacts related to tribal cultural resources with implementation of mitigation measures, impacts under Alternative 1 would be less than the proposed project because no construction or new development would occur.

Utilities and Service Systems. Under Alternative 1, no new development would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping, and the building would remain vacant consistent with existing conditions. As such, Alternative 1 would not require the relocation or construction of any new utilities or new or expanded entitlements including increased demand for water supply and would not result in the generation of any wastewater or solid waste. Therefore, although the proposed project would result in less than significant impacts related to utilities and service systems, impacts under Alternative 1 would be less than the proposed project because no construction or operational uses would occur.

Wildfire. Under Alternative 1, no new development would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping, and the building would remain vacant consistent with existing conditions. The project site is not located in a very high fire hazard severity zone. Because no new development would occur, Alternative 1 would not impair an adopted emergency response or evacuation plan, exacerbate wildfire risks, require the installation or maintenance of associate infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment, or expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff post-fire slope instability, or drainage changes. Therefore, although the proposed project would result in less than significant impacts related to wildfire, impacts under Alternative 1 would be less than the proposed project because no new development would occur.

5.4.1.3 Overview of Potential Impacts/Comparison to Proposed Project

As stated above, under Alternative 1, no new development would occur on the project site. The project site would remain developed with the existing office/industrial building and associated parking and landscaping. The impacts analysis for Alternative 1 is based on the existing building remaining vacant, consistent with existing conditions. Alternative 1 and the proposed project are similar in that both would result in no impacts to agriculture and forestry resources, land use and planning, and mineral resources. However, because Alternative 1 would not require demolition activities, construction of a new building, or increase the intensity of on-site uses, the impacts of Alternative 1 would be less than the impacts of the proposed project for aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire. More specifically, Alternative 1 would not result in significant and unavoidable transportation impacts related to VMT or a significant and unavoidable cumulatively considerable impact related to GHG emissions.

5.4.1.4 Project Objectives

Alternative 1 would be potentially consistent with the following project objective:

7. Cluster land uses in proximity to other similar industrial/commercial uses and close to access points of the State highway system, such as State Route 241, to reduce traffic congestion on surface streets and reduce local air pollution emissions from vehicle sources.

Under Alternative 1 the existing underutilized office/industrial building would remain in place and would remain vacant. Therefore, the No Project Alternative would not be consistent with the following six project objectives:

1. Provide a permitted land use that is consistent with the General Plan land use and zoning designation and that helps fulfill the demands of businesses and residents in the City of Lake Forest;

2. Re-envision an existing underutilized office/industrial property to build a new financially and environmentally sustainable building;

3. Re-envision an existing underutilized office/industrial property to provide a building type that is flexible and accommodating to a variety of permitted land uses to extend the useful life of the building;

4. Provide industrial development that is attractive and minimizes conflicts with the surrounding existing uses;

5. Provide employment opportunities and facilitate job-creation for the residents of Lake Forest and surrounding communities to reduce the need for members of the local workforce to commute outside the area for employment; and

6. Redevelop an underutilized site for improvement and enhanced contribution to the City of Lake Forest's fiscal benefits.

5.4.2 Alternative 2: Previous Use and Associated Site Development Permit Alternative

5.4.2.1 Description

Alternative 2 assumes that the project site would be occupied by office uses consistent with the existing Site Development Permit. The project site would continue to be occupied by a 144,906 sq ft, two-story tilt-up office/industrial building and associated parking and landscaping. No modifications would be made to the exterior of the building, parking, or landscaping and no construction activities (aside from interior tenant improvements) or ground disturbance would occur. Under this alternative, an estimated 472 individuals would be employed at the project site.[1] Alternative 2 is expected to generate 1,571 daily trips, including 220 a.m. and 209 p.m. peak-hour trips, as calculated using rates from the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition (2021) for Land Use Code 710 (General Office Building). Therefore, Alternative 2 would result in a net increase of 844 daily trips compared to the proposed project.

The potential impacts associated with Alternative 2 are described below. As discussed, Alternative 2 would avoid all of the construction-related impacts of the proposed project. No regulatory compliance measures or mitigation measures would be required for Alternative 2.

5.4.2.2 Environmental Analysis

Aesthetics. Alternative 2 would not require demolition of the existing on-site building or surface parking, grading, construction, or removal of vegetation because no new development would occur on the project site (aside from potential interior tenant improvements). In addition, no new building

[1] Based on the Institute of Transportation Engineers' (ITE) Trip Generation Manual (11th Edition) rates for Land Use 710 – "General Office Building," Alternative 2 would generate approximately 10.84 average daily vehicle trips per 1,000 square feet gross floor area and average 3.33 daily vehicle trips per employee. 10.84 ÷ 3.33 = 3.255 employee per 1,000 square feet gross floor area. 3.255 × 144.906 thousand square feet = 472 employees.

would be constructed on the project site, and public views of and from the project site would remain unchanged. As such, Alternative 2 would not result in impacts to scenic vistas or scenic highways. The project site is currently developed with an office/industrial building and associated surface parking, which produce light and glare from the on-site outdoor lighting. Under Alternative 2, the existing building would be occupied by office uses with typical hours of operation from 8:00 a.m. to 5:00 p.m., and as such, would not operate during the nighttime hours as the proposed project would. Therefore, while Alternative 2 would result in additional on-site lighting sources from additional vehicle headlights and interior building lighting, it is anticipated that those additional lighting sources would be limited to daylight hours when light and glare is less visible. Although the proposed project would result in less than significant impacts related to aesthetics, impacts under Alternative 2 would be nominally less than the proposed project because no new development would occur on site (aside from potential interior tenant improvements) and no nighttime operation is anticipated.

Agricultural Resources. Under Alternative 2, no new development would occur on the project site (aside from potential interior tenant improvements). The project site would remain developed with the existing office/industrial building and associated parking and landscaping consistent with the project site's existing General Plan land use designation and zoning. As such, Alternative 2 would not convert farmland to a non-agricultural use, conflict with existing zoning for an agricultural use or Williamson Act contract, conflict with existing zoning for forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use. Consistent with the proposed project, Alternative 2 would not result in impacts related to agriculture or forestry resources.

Air Quality. Alternative 2 would not require demolition of the existing on-site building or surface parking, grading, or construction (aside from potential interior tenant improvements). Therefore, Alternative 2 would not result in any construction-related impacts to air quality, and no mitigation would be required. Under Alternative 2 the existing building would be occupied by office uses that would generate approximately 1,571 daily trips, including 220 a.m. and 209 p.m. peak-hour trips (a net increase of 844 trips compared to the proposed project) and would result in operational emissions resulting from the additional vehicle trips. Although the proposed project would result in less than significant impacts to air quality with implementation of mitigation measures, construction-related impacts under Alternative 2 would be less than the proposed project because no construction would occur while operation-related impacts would be higher than the proposed project because Alternative 2 would result in approximately 844 additional daily vehicle trips compared to the proposed project.

Biological Resources. Alternative 2 would not require any demolition activities or the removal of any vegetation or trees. Therefore, Alternative 2 would not result in adverse effects to special-status plant and/or wildlife species including nesting birds protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Additionally, Alternative 2 would not result in impacts to riparian habitat, other sensitive natural community, or state or federally protected wetlands as none of these resources are present at the project site. Similarly, Alternative 2 would not conflict with any local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted habitat conservation plan as there are no applicable local policies or habitat conservation plans involving the project site. Although the proposed project would result in less than significant impacts to biological resources with implementation of regulatory compliance measures, impacts under

Alternative 2 would be less than the proposed project because no vegetation would be removed because no demolition or construction would occur on site.

Cultural Resources. Alternative 2 would not require the demolition or construction of any buildings on the project site and no construction, such as grading or site work would occur (aside from potential interior tenant improvements). Therefore, Alternative 2 would not cause a substantial adverse change in the significance of a historical resource. Additionally, Alternative 2 would not have the potential to disrupt previously unknown human remains or result in the discovery of previously unknown archaeological resources. No impacts related to cultural resources would occur under Alternative 2. Therefore, although the proposed project would result in less than significant impacts to cultural resources with implementation of regulatory compliance measures, impacts under Alternative 2 cultural impacts would be less than the proposed project as no disturbance/construction would occur on the project site.

Energy. Alternative 2 would not require any buildings be demolished or constructed on the project site and no construction would occur (aside from potential interior tenant improvements). As such, Alternative 2 would not result in any construction-related impacts related to energy. Under Alternative 2 the existing building would be occupied by office uses that would result in similar energy demand on-site as the proposed project but would generate a net increase of 844 trips compared to the proposed project. Alternative 2 would adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. Energy usage associated with operation of Alternative 2 would be relatively small in comparison to the overall use in Orange County, and the State's available energy resources. As such, Alternative 2 would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Although the proposed project would result in less than significant impacts to related to energy, construction-related impacts under Alternative 2 would be less than the proposed project because no construction would occur while operation-related impacts would be higher than the proposed project because Alternative 2 would result in approximately 844 additional daily vehicle trips compared to the proposed project.

Geology and Soils. Alternative 2 would not require any buildings be demolished or constructed on the project site (aside from potential interior tenant improvements) and no construction, such as grading or site work would occur. Therefore, Alternative 2 would have no impacts related to geology and soils, and no mitigation would be required. Although the proposed project would result in less than significant impacts related to geology and soils with implementation of mitigation measures, impacts under Alternative 2 would be less than the proposed project as no construction or ground disturbance would occur.

Greenhouse Gas Emissions. Alternative 2 would not require demolition of the existing on-site building or surface parking, grading, or construction (aside from potential interior tenant improvements). As such, Alternative 2 would not result in any construction-related impacts related to greenhouse gas emissions. Alternative 2 would increase the intensity of the existing on-site use as the existing building would be occupied by office uses. Alternative 2 would result in operation-related greenhouse gas emissions related to mobile sources (e.g., vehicle trips), area sources (e.g., maintenance activities and landscaping), stationary sources (e.g., fire pump), and indirect emission from sources associated with

energy consumption. Alternative 2 would generate approximately 1,571 daily trips, including 220 a.m. and 209 p.m. peak-hour trips (a net increase of 844 trips compared to the proposed project). Alternative 2 would comply with existing State regulations adopted to achieve the overall greenhouse gas emissions reduction goals and would be consistent with the policies of the 2020–2024 and 2024–2050 RTP/SCS. However, consistent with the proposed project, because Alternative 2 would result in significant and unavoidable impacts related to VMT, Alternative 2 would conflict with the goals of the 2022 Scoping Plan. Although construction-related impacts under Alternative 2 would be less than the proposed project because no construction would occur, operation-related impacts would be higher than the proposed project because Alternative 2 would result in approximately 844 additional daily vehicle trips compared to the proposed project. Furthermore, consistent with the proposed project, because Alternative 2 would conflict with the goals of the 2022 Scoping Plan, Alternative 2 would also result in a significant and unavoidable cumulatively considerable impact related to GHG emissions.

Hazards and Hazardous Materials. Alternative 2 would not require any buildings be demolished or constructed on the project site and no construction, such as grading or site work would occur. Therefore, Alternative 2 would not result in any construction-related impacts related to hazards or hazardous materials. Additionally, Alternative 2 would not result in any impacts associated with being included on a hazardous materials site pursuant to Government Code Section 65962.5, being located within an airport land use plan or within two miles of a public airport, or exposing people or structures to a significant risk of loss, injury or death involving wildland fires as the project site is not located in an area impacted by any of these hazards. Alternative 2 would be subject to existing hazardous materials regulations and programs including Occupational Safety and Health Administration (OSHA) and California Occupational Safety and Health Administration (Cal/OSHA) regulations, California Code of Regulations (CCR) Title 8; the Construction General Permit (CGP); and United States Department of Transportation (USDOT), the Resource Conservation and Recovery Act (1976) (RCRA), and State regulations during project operation. In addition, the office uses associated with Alternative 2 would not involve the use or disposal of significant quantities of hazardous materials. As such, Alternative 2 would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials; create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Additionally, no modifications to existing site access or infrastructure would occur, thus no impacts related to emergency response or evacuation plans would occur. Therefore, although the proposed project would result in less than significant impacts related to hazards and hazardous materials, impacts under Alternative 2 would be less than the proposed project because no construction would occur.

Hydrology and Water Quality. Alternative 2 would not require any buildings be demolished or constructed on the project site and no construction, such as grading or site work would occur. Alternative 2 would not result in any impacts associated with impeding or redirecting flood flows as the project site is located within an area of minimal flood hazard. Since no construction or ground-disturbing activities would occur, Alternative 2 would not result in any impacts associated with construction-related water quality standards, erosion or siltation, or polluted runoff. Additionally, Alternative 2 would not result in operation-related impacts to water quality standards, erosion or

siltation, flooding, inundation, groundwater supplies or recharge, exceeding capacity of storm water drainage systems, polluted runoff, or compliance with a water quality control plan or sustainable groundwater management plan as the project site would remain developed consistent with existing conditions. Therefore, although the proposed project would result in less than significant impacts related to hydrology and water quality with implementation of regulatory compliance measures, impacts under Alternative 2 would be less than the proposed project because no construction would occur.

Land Use and Planning. Under Alternative 2, no new development would occur on the project site (aside from potential interior tenant improvements). The project site would remain developed with the existing office/industrial building and associated parking and landscaping consistent with the project site's existing General Plan land use designation and zoning. As such, Alternative 2 would not result in the physical division of an established community or 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 as the existing land use is consistent with the project site's General Plan land use designation and zoning. Consistent with the proposed project, Alternative 2 would not result in impacts related to land use and planning.

Mineral Resources. Under Alternative 2, no new development would occur on the project site (aside from potential interior tenant improvements). The project site would remain developed with the existing office/industrial building and associated parking and landscaping consistent with the project site's existing General Plan land use designation and zoning. Alternative 2 would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site as there are no known mineral resources in the vicinity of the project site. Consistent with the proposed project, Alternative 2 would not result in impacts related to mineral resources.

Noise. Under Alternative 2, no construction (aside from potential interior tenant improvements) or ground-disturbing activities would occur. As such, Alternative 2 would not result in the generation of a substantial temporary increase in ambient noise levels nor would it result in the generation of excessive ground-borne vibration or ground-borne noise levels. Additionally, Alternative 2 would not result in impacts associated with excessive noise levels associated with being located in the vicinity of a private airstrip or airport. Under Alternative 2, the existing building would be occupied by office uses with typical hours of operation from 8:00 a.m. to 5:00 p.m. Therefore, while Alternative 2 would result in additional on-site noise sources from operational office uses, it is anticipated that those noise sources would be limited to daytime hours and would not involve truck deliveries or loading and unloading activities associated with the proposed project. As such, Alternative 2 would not result in the generation of a substantial permanent increase in ambient noise levels nor would it result in the generation of excessive ground-borne vibration or ground-borne noise levels, and no mitigation would be required. Therefore, although the proposed project would result in less than significant impacts related to noise and vibration, impacts under Alternative 2 would be less than the proposed project because, aside from potential interior tenant improvements, no construction would occur and operational uses would be limited to daylight hours and would not involve truck deliveries or loading and unloading activities.

Population and Housing. Under Alternative 2, no new development would occur on the project site (aside from potential interior tenant improvements). The project site would remain developed with the existing office/industrial building and would operate as an office consistent with the existing Site Development Permit. Alternative 2 would not require any ground-disturbing construction activities, such as demolition or grading (aside from potential internal tenant improvements) and therefore would be expected to provide fewer short-term construction jobs as compared to the proposed project. Additionally, Alternative 2 would not result in direct population growth because the proposed use is not residential. However, Alternative 2 is anticipated to generate 472 new jobs within the City of Lake Forest (285 more jobs than the proposed project). It is reasonable to assume that the majority of these positions would be filled by existing City or County residents, and Alternative 2 would not result in a significant increase to the City's population due to hiring out of area employees. Additionally, Alternative 2 would be consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. Alternative 2 would not result in the displacement of people or housing and would not require the construction of replacement housing elsewhere. Therefore, although Alternative 2 would result in 285 more jobs than the proposed project, consistent with the proposed project, Alternative 2 would result in less than significant impacts related to population and housing.

Public Services. Under Alternative 2, no new development would occur on the project site. The project site would remain developed with the existing office/industrial building and would operate as an office consistent with the existing Site Development Permit. Alternative 2 is anticipated to generate 472 new jobs within the City of Lake Forest. It is reasonable to assume that the majority of these positions would be filled by existing City or County residents, and Alternative 2 would not result in a significant increase to the City's population due to hiring out of area employees. Additionally, Alternative 2 would be consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. Therefore, the Alternative 2 increase in the demand for new or expanded fire protection and police services would be negligible. Furthermore, Alternative 2 would be required to comply with the California Fire Code, Orange County Fire Authority (OCFA) requirements, and encouraged to implement Crime Prevention Through Environmental Design (CPTED) techniques. Alternative 2 does not include a residential component; therefore, it would not directly generate any schoolchildren, the addition of which could cause negative impacts to existing or future school facilities or programs. Therefore, Alternative 2 would result in a negligible increase in demand for public services and would not require the construction of new public facilities or the upgrade of existing facilities, which could cause significant environmental impacts. Consistent with the proposed project, Alternative 2 would result in less than significant impacts related to public services.

Recreation. Under Alternative 2, no new development would occur on the project site. The project site would remain developed with the existing office/industrial building and would operate as an office consistent with the existing Site Development Permit. Alternative 2 is anticipated to generate 472 new jobs within the City of Lake Forest. It is reasonable to assume that the majority of these positions would be filled by existing City or County residents and Alternative 2 would not result in a significant increase to the City's population due to hiring out of area employees. Additionally, Alternative 2 would be consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and

zoning designations. Therefore, Alternative 2 would not generate a significant increase in the City's population and would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Alternative 2 would not include recreational facilities or develop land uses that would lead to a significant increase in the demand for parks and recreational facilities, which would require the construction or expansion of recreational facilities that might have an adverse effect on the environment. Consistent with the proposed project, Alternative 2 would result in less than significant impacts related to recreation.

Transportation. Under Alternative 2, no new development would occur on the project site and no site improvements would be implemented (aside from potential interior tenant improvements). The project site would remain developed with the existing office/industrial building and would operate as an office consistent with the existing Site Development Permit. No modifications to existing site access or infrastructure would occur, thus Alternative 2 would not conflict with program, plan, ordinance or policy addressing the circulation system and no impacts related to transit, roadway, bicycle, and pedestrian facilities; inadequate emergency access; or hazards due to a geometric design feature would occur. Alternative 2 would generate 1,571 daily trips, including 220 a.m. and 209 p.m. peak-hour trips (a net increase in 844 daily trips compared to the proposed project). Consistent with the proposed project, the VMT rate under Alternative 2 would exceed the City VMT threshold (Target VMT Rate) and there are no feasible mitigation measures that can reliably guarantee that VMT can be reduced to below the City's threshold. Although Alternative 2 would not result in any construction-related transportation impacts, it would result in an increase in daily trips compared to the proposed project, and consistent with the proposed project, would result in a significant and unavoidable transportation impact related to VMT.

Tribal Cultural Resources. Alternative 2 would not require any buildings be demolished or constructed on the project site and no construction, such as grading or site work would occur. Because no construction or new development would occur, Alternative 2 would not have the potential to cause a substantial adverse change in the significance of a tribal cultural resources, and no mitigation would be required. Therefore, although the proposed project would result in less than significant impacts related to tribal cultural resources with implementation of mitigation measures, impacts under Alternative 2 would be less than the proposed project because no construction or new development would occur.

Utilities and Service Systems. Under Alternative 2, no new development would occur on the project site and no site improvements would be implemented (aside from potential interior tenant improvements). The project site would remain developed with the existing office/industrial building and would operate as an office consistent with the existing Site Development Permit. Therefore, Alternative 2 would not 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. Consistent with existing conditions, the Irvine Ranch Water District (IRWD) would continue to provide domestic, recycled water, and wastewater collection services to the project site and the City of Lake Forest would continue to provide solid waste collection at the project site. Alternative 2 would result in an increase in water demand, domestic wastewater, and solid waste similar to the proposed

project. However, Alternative 2 would be consistent with the City's General Plan land use designation for the project site and would not represent unplanned growth given that the project site would be developed consistent with its land use designation and zoning. Because Alternative 2 would be consistent with the existing Site Development Permit, the availability of sufficient water supplies to serve the project has already been confirmed, the availability of sufficient wastewater treatment capacity to serve the project has been confirmed, and it has been confirmed that the project would not generate solid waste in excess of local standards or in excess of the capacity of local infrastructure. Additionally, Alternative 2 would comply with federal, State, and local statutes and regulations related to solid waste, including OC Waste & Recycling's (OCWR) California Integrated Waste Management Board (CIWMP) and agency permits, Assembly Bill (AB) 341, Senate Bill (SB) 1016, and the California Green Building Standards Code (CALGreen Code). Therefore, while Alternative 2 would generate more employees than the proposed project, consistent with the proposed project, Alternative 2 would result in less than significant impacts related to utilities.

Wildfire. Under Alternative 2, no new development would occur on the project site and no site improvements would be implemented. The project site would remain developed with the existing office/industrial building and would operate as an office consistent with the existing Site Development Permit. No modifications to existing site access or infrastructure would occur, thus no impacts related to emergency response or evacuation plans would occur. The project site is not located in a very high fire hazard severity zone and Alternative 2 would not exacerbate wildfire risks, require the installation or maintenance of associate infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment, or expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff post-fire slope instability, or drainage changes. Therefore, although the proposed project would result in less than significant impacts related to wildfire, impacts under Alternative 2 would be less than the proposed project because no new development would occur.

5.4.2.3 Overview of Potential Impacts/Comparison to Proposed Project

As stated above, under Alternative 2, no new development would occur on the project site and no site improvements (aside from potential interior tenant improvements) would be implemented. The project site would remain developed with the existing office/industrial building and would operate as an office consistent with the existing Site Development Permit. Therefore, Alternative 2 would not result in any construction-related impacts. Alternative 2 and the proposed project are similar in that both would result in no impacts to agriculture and forestry resources, land use and planning, and mineral resources; and both would result in less than significant impacts to population and housing, public services, recreation, and utilities and service systems. However, because Alternative 2 would not require demolition activities or construction of a new building, the impacts of Alternative 2 would be less than the impacts of the proposed project for aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, tribal cultural resources, and wildfire. No regulatory compliance measures would be required for Alternative 2.

As stated above, Alternative 2 would result in a net increase in 844 daily trips compared to the proposed project, and therefore, would result in an increase in operational impacts to air quality,

energy, greenhouse gas emissions, and transportation, compared to the proposed project. As with the proposed project, Alternative 2 would be required to implement **MMs GHG-1** and **TRA-1** to aid in the reduction of GHG emissions and VMT. Consistent with the proposed project, Alternative 2 would result in a significant and unavoidable transportation impact related to VMT and a significant and unavoidable cumulatively considerable impact related to GHG emissions.

5.4.2.4 Project Objectives

Alternative 2 would be potentially consistent with the following three project objectives:

7. Cluster land uses in proximity to other similar industrial/commercial uses and close to access points of the State highway system, such as State Route 241, to reduce traffic congestion on surface streets and reduce local air pollution emissions from vehicle sources;

1. Provide a permitted land use that is consistent with the General Plan land use and zoning designation and that helps fulfill the demands of businesses and residents in the City of Lake Forest; and

5. Provide employment opportunities and facilitate job-creation for the residents of Lake Forest and surrounding communities to reduce the need for members of the local workforce to commute outside the area for employment.

Under Alternative 2 the existing building would operate as an office consistent with the existing Site Development Permit. The project site would continue to be occupied by a 144,906 sq ft, two story tilt-up office/industrial building and associated parking and landscaping. Therefore, Alternative 2 would not be consistent with the following four project objectives:

4. Provide industrial development that is attractive and minimizes conflicts with the surrounding existing uses;

2. Re-envision an existing underutilized office/industrial property to build a new financially and environmentally sustainable building;

3. Re-envision an existing underutilized office/industrial property to provide a building type that is flexible and accommodating to a variety of permitted land uses to extend the useful life of the building; and

6. Redevelop an underutilized site for improvement and enhanced contribution to the City of Lake Forest's fiscal benefits.

5.4.3 Alternative 3: Reduced Project Alternative

5.4.3.1 Description

Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new 35 ft tall, 124,352.25 sq ft tilt-up

concrete industrial building would be constructed. The building would include 7,500 sq ft of office space, 48,750 sq ft of manufacturing space, and 68,102.25 sq ft of warehouse space. The additional available square footage at the project site that would result from the decreased building square footage would be designated for vehicle and truck parking. Consistent with the proposed project, Alternative 3 would include a gated truck loading area, truck and auto parking spaces, and new landscaping throughout the site.

Under this alternative, an estimated 139 individuals would be employed at the project site.[2] Alternative 3 is expected to generate 429 daily trips, including 55 a.m. and 58 p.m. peak-hour trips, as calculated using rates from the ITE Trip Generation Manual, 11th Edition (2021) for Land Use Codes 140 (Manufacturing), 150 (Warehousing), and 710 (General Office Building). Therefore, Alternative 3 would result in a net decrease of 298 daily trips compared to the proposed project.

The potential impacts associated with Alternative 3 are described below. All regulatory compliance and mitigation measures prescribed for the proposed project would also be applicable to Alternative 3.

5.4.3.2 Environmental Analysis

Aesthetics. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping throughout the site would be constructed. Alternative 3 would not result in a substantial adverse effect on views of a scenic vista because the project site is surrounded by existing development on all sides, and no scenic vistas are visible from the project site. Furthermore, the proposed building would only be 75 percent the size of the proposed project building, which would reduce the building's bulk and scale from public view points. Additionally, Alternative 3 would not result in impacts to scenic resources within a State Scenic Highway as there are no officially listed or eligible State Scenic Highways in the vicinity of the project site. Alternative 3 would introduce new sources of light and glare consistent with the proposed project and would be developed consistent with all applicable zoning development standards, General Plan goals and policies related to aesthetics and scenic quality, and the Citywide Design Guidelines.

[2] Employment numbers were estimated based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) rates for Land Uses 140 – "Manufacturing", 150 – "Warehousing", and 710– "General Office Building,". Alternative 3 would generate approximately 1.710 average daily vehicle trips per 1,000 square feet gross floor area of warehousing uses and average 5.05 daily vehicle trips per employee for warehousing uses. 1.710 ÷ 5.05 = 0.339 employees per 1,000 square feet gross floor area of warehousing uses. 0.339 x 68.10225 thousand square feet = 23 warehousing employes. Alternative 3 would generate approximately 4.750 average daily vehicle trips per 1,000 square feet gross floor area of manufacturing uses and average 2.510 daily vehicle trips per employee for manufacturing uses. 4.750 ÷ 2.510 = 1.892 employees per 1,000 square feet gross floor area of manufacturing uses. 1.892 x 48.750 thousand square feet = 92 manufacturing employes. Alternative 3 would generate approximately 10.84 average daily vehicle trips per 1,000 square feet gross floor area of office uses and average 3.33 daily vehicle trips per employee for office uses. 10.84 ÷ 3.33 = 3.255 employees per 1,000 square feet gross floor area of office uses 3.255 x 7.5 thousand square feet = 24 office employes. 23 warehousing employees + 92 manufacturing employees + 24 office employees = 139 total employees.

Consistent with the proposed project, Alternative 3 would result in less than significant impacts related to aesthetics but would have nominally less impacts associated with aesthetic resources because the bulk and scale of the building would be smaller when seen from public view points.

Agricultural Resources. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. Consistent with the proposed project, the existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed consistent with the project site's existing General Plan land use designation and zoning. As such, Alternative 3 would not convert farmland to a non-agricultural use, conflict with existing zoning for an agricultural use or Williamson Act contract, conflict with existing zoning for forest land or timberland, or result in the loss of forest land or conversion of forest land to non-forest use. Consistent with the proposed project, Alternative 3 would not result in impacts related to agriculture or forestry resources.

Air Quality. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. Consistent with the proposed project, the existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would result in construction-period and operational emissions; however, emissions associated with Alternative 3 would be reduced compared to the proposed project due to the smaller building size and fewer associated daily vehicle trips (a net decrease of 298 trips compared to the proposed project). Although emission under Alternative 3 would be slightly reduced compared to the proposed project, mitigation measures prescribed for the proposed project would also be required for Alternative 3 to reduce potential impacts to levels below significance. Alternative 3 is not defined as a significant project pursuant to the South Coast Air Quality Management District's (SCAQMD) *CEQA Air Quality Handbook* and would not require a change to the General Plan land use designation or the current zoning and would be consistent with the City's General Plan and Zoning Ordinance. Therefore, Alternative 3 would not conflict with or obstruct implementation of the applicable air quality plan. Additionally, Alternative 3 would not include any activities or operations that would generate objectionable odors, and once operational, the project would not be a source of odors. Therefore, although the proposed project would result in less than significant impacts related to air quality with implementation of mitigation measures, impacts under Alternative 3 would be nominally less than the proposed project because Alternative 3 would result in the construction and operation of a smaller building with 298 fewer daily vehicle trips compared to the proposed project.

Biological Resources. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would not result in adverse effects on any riparian habitat or other sensitive natural community or result in adverse effects on state or federally protected wetlands as none of these resources are present at the project site. Similarly, Alternative 3 would not conflict with any local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted

habitat conservation plan as there are no applicable local policies or habitat conservation plans involving the project site. Additionally, Alternative 3 would not result in impacts to listed, candidate, non-listed sensitive, or special-status plant or wildlife species as these species are not expected to occur on site due to lack of suitable habitat. However, Alternative 3 would require demolition and ground-disturbing activities including the removal of vegetation. As such, consistent with the proposed project, Alternative 3 would be required to implement regulatory compliance measures to avoid impacts to nesting birds protected under the Migratory Bird Treaty Act and the California Fish and Game Code during construction of the project. Therefore, consistent with the proposed project, Alternative 3 would result in less than significant impacts to biological resources with implementation of regulatory compliance measures.

Cultural Resources. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would not cause a substantial adverse change in the significance of a historical resource as neither the project site nor existing structure qualifies as an "historical resource" as defined by CEQA. Alternative 3 would have the potential to impact previously undiscovered archaeological resources and human remains because it would require ground-disturbing activities. As such, consistent with the proposed project, Alternative 3 would be required to implement regulatory compliance measures requiring proper procedures be followed in the unlikely event that previously unknown human remains or archaeological resources are discovered during construction of the project. Therefore, consistent with the proposed project, Alternative 3 would result in less than significant impacts to cultural resources with implementation of regulatory compliance measures.

Energy. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would require energy for both construction and operation; however, energy consumption associated with Alternative 3 would be reduced compared to the proposed project due to the smaller building size and fewer daily vehicle trips (a net decrease of 298 trips compared to the proposed project). Alternative 3 would adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. As such, Alternative 3 would not result in the wasteful, inefficient, or unnecessary consumption of energy resources and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, although the proposed project would result in less than significant impacts related to energy, impacts under Alternative 3 would be less than the proposed project because Alternative 3 would result in the construction and operation of a smaller building with 298 fewer daily vehicle trips compared to the proposed project.

Geology and Soils. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would not result in any impacts associated with the rupture of a known earthquake fault,

seismic-related ground failure, landslides and unstable slopes, lateral spreading and liquefaction, subsidence and collapsible soils, or expansive soils as these hazards are not present at the project site. Similarly, Alternative 3 would not result in any impacts related to alternative wastewater disposal systems as the existing building is connected to the City's wastewater system. Consistent with the proposed project, there are corrosive soils on the project site, the potential for strong seismic ground shaking, and the potential to impact unknown paleontological resources during ground disturbance. Therefore, mitigation measures prescribed for the proposed project would also be required for Alternative 3 to reduce potential impacts to levels below significance. Similarly, because Alternative 3 would require ground disturbance and expose soil during construction, consistent with the proposed project, regulatory compliance would be required to avoid impacts related to soil erosion. Therefore, consistent with the proposed project, Alternative 3 would result in less than significant impacts to geology and soils with implementation of regulatory compliance and mitigation measures.

Greenhouse Gas Emissions. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would result in greenhouse gas emissions during both construction and operation related to mobile sources (e.g., vehicle trips), area sources (e.g., maintenance activities and landscaping), stationary sources (e.g., fire pump), and indirect emission from sources associated with energy consumption. However, greenhouse gas emissions associated with Alternative 3 would likely be reduced compared to the proposed project due to the smaller building size and fewer daily vehicle trips (a net decrease of 298 trips compared to the proposed project). Alternative 3 would comply with existing State regulations adopted to achieve the overall greenhouse gas emissions reduction goals and would not conflict with the policies in the 2020–2024 and 2024–2050 RTP/SCS. However, consistent with the proposed project, because Alternative 3 would result in significant and unavoidable impacts related to VMT, Alternative 3 would conflict with the goals of the 2022 Scoping Plan. Although mass GHG emission impacts under Alternative 3 would be less than the proposed project because Alternative 3 would result in the construction and operation of a slightly smaller building with 298 fewer daily vehicle trips compared to the proposed project, consistent with the proposed project, Alternative 3 would conflict with the goals of the 2022 Scoping Plan and result in a significant and unavoidable cumulatively considerable impact related to GHG emissions.

Hazards and Hazardous Materials. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would not result in any impacts associated with being included on a hazardous materials site pursuant to Government Code Section 65962.5, being located within an airport land use plan or within two miles of a public airport, or exposing people or structures to a significant risk of loss, injury or death involving wildland fires as the project site is not located in an area impacted by any of these hazards. Alternative 3 would be subject to existing hazardous materials regulations and programs including requirements for Hazardous Materials Business Plans (HMBPs) and Risk Management Plans (RMPs) for facilities handling significant quantities of hazardous materials, OSHA and Cal/OSHA regulations, CCR Title 8; the CGP; and USDOT, the RCRA, and State

regulations. Therefore, Alternative 3 would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials or emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Similarly, compliance with federal and State regulations pertaining to the handling of asbestos containing materials (ACMs) would ensure that impacts associated with the removal of ACMs or potential ACMs would be less than significant during demolition of the existing structure. Therefore, Alternative 3 would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. All site access points and driveway aprons would be designed and constructed to adequate widths for public safety pursuant to OCFA and City requirements and structures, roadways, and facilities would be designed and constructed in accordance with California Fire Code requirements. Therefore, implementation of the Alternative 3 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Consistent with the proposed project, Alternative 3 would result in less than significant impacts related to hazards and hazardous materials.

Hydrology and Water Quality. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would not result in any impacts associated with impeding or redirecting flood flows as the project site is located within an area of minimal flood hazard. Construction and ground-disturbing activities associated with Alternative 3 would result in an increased potential for soil erosion and discharge of pollutants to receiving waters. However, Alternative 3 would be required to comply with the Construction General Permit and the City's Municipal Code requirements as stipulated by regulatory compliance measures, which would ensure that Alternative 3 would not result in any construction-period impacts to water quality standards, erosion or siltation, polluted runoff, or obstruction of a water quality control plan or sustainable groundwater management plan. Similarly, implementation of regulatory compliance measures, which entail the preparation of a Final Water Quality Management Plan (WQMP) consistent with the City's Municipal Separate Storm Sewer System (MS4) permit, and preparation of a Final Hydrology Study, would ensure Alternative 3 would not result in operational impacts related to water quality standards, erosion or siltation, flooding, exceeding capacity of storm water drainage systems, groundwater supplies or recharge, polluted runoff, or obstruction of a water quality control plan or sustainable groundwater management plan. The project site is not located within a flood zone, tsunami hazard zone, at risk of inundation due to seiche, or at risk of inundation due to dam failure. Therefore, Alternative 3 would not result in the release of pollutants due to a flood, dam inundation, tsunami, or seiche. Consistent with the proposed project, Alternative 3 would result in less than significant impacts related to hydrology and water quality with implementation of regulatory compliance measures.

Land Use and Planning. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed consistent with the project site's existing General Plan land use designation and zoning. As such,

Alternative 3 would not result in the physical division of an established community or 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 as the existing land use is consistent with the project site's General Plan land use designation and zoning. Therefore, consistent with the proposed project, Alternative 3 would not result in impacts related to land use and planning.

Mineral Resources. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed consistent with the project site's existing General Plan land use designation and zoning. Alternative 3 would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site as there are no known mineral resources in the vicinity of the project site. Therefore, consistent with the proposed project, Alternative 3 would not result in impacts related to mineral resources.

Noise. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would not result in any impacts associated with excessive noise levels associated with being located in the vicinity of a private airstrip or airport. Construction of Alternative 3 would generate noise and vibration. Implementation of regulatory compliance measures would ensure that Alternative 3 would comply with the allowable construction hours and vibration levels established in the City's Municipal Code and construction noise impacts associated with Alternative 3 would be less than significant. Therefore, although the proposed project would result in less than significant impacts related to noise and vibration, construction-related noise impacts under Alternative 3 would be the same as the proposed project while operational noise impacts under Alternative 3 would be reduced compared to the proposed project because Alternative 3 would have less operational noise due to the smaller building size and correspondingly reduced number of employees and daily vehicle trips.

Population and Housing. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would generate short-term construction jobs but it is expected that local and regional construction workers would serve the construction needs of the site and substantial population growth or demand for housing would not occur during construction. Alternative 3 would not result in direct population growth because the proposed use is not residential; however, Alternative 3 is anticipated to generate 139 new jobs within the City of Lake Forest (48 fewer jobs than the proposed project). It is reasonable to assume that the majority of these positions would be filled by existing City or County residents. Therefore, Alternative 3 would not result in a significant increase to the City's population due to hiring out of area employees. Additionally, Alternative 3 would be consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its General Plan land use designation and zoning. Alternative

3 would not result in the displacement of people or housing and would not require the construction of replacement housing elsewhere. Therefore, although Alternative 3 would result in 48 fewer jobs than the proposed project, consistent with the proposed project, Alternative 3 would result in less than significant impacts to population and housing.

Public Services. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 is anticipated to generate 139 new jobs in the City (48 fewer jobs than the proposed project) but it is reasonable to assume that the majority of these positions would be filled by existing City or County residents and therefore would not result in a significant increase to the City's population. Additionally, Alternative 3 would be consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its General Plan land use designation and zoning. Therefore, similar to the proposed project, the demand for new or expanded fire protection and police services under Alternative 3 would be negligible. Furthermore, Alternative 3 would be required to comply with the California Fire Code, OCFA requirements, and CPTED techniques. Alternative 3 does not include a residential component; therefore, it would not directly generate any schoolchildren, the addition of which could cause negative impacts to existing or future school facilities or programs. As such, Alternative 3 would result in a similar demand for public services as the proposed project and would not require the construction of new public facilities or the upgrade of existing facilities, which could cause significant environmental impacts. Therefore, although Alternative 3 would result in 48 fewer jobs compared to the proposed project, consistent with the proposed project, Alternative 3 would result in less than significant impacts related to public services.

Recreation. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 is anticipated to generate 139 new jobs within the City of Lake Forest (48 fewer jobs than the proposed project). It is reasonable to assume that the majority of these positions would be filled by existing City or County residents and Alternative 3 would not result in a significant increase to the City's population due to hiring out of area employees. Additionally, Alternative 3 would be consistent with the site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its General Plan land use designation and zoning. As such, Alternative 3 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Alternative 3 would not include recreational facilities or develop land uses that would lead to a significant increase in the demand for parks and recreational facilities, which would require the construction or expansion of recreational facilities that might have an adverse effect on the environment. Therefore, although Alternative 3 would result in 48 fewer jobs compared to the proposed project, consistent with the proposed project, Alternative 3 would result in less than significant impacts related to recreation.

Transportation/Traffic. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would generate 429 daily trips, including 55 a.m. and 58 p.m. peak-hour trips (a net decrease in 298 daily trips compared to the proposed project). Alternative 3 would comply with applicable City General Plan goals and policies related to transportation and traffic and would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Additionally, in accordance with the California Fire Code, structures, roadways, and facilities would be designed, constructed, and maintained to maintain appropriate emergency/evacuation access to and from the project site and all site access points and driveway aprons would be designed and constructed to adequate widths for public safety pursuant to the OCFA. Therefore, Alternative 3 would not result in inadequate emergency access or substantially increase hazards due to a geometric design feature. Although Alternative 3 would result in a decrease in daily trips compared to the proposed project, Alternative 3 would exceed the City VMT threshold (Target VMT Rate) and there are no feasible mitigation measures that can reliably guarantee that VMT can be reduced to below the City's threshold. Therefore, although Alternative 3 would result in a decrease in daily trips compared to the proposed project, consistent with the proposed project, Alternative 3 would result in a significant and unavoidable transportation impact related to VMT.

Tribal Cultural Resources. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 would have the potential to impact previously undiscovered tribal cultural resources because it would require ground-disturbing activities. As such, mitigation measures prescribed for the proposed project would also be required for Alternative 3 to reduce potential impacts to levels below significance. Therefore, consistent with the proposed project, Alternative 3 would result in less than significant impacts to tribal cultural resources with implementation of mitigation measures.

Utilities and Service Systems. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Consistent with existing conditions, the IRWD would continue to provide domestic, recycled water, and wastewater collection services to the project site and the City of Lake Forest would continue to provide solid waste collection at the project site. Alternative 3 would require new utility connections which would be reviewed and approved by the City's Public Works Department and the utility provider. Significant environmental effects would not occur due to the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities under Alternative 3. Alternative 3 would be consistent with the City's General Plan land use designation for the project site and would not represent unplanned growth given that the project site would be developed consistent with its land use and zoning. The water demand, wastewater generation, and solid waste generation associated with Alternative 3 would be

reduced compared to the proposed project because of the smaller building size and fewer number of employees. Consistent with the proposed project, sufficient water supplies are available to serve the project, the wastewater treatment provider has adequate capacity to serve the project's projected demand, and the project would not generate solid waste in excess of local standards or in excess of the capacity of local infrastructure. Additionally, Alternative 3 would comply with federal, State, and local statutes and regulations related to solid waste, including OCWR's CIWMP and agency permits, AB 341, SB 1016, and the CALGreen Code. Therefore, although Alternative 3 would result in reduced water demand, wastewater generation, and solid waste compared to the proposed project, consistent with the proposed project, Alternative 3 would result in less than significant impacts to utilities and service systems.

Wildfire. Under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 is not located within a very high fire hazard severity zone, landslide hazard zone, flood zone, or an area at risk of wildfire. Therefore, Alternative 3 would not exacerbate wildfire risks or expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff post-fire slope instability, or drainage changes. Because Alternative 3 does not include any emergency facilities, does not serve as an emergency evacuation route, and construction activities would not impact the use of roadways near the project site, Alternative 3 would not physically impair or otherwise interfere with emergency response or evacuation in the project vicinity. Additionally, all structures and internal circulation paths associated with Alternative 3 would be developed in accordance with the City and OCFA emergency access standards. Therefore, Alternative 3 would not impair an adopted emergency response or emergency evacuation plan. Installation of all project-related utility improvements under Alternative 3 would be implemented in an urbanized setting in accordance with the current California Building Code, California Fire Code, and applicable local ordinances, and impacts related to the installation or maintenance of infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts to the environment would be less than significant. Therefore, consistent with the proposed project, Alternative 3 would result in less than significant impacts related to wildfire.

5.4.3.3 Overview of Potential Impacts/Comparison to Proposed Project

As stated above, under Alternative 3, the square footage of the proposed project would be reduced by 25 percent and all building uses (e.g., office, manufacturing, and warehouse) would be proportionally reduced. The existing office/industrial building would be demolished and a new industrial building with truck and auto parking spaces, and new landscaping would be constructed. Alternative 3 and the proposed project are similar in that both would result in no impacts to agriculture and forestry resources, land use and planning, and mineral resources; and both would result in less than significant impacts to biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, population and housing, public services, recreation, tribal cultural resources, and wildfire. However, because Alternative 3 would result in the development of a slightly smaller building, would result in 48 fewer employees, and would result in a net decrease of 298 daily trips compared to the proposed project, the impacts of

Alternative 3 would be less than the impacts of the proposed project for aesthetics, air quality, energy, utilities and service systems, and noise. Consistent with the proposed project, Alternative 3 would result in a significant and unavoidable transportation impact related to VMT and a significant and unavoidable cumulatively considerable impact related to GHG emissions. All regulatory compliance and mitigation measures prescribed for the proposed project would also be applicable to Alternative 3.

5.4.3.4 Project Objectives

Alternative 3 would be potentially consistent with all seven of the project objectives; however, due to the reduced size of the building and fewer job offerings, the objectives would not be met to the same degree as the proposed project:

1. Provide a permitted land use that is consistent with the General Plan land use and zoning designation and that helps fulfill the demands of businesses and residents in the City of Lake Forest;

2. Re-envision an existing underutilized office/industrial property to build a new financially and environmentally sustainable building;

3. Re-envision an existing underutilized office/industrial property to provide a building type that is flexible and accommodating to a variety of permitted land uses to extend the useful life of the building;

4. Provide industrial development that is attractive and minimizes conflicts with the surrounding existing uses;

5. Provide employment opportunities and facilitate job-creation for the residents of Lake Forest and surrounding communities to reduce the need for members of the local workforce to commute outside the area for employment;

6. Redevelop an underutilized site for improvement and enhanced contribution to the City of Lake Forest's fiscal benefits; and

7. Cluster land uses in proximity to other similar industrial/commercial uses and close to access points of the State highway system, such as State Route 241, to reduce traffic congestion on surface streets and reduce local air pollution emissions from vehicle sources.

5.5 IDENTIFICATION OF ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an Environmentally Superior Alternative among the alternatives evaluated in an EIR. Table 5.A provides, in summary format, a comparison of the level of impacts of each alternative compared to the proposed project. Based on the above analysis, Alternative 1, the No Project Alternative, would have the least impact to the environment because it would not result in any construction activities on the project site or operational uses. While Alternative 1 would avoid the impacts of the proposed project, it would not achieve the beneficial impacts of the proposed

project including the re-envisioning of an existing underutilized office/industrial property to provide a building type that is flexible and accommodating to a variety of permitted land uses to extend the useful life of the building, and creating employment opportunities. While Alternative 1 would be environmentally superior in the technical sense in that contribution to the aforementioned impacts would not occur, it would fail to achieve all but one of the project's objectives. *State CEQA Guidelines* Section 15126.6(e)(2) provides that, if the No Project/No Build Alternative is the Environmentally Superior Alternative, then the EIR shall also identify an Environmentally Superior Alternative among the other alternatives.

With the exception of Alternative 1, the environmentally superior alternative would be Alternative 3, the Reduced Intensity Alternative. As discussed above and shown in Table 5.A below, Alternative 3 would result in similar or reduced environmental impacts compared to the proposed project. Although Alternative 3 would achieve all of the project objectives, it would not achieve those objectives to the same degree as the proposed project. Additionally, Alternative 3, consistent with the proposed project, would result in a significant and unavoidable transportation impact related to VMT and a significant and unavoidable cumulatively considerable impact related to GHG emissions. While Alternative 2 would reduce some of the environmental impacts compared to the proposed project, it would increase operational impacts associated with air quality, energy, greenhouse gas emissions, and transportation due to a net increase in 844 daily trips compared to the proposed project. Similar to Alternative 3 and the proposed project, Alternative 2 would also result in a significant and unavoidable transportation impact related to VMT and significant and unavoidable cumulatively considerable impact related to GHG emissions. Furthermore, Alternative 2 would only meet three of the project objectives. For the reasons presented above, Alternative 3 was identified as the Environmentally Superior Alternative.

Table 5.A: Comparison of the Environmental Impacts of the Proposed Project and Project Alternatives

Impact Area	Proposed Project Impact After Incorporation of Mitigation (if required)	Alternative 1: No Project Alternative	Alternative 2: Previous Use and Associated Site Development Permit Alternative	Alternative 3: Reduced Project Alternative
Aesthetics	Less than Significant	Fewer	Fewer	Fewer
Agricultural Resources	No Impact	Similar	Similar	Similar
Air Quality	Less than Significant[1]	Fewer	More (Operational Impacts)	Fewer
Biological Resources	Less than Significant[2]	Fewer	Fewer	Similar
Cultural Resources	Less than Significant[2]	Fewer	Fewer	Similar
Energy	Less than Significant	Fewer	More (Operational Impacts)	Fewer
Geology and Soils	Less than Significant[1]	Fewer	Fewer	Similar
Greenhouse Gas Emissions	Significant and Unavoidable[1]	Fewer	Similar	Similar
Hazards and Hazardous Materials	Less than Significant	Fewer	Fewer	Similar
Hydrology and Water Quality	Less than Significant[2]	Fewer	Fewer	Similar
Land Use and Planning	No Impact	Similar	Similar	Similar
Mineral Resources	No Impact	Similar	Similar	Similar
Noise	Less than Significant[2]	Fewer	Fewer	Similar
Population and Housing	Less than Significant	Fewer	Similar	Similar
Public Services	Less than Significant	Fewer	Similar	Similar
Recreation	Less than Significant	Fewer	Similar	Similar
Transportation and Traffic	Significant and Unavoidable[1]	Fewer	Similar	Similar
Tribal Cultural Resources	Less than Significant[1]	Fewer	Fewer	Similar
Utilities and Service Systems	Less than Significant	Fewer	Similar	Fewer
Wildfire	Less than Significant	Fewer	Fewer	Similar

[1] Mitigation Measure(s) Required
[2] Regulatory Compliance Measure(s) Required

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6.0 OTHER CEQA CONSIDERATIONS

6.1 SUMMARY OF SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(c) of the *State CEQA Guidelines* requires that an Environmental Impact Report (EIR) describe any significant impacts that cannot be avoided. Specifically, Section 15126.2(c) states that an EIR shall:

> "Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described."

The Executive Summary of this document (Chapter 1.0) contains a detailed summary that identifies the proposed project's environmental impacts as compared to existing conditions, proposed mitigation measures, and the level of significance of any impacts after mitigation. As described in further detail in Chapter 4.0, Existing Environmental Setting, Environmental Analysis, Impacts, and Mitigation Measures, implementation of the proposed project would result in no impact to the following resource topics: Agricultural and Forestry Resources and Mineral Resources. Additionally, as described in Chapter 4.0, with implementation of regulatory compliance measures and/or mitigation measures the proposed project would result in less than significant impacts to the following resources topics: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. Implementation of the proposed project would result in impacts related to vehicle miles traveled (VMT) and a cumulatively considerable impact related to greenhouse gas emissions (GHGs) that would both be considered significant, adverse, and unavoidable after all mitigation is applied. These impacts are described further below and in detail in Chapter 4.0.

6.1.1 Transportation and Traffic (Project-Specific Vehicle Miles Traveled Impact)

As discussed in Section 4.17, Transportation and Traffic, of this Draft EIR, the proposed project's VMT rate would exceed the City of Lake Forest's (City) VMT threshold (Target VMT Rate) by 20 percent. In accordance with the Lake Forest Municipal Code, the proposed project is required to implement feasible Traffic Demand Management (TDM) measures that would reduce project VMT, as stipulated by **Mitigation Measure (MM) TRA-1**. Providing bike lanes and an enhanced bikeway network, as required by **MM TRA-1**, can increase access to and from transit hubs. This encourages a mode shift from vehicles to bicycles and displaces VMT. According to the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (December 2021) (CAPCOA Handbook), the addition of bike lanes (T-20 Expand Bikeway Network) can provide a maximum VMT reduction of 0.5 percent. Assuming this TDM measure could achieve the maximum 0.5 percent VMT reduction, the reduction achieved would not reduce the project's VMT to below

the City's VMT threshold. Therefore, even with implementation of **MM TRA-1** (addition of bike lanes), the proposed project would result in a significant and unavoidable impact related to VMT.

6.1.2 Greenhouse Gas Emissions (Cumulative Impact)

As discussed in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR, the proposed project would not result in any significant impacts related to mass emissions of GHG, and no mitigation is required. However, the proposed project would conflict with the goals of the 2022 Scoping Plan related to VMT. As described directly above under Section 6.1.1 and in Section 4.17, Transportation and Traffic, the proposed project would be required to implement TDM measures as specified in **MM TRA-1** to promote alternative transportation with the intent of reducing VMT. While implementation of this TDM measure could reduce VMT, the proposed project would still result in a significant and unavoidable impact related to VMT. As such, the proposed project would not contribute to its "fair share" of emission reductions required to support SB 743 and the goals of the 2022 Scoping Plan related to VMT. Because the proposed project would conflict with the plans and policies adopted for the purpose of reducing the emissions of GHGs, including the 2022 Scoping Plan, the proposed project would result in a significant and unavoidable cumulatively considerable impact related to GHG emissions.

6.2 ENERGY IMPACTS

According to Section 15126.2(b) of the *State CEQA Guidelines*, "[i]f analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption use of energy, or wasteful use of energy resources, the EIR shall mitigate that energy use."

As described in Section 4.6, Energy, of this Draft EIR, the primary use of energy associated with construction and operation of the proposed project would be the consumption of fuel (e.g., diesel and gasoline) for vehicle trips. Operation of the proposed project would also use electricity for heating and cooling of the building and building lighting. Construction and operation of the proposed project would be required to comply with State and local policies and regulations including the Public Resources Code (PRC), the California Green Building Standards Code (CALGreen Code), Title 24, Part 6 of the California Code of Regulations (CCR), the California Energy Efficiency Strategic Plan, Senate Bill (SB) 100, the California Renewable Portfolio Standards Program, and the City of Lake Forest General Plan. These State and local policies and regulations are designed to promote efficient use of energy resources and minimize unnecessary and wasteful use to the maximum extent feasible. Furthermore, the proposed project would be designed to meet sustainability goals, including the CALGreen Code, Assembly Bill (AB) 1881 water efficient landscape requirements, and would comply with the SCAQMD's Warehouse Indirect Source Rule (ISR), which is designed to reduce emissions from day-to-day warehouse operations. The proposed project would also be seeking Leadership in Energy and Environmental Design (LEED) certification through the applicant's LEED Volume program. Some of the features included in the design would include, but not be limited to, drought-tolerant landscaping, low-flow fixtures, high-efficiency lighting, solar, and infrastructure for electric vehicle charging. Therefore, construction and operation of the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy.

6.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(d) of the *State CEQA Guidelines* requires that an EIR consider and discuss significant irreversible changes that would be caused by implementation of a proposed project. The *State CEQA Guidelines* specify that the use of nonrenewable resources during the initial and continued phases of a project should be discussed because a large commitment of such resources makes removal or non-use thereafter unlikely. Primary and secondary impacts (e.g., a highway improvement that provides access to a previously inaccessible area) should also be discussed because such changes generally commit future generations to similar uses. Irreversible damage can also result from environmental accidents associated with a project and should be discussed.

The types and level of development associated with the proposed project would consume limited, slowly renewable, and nonrenewable resources. This consumption would occur during construction of the proposed project and would continue throughout the operational lifetime of the proposed project. The development of the proposed project would require a commitment of resources that would include (1) building materials, (2) fuel and operational materials/resources, and (3) fuel for the transportation of goods and people to and from the project site.

Construction of the proposed project would require consumption of resources that are not replenishable or that may renew so slowly as to be considered nonrenewable. These resources would include certain types of lumber and other forest products (e.g., hardwood lumber), aggregate materials used in concrete and asphalt (e.g., sand, gravel, and stone), metals (e.g., steel, copper, and lead), petrochemical construction materials (e.g., plastics), and water. Fossil fuels (e.g., gasoline and oil) would also be consumed in the use of construction vehicles and equipment. Lumber, aggregate materials, metals, and petrochemical construction materials would be used to construct the proposed building. However, as described in Section 4.19, Utilities and Service Systems, of this Draft EIR, once construction is complete, the proposed project would not require additional consumption of these materials and, should the proposed building be demolished in the future, some of these materials may be recycled or salvaged for future uses as required by the CALGreen Code and SB 1374. Water, which is a limited, slowly renewable resource, would also be consumed during construction of the proposed project. However, as described in Section 4.19, given the temporary nature and short duration of construction activities, water consumption during construction would result in a less than significant impact on water supplies. Furthermore, the use of construction vehicles and equipment would require the consumption of nonrenewable fossil fuels such as natural gas and oil. As with other resources consumed during construction, the consumption of nonrenewable fossil fuels for energy use would occur on a temporary basis during construction of the proposed project. As described in Section 4.6, Energy, of this Draft EIR, the proposed project would comply with existing requirements for fuel efficiency and use of renewable energy sources pursuant to the PRC and the CALGreen Code, which would minimize the consumption of non-renewable resources during construction to the maximum extent feasible.

Operation of the proposed project would continue to expend similar non-renewable resources that are currently consumed within Lake Forest and on site. These include energy resources such as electricity, petroleum-based fuels, fossil fuels, and water. Energy resources would be used for heating and cooling the building and building lighting. Fossil fuels are primary energy sources for project operation. This existing, finite energy source would thus be incrementally reduced. As

described in Section 4.6, the proposed project would comply with existing requirements for energy efficiency and use of renewable energy sources as required by Title 24, Part 6 of the CCR, the CALGreen Code, the California Energy Efficiency Strategic Plan, SB 100, the California Renewable Portfolio Standards Program, the PRC, and the City of Lake Forest General Plan, which would minimize the consumption of non-renewable resources during operation to the maximum extent feasible.

The future tenant of the new industrial building is unknown at this time, and it is possible project operation may result in the use or handling of hazardous materials depending on what types of manufacturing activities would occur on the project site. Nevertheless, such materials would be used, handled, stored, and disposed of in accordance with applicable government regulations and standards that would serve to protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials, including requirements for Hazardous Materials Business Plans (HMBPs) and Risk Management Programs (RMPs) for facilities handling significant quantities of hazardous materials, Occupational Safety and Health Administration (OSHA) and the Division of Occupational Safety and Health of California (Cal/OSHA) regulations, CCR Title 8; the Construction General Permit (CGP); and Department of Transportation (USDOT), the Resource Conservation and Recovery Act (RCRA), and State regulations.

In summary, construction and operation of the proposed project would commit the use of slowly renewable and non-renewable resources and would limit the availability of these resources on the project site for future generations or for other uses during the life of the proposed project. However, the continued use of such resources during operation would be on a relatively small scale, consistent with all State and local policies and regulations referenced above aimed at minimizing the inefficient use of non-renewable resources. As a result, the use of non-renewable resources in this manner would not result in significant irreversible changes to the environment under the proposed project.

6.4 GROWTH-INDUCING IMPACTS

Sections 15126(d) and 15126.2(e) of the *State CEQA Guidelines* require that an EIR analyze growth-inducing impacts and discuss the ways in which a proposed project could foster economic or population growth or construction of additional housing, either directly or indirectly, in the surrounding environment. Section 15126.2(d) of the *State CEQA Guidelines* also requires a discussion of the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. A project is typically considered growth inducing: (1) if it would foster economic or population growth or the construction of additional housing; (2) if it would remove obstacles to population growth or tax community services to the extent that the construction of new facilities would be necessary; or (3) if it would encourage or facilitate other activities that cause significant environmental effects.[1] Examples of projects likely to have significant growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or industrial parks in areas that are currently only sparsely developed or are undeveloped.

[1] *State CEQA Guidelines*. 2023. Section 15126.2(d).

The proposed project consists of the redevelopment of an existing office/industrial building with a new industrial building and associated parking and landscaping. The proposed project does not include a housing component. The area surrounding the project site is already highly urbanized and developed with a mix of residential, business park, regional park/open space, and industrial land uses. Due to the developed nature of the area surrounding the project site, population growth within the vicinity of the project site is highly constrained and implementation of the proposed project would not remove impediments to population growth in the area surrounding the project site.

As described in Section 4.14, Population and Housing, of this Draft EIR, the construction of the proposed project would provide short-term construction jobs over an approximately 12-month period. Construction jobs would be temporary and would be specific to the variety of construction activities. The work requirements of most construction projects are highly specialized so construction workers remain at a job site only for the limited time in which their specific skills are needed to complete a particular phase of the construction process. Given the relatively short duration of construction, the relatively small size of the proposed project, and the availability of local and regional construction workers, project-related construction workers would not be expected to relocate their places of residence as a consequence of working on the project site. Once operational, the proposed project would not result in direct population growth because the proposed project is not a residential use or does not include a residential component; and therefore, would not add new residents at the project site. The proposed industrial building would generate approximately 187 new jobs in the City of Lake Forest. Due to the large population and the existing workforce within Orange County and the proportion of unemployed individuals within the City (3.7 percent of the labor force) and Orange County (4.0 percent of the labor force) (EDD 2024), it is reasonable to assume that the majority of the new jobs generated by the proposed project would be filled by existing City residents and residents of nearby Cities within Orange County. Therefore, because it is reasonable to assume that the majority of the new jobs generated by the proposed project would be filled by the local and regional labor pools and that the types of employment offered by the proposed project would not cause people to move or relocate to the area solely for the purpose of being close to the project site, the proposed project would not generate substantial population growth in the area. Furthermore, since employees would already live in the City or nearby geographic areas, it is assumed that they would already have adequate housing. As described in Section 4.11, Land Use, of this Draft EIR, the proposed project is consistent with the project site's General Plan designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. Therefore, although the proposed project would provide short- and long-term employment opportunities, it would not result in substantial direct or indirect population growth or create a significant demand for housing in the project site vicinity.

Additionally, as described in Section 4.19, Utilities and Service Systems, of this Draft EIR, the proposed project would consist of redevelopment of an existing developed site and would not require the extension of utilities or roads into undeveloped areas or directly or indirectly lead to the development of undeveloped sites. The existing office/industrial building has existing on-site connections to water, sewer, stormwater, and electricity. Redevelopment of the project site with the new industrial building would require improvements to existing on-site connections for water,

sewer, drainage, and electricity. These on-site improvements are wholly contained within the project footprint and would only serve the proposed project. All access and internal circulation improvements implemented as part of the proposed project would provide for better circulation flows within the project site and would not foster off-site population growth. Additionally, the proposed off-site intersection improvements included as part of the proposed project are intended to enhance public safety and address concerns related to large truck turning movements and would not foster off-site population growth. Due to the nature of the project (i.e., non-residential) and the location of the project site within a developed and urbanized area, development of the proposed project would not result in growth-inducing impacts.

7.0 MITIGATION MONITORING AND REPORTING PROGRAM

7.1 MITIGATION MONITORING REQUIREMENTS

Public Resources Code (PRC) Section 21081.6 (enacted by the passage of Assembly Bill 3180) mandates that where significant effects have been identified, the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes that have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.

- The lead agency shall specify the location and custodian of the documents or other materials that constitute the record of proceedings upon which its decision is based.

- A public agency shall provide measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents that address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.

- Prior to the close of the public review period for a Draft Environmental Impact Report (EIR), a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either (1) submit to the lead agency complete and detailed performance objectives for mitigation measures that would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or (2) refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures that mitigate impacts to resources that are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance with that requirement by a responsible agency or agency having jurisdiction over natural resources affected by a project shall not limit the authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

7.2 MITIGATION MONITORING PROCEDURES

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in compliance with PRC Section 21081.6. It describes the requirements and procedures to be followed by the City of Lake Forest (City) to ensure that all mitigation measures adopted as part of the IPT Enterprise Business Center LLC Project (proposed project) will be carried out as described in the Final EIR.

Table 7.A lists each of the **Mitigation Measures (MMs)** and **Regulatory Compliance Measures (RCMs)** specified in the Draft EIR and identifies the party or parties responsible for implementation and monitoring of each measure.

Table 7.A: Mitigation and Monitoring Reporting Program

	Draft EIR Mitigation Measures (MMs) and Regularly Compliance Measures (RCMs)	Timing	Responsible Party / Approving Agency	Date Completed and Initials
4.1 Aesthetics				
There are no significant impacts related to aesthetics. No mitigation is required.				
4.2 Agriculture and Forestry Resources				
There are no significant impacts related to agriculture and forestry resources. No mitigation is required.				
4.3 Air Quality				
MM AQ-1:	**Tier 4 Interim Construction Equipment.** Prior to issuance of a building permit, the project Applicant shall submit construction plans to the City of Lake Forest verifying that all construction equipment used during construction of the project shall be equipped with Tier 4 Interim engines or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement as certified by the California Air Resources Board (CARB). [1] During construction activities, the equipment shall be properly maintained and tuned in accordance with manufacturer specifications.	Prior to issuance of a building permit.	Project Applicant / City of Lake Forest	
MM AQ-2:	**Volatile Organic Compounds.** Prior to issuance of a grading permit, the Project Applicant shall submit construction plans to the City of Lake Forest that state that the project shall utilize "Super-Compliant" low volatile organic compounds (VOC) paints for nonresidential interior and exterior surfaces and low VOC paint for parking lot surfaces. Super-Compliant low VOC paints have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC.	Prior to issuance of a grading permit.	Project Applicant / City of Lake Forest	
MM AQ-3:	**Tier 4 Final Construction Equipment.** Prior to issuance of a building permit, the project Applicant shall consult with the City on the status of Western Realco Projects 1 and 2. If in this consultation, the City identifies that the construction schedule of Western Realco Projects 1 and 2, and the IPT Enterprise Business Center LLC Project (proposed project) will be under construction at the same time, the proposed project shall equip all construction equipment during the overlapping period with Tier 4 Final engines or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the California Air Resources Board. The equipment shall be properly maintained and tuned in accordance with manufacturer specifications. The project Applicant shall submit construction plans to the City of Lake Forest denoting the projected equipment Tier rating that will be used during the construction period.	Prior to issuance of a building permit.	Project Applicant / City of Lake Forest	
4.4 Biological Resources				
RCM BIO-1:	**Nesting Bird Clearance Survey.** If construction/ground disturbing activities, including demolition, occurs between February 1 and August 31, a Qualified Biologist shall conduct a pre-construction clearance survey for nesting birds within 3 days of the start of any construction, vegetation clearing, or grading activities (including disking and demolition) to ensure that no nesting birds are disturbed during construction. The Qualified Biologist shall be retained by the Construction Contractor. The Qualified Biologist conducting the clearance survey shall document a negative survey with a brief letter report indicating that no impacts to active avian nests would occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. In general, the no-disturbance buffer shall be a minimum of 50 feet for passerines and 250 feet for raptors. However, a species' sensitivity to disturbance can vary among species, the level of noise or construction disturbance, and the line of sight between the nest and the disturbance. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel shall be instructed on the sensitivity of nest areas. A biological monitor, with experience in monitoring active nests, shall be present to delineate the boundaries of the buffer area and to monitor daily all active nests to observe the efficacy of the no-disturbance buffers and to document any new nesting occurrences to ensure that nesting behavior is not adversely affected by the construction activity. Adversely affected nesting behavior, as determined by the biological monitor, includes, but is not limited to, disrupting reproductive behavior, nest abandonment, and/or prolonged absences of parents while incubating eggs. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction, vegetation clearing, or grading activities (including disking and demolition) within the buffer area can occur. Field memorandums shall be prepared by the biological monitor within 24 hours of each day of monitoring and shall be submitted to the City of Lake Forest to document compliance with the applicable resource protection measures.	Prior to any construction, demolition, vegetation clearing, or grading activities and during construction.	Construction Contractor / City of Lake Forest	
4.5 Cultural Resources				
RCM CUL-1:	**Unknown Archaeological Resources.** In the event that archaeological resources are discovered during excavation, grading, or construction activities, work shall cease within 100 feet of the find until a qualified archaeologist from the Orange County List of Qualified Archaeologists has evaluated the find in accordance with federal, State, and local guidelines to determine whether the find constitutes a "unique archaeological resource," as defined in Section 21083.2(g) of the California Public Resources Code (PRC). Personnel of the proposed project shall not collect or move any archaeological materials and associated materials. Construction activity may continue unimpeded beyond 100 feet from the find on other portions of the project site. The found deposits shall be treated in accordance with federal, State, and local guidelines, including those set forth in PRC Section 21083.2. Prior to issuance of a grading permit, the Director of Community Development, or designee, shall ensure that this regulatory compliance measure is documented on the grading plans.	During ground-disturbing construction activities, upon discovery of archaeological resources.	Construction Contractor and Qualified Archaeologist / City of Lake Forest Director of Community Development or designee	

[1] CARB. 2015. Verified Diesel Emission Control Strategy (VDECS). Website: https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/faq/vdecsfaq.pdf (accessed June 2025)

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures (MMs) and Regularly Compliance Measures (RCMs)		Timing	Responsible Party / Approving Agency	Date Completed and Initials
RCM CUL-2:	**Human Remains.** If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated grave goods in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment. Prior to issuance of a grading permit, the Director of Community Development, or designee, shall ensure that this regulatory compliance measure is documented on the grading plans.	During ground-disturbing construction activities, upon discovery of human remains.	Construction Contractor and County Coroner / City of Lake Forest Director of Community Development or designee	
4.6 Energy				
There are no significant impacts related to energy. No mitigation is required.				
4.7 Geology and Soils				
MM GEO-1:	**Compliance with Applicable California Building Code and Project-Specific Geotechnical Specifications**. Prior to the final grading permit and the issuance of building permits, the project Applicant shall provide final project plans to applicable City of Lake Forest (City) staff for review and approval showing that the project, including site preparation and construction of proposed buildings, has been designed and will be constructed in conformance with applicable provisions of the most current California Building Code at the time of City review, the City's Building Code, and the specifications cited in the Geotechnical Investigation, prepared by Southern California Geotechnical, dated November 2021. During grading, an on-site inspection shall be conducted by the Applicant-hired Project Geotechnical Consultant and the City of Lake Forest Director of Public Works/ City Engineer, or designee, to ensure compliance with geotechnical specifications as incorporated into project plans. Prior to the final grading permit, the Project Geotechnical Consultant shall submit a Final Testing and Observation Geotechnical Report for Rough Grading to the City of Lake Forest Director of Public Works/City Engineer, or designee. Prior to the issuance of a Certificate of Occupancy for the new building, the Project Geotechnical Consultant shall provide a letter regarding contractor compliance with project plans and required geotechnical. The letter shall be submitted to the City of Lake Forest Building Division for review and approval.	Prior to the final grading permit and issuance of building permits.	Project Applicant and Project Geotechnical Consultant / City of Lake Forest Director of Public Works, City Engineer, or designee	
MM GEO-2:	**Corrosive Soils.** Prior to issuance of building permits, the project Applicant/Developer shall retain the services of a licensed corrosion engineer to conduct additional site testing and final design evaluation regarding the possible on-site presence of significant volumes of corrosive soils. At a minimum, the corrosion engineer shall (1) verify the soluble sulfate concentrations of the soils that are present at pad grade within the building areas at the completion of rough grading; (2) provide detailed corrosion protection measures for cast iron and/or ductile iron pipes, as necessary; (3) confirm that soluble sulfates and chloride levels in the on-site soils do not warrant specialized concrete mix design; and (4) confirm that nitrates present in the on-site soil do not warrant protection for copper materials. During grading, on-site inspection shall be conducted by the Project Geotechnical Consultant and City of Lake Forest Director of Public Works/City Engineer, or designee, to ensure compliance with the corrosion protection measures of the corrosion engineer, as incorporated into the project plans. Prior to issuance of a building permit, the Director of the City of Lake Forest Public Works Department, or designee, shall verify that the project plans incorporate the corrosion protection measures of the corrosion engineer.	Prior to issuance of building permits.	Project Applicant and Project Geotechnical Consultant / City of Lake Forest Director of Public Works, City Engineer, or designee	
MM GEO-3:	**Paleontological Resources Impact Mitigation Program.** Prior to the final grading permit and the issuance of building permits, the project Applicant/Developer shall provide a letter to the Director of Community Development Department, or designee, stating that they have retained a qualified paleontologist (defined as a practicing paleontologist who is recognized in the paleontological community and proficient in vertebrate paleontology) who is listed on the County of Orange list of certified paleontologists. Prior to the final grading permit and the issuance of building permits, the qualified paleontologist shall submit to the City, a Paleontological Resources Impact Mitigation Program (PRIMP) for this project. The PRIMP shall include the methods that will be used to protect paleontological resources that may exist within the project site, as well as procedures for monitoring, fossil preparation and identification, curation into a repository, and preparation of a report at the conclusion of grading. The PRIMP shall be consistent with the guidelines of the Society of Vertebrate Paleontology. The City shall not issue a grading permit for the project until the letter and PRIMP, both referenced above, have been received.	Prior to the final grading permit and issuance of building permits.	Project Applicant / City of Lake Forest Director of Community Development Department or designee	

Table 7.A: Mitigation and Monitoring Reporting Program

	Draft EIR Mitigation Measures (MMs) and Regularly Compliance Measures (RCMs)	Timing	Responsible Party / Approving Agency	Date Completed and Initials
	During construction, excavation and grading activities in deposits with high paleontological sensitivity shall be monitored by a paleontological monitor as defined by the PRIMP. No monitoring is required for excavations in deposits with no or low paleontological sensitivity (i.e., engineered fill soils). If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to temporarily redirect construction away from the area of the find in order to assess its significance. In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected, and a paleontologist shall be contacted to assess the find for significance. Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a scientific institution prepared by the Applicant-hired qualified paleontologist. Prior to the issuance of building permits, a report of findings shall be prepared to document the results of the monitoring program prepared by the Applicant-hired qualified paleontologist. The report shall be provided to the Director of Community Development, or designee.			
Refer to **RCM WQ-1 through RCM WQ-4** under Section 4.10 below.				
4.8 Greenhouse Gas Emissions				
MM GHG-1:	**Electric Vehicle Charging.** Provisions shall be made at the project site for emerging electric truck technology. Prior to the issuance of a shell building permit, the City shall verify that the site plan identifies an on-site location for future electric truck charging stations, with space available for a minimum of four (4) trucks to simultaneously charge when charging stations are installed in the future. The conduit trenching shall be installed to that location for future conduit pull as a requirement of the shell building permit. In conjunction with the approval of tenant improvement plans and permits, the applicant shall install electric truck charging stations on the site for a minimum of four (4) electric trucks to simultaneously charge.	Prior to issuance of a shell building permit and in conjunction with the approval of tenant improvement plans and permits.	Project Applicant / City of Lake Forest	
4.9 Hazards and Hazardous Materials				
There are no significant impacts related to hazards and hazardous materials. No mitigation is required.				
4.10 Hydrology and Water Quality				
RCM WQ-1:	**Construction General Permit.** Prior to the issuance of a grading permit, the Construction Contractor shall obtain coverage under the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ, NPDES No. CAS000002) (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including a Notice of Intent for coverage under the permit to the SWRCB via the Stormwater Multiple Application and Report Tracking System (SMARTs). The Construction Contractor shall provide the Waste Discharge Identification Number (WDID) to the Lake Forest Public Works Director, or designee, to demonstrate proof of coverage under the Construction General Permit. Project construction shall not be initiated until a WDID is received from the SWRCB and is provided to the City, or designee. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared by a Qualified SWPPP Developer in accordance with the requirements of the Construction General Permit and submitted via SMARTs. These include: Best Management Practices (BMPs) for erosion and sediment control, site management/housekeeping/waste management, management of non-storm water discharges, run-on and runoff controls, and BMP inspection/maintenance/repair activities. BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association's Stormwater Best Management Handbook: Construction. The SWPPP shall include a construction site monitoring program that identifies requirements for dry weather visual observations of pollutants at all discharge locations, and as appropriate (depending on the Risk Level), sampling of the site effluent and receiving waters. A Qualified SWPPP Practitioner shall be responsible for implementing the BMPs at the site and performing all required monitoring and inspection/ maintenance/repair activities. Upon completion of construction and stabilization of the site, a Notice of Termination shall be submitted via SMARTs.	Prior to the issuance of a grading permit.	Construction Contractor / Lake Forest Public Works Director or designee	
RCM WQ-2:	**City of Lake Forest Municipal Code.** Prior to the issuance of a grading permit, the Project Applicant shall submit and obtain approval of an Erosion Control Plan in compliance with Article XIII of Chapter 8.30 of the City of Lake Forest Municipal Code from the Lake Forest Public Works Director, or designee. The Erosion Control Plan shall be submitted to the City of Lake Forest Building Official for approval by September 15 each year for projects under a grading permit. All grading shall be undertaken in accordance with the BMPs for pollution prevention adopted by the City, the City's NPDES Permit regulating discharges into and from its Municipal Separate Storm Sewer System (MS4), the Drainage Area Management Plan (DAMP), and any other conditions, requirements and water quality management plans adopted by the City. Additionally, the project Applicant shall adhere to the erosion and sediment control and water quality system maintenance requirements listed in Section 8.30.154 of the Lake Forest Municipal Code.	Prior to the issuance of a grading permit.	Project Applicant / Lake Forest Public Works Director	

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures (MMs) and Regularly Compliance Measures (RCMs)		Timing	Responsible Party / Approving Agency	Date Completed and Initials
RCM WQ-3:	**Final Water Quality Management Plan.** Prior to issuance of a grading permit, the project Applicant shall submit and obtain approval of a Final Water Quality Management Plan (WQMP) to the Lake Forest Public Works Director, or designee. The project shall implement project design features identified in the Final WQMP. The Final WQMP shall demonstrate that any proposed on-site development plan includes BMPs for source control, pollution prevention, site design, low impact development (LID) implementation, and structural treatment control. BMPs shall be designed and implemented to address 303(d) listed pollutants and retain the project site's minimum design capture volume and hydromodification volume to ensure that post-development storm water runoff volume or time of concentration does not exceed pre-development storm water runoff by more than 10 percent of the 2-year peak flow in accordance with the Santa Ana Regional Water Quality Control Board Order Number R8-2009-0030, NPDES Permit No. CAS618030, as amended by Order No. R8-2010-0062, also known as the North Orange County MS4 permit. The proposed LID BMPs specified in the Final WQMP shall be incorporated into the grading and development plans submitted to the City of Lake Forest for review and approval. Periodic maintenance of any required BMPs and landscaped areas during project occupancy and operation shall be in accordance with the schedule outlined in the Final WQMP.	Prior to issuance of a grading permit.	Project Applicant / Lake Forest Public Works Director, or designee	
RCM WQ-4:	**Final Hydrology and Hydraulic Analyses**. Prior to issuance of grading permits, the project Applicant shall submit and obtain approval of the Final Hydrology and Hydraulic Analyses to the Lake Forest Director of Public Works, or designee, and the Orange County Flood Control District (OCFCD). The Final Hydrology and Hydraulic Analyses shall be prepared consistent with the requirements of the Orange County Hydrology Manual (Orange County Environment Agency 1986) and Orange County Hydrology Manual Addendum No. 1 (Orange County Environment Agency 1996), or subsequent guidance manuals. The Final Hydrology and Hydraulic Analyses shall confirm that the on-site storm drains, on-site detention basins, and any other drainage structures are appropriately sized to accommodate stormwater runoff from the design storm so that the peak flow of stormwater discharge from the project site is less than existing conditions. The Final Hydrology and Hydraulic Analyses shall also demonstrate that the detention facilities meet the hydromodification requirements of the Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the Incorporated Cities of Orange County within the Santa Ana Region Areawide Urban Storm Water Runoff Orange County (North Orange County MS4 Permit), Order R8-2009-0030, NPDES No. CAS618030 (as amended by Order No. R8-2010-0062). In compliance with the hydromodification requirements, the post-project runoff discharge volume for the 2-year storm shall not exceed that of the predevelopment condition by more than 5 percent, and the time of concentration of post-development runoff for the 2 year storm event shall not be greater than 5 percent less than that of the predevelopment condition. The Director of the City of Lake Forest Public Works Department, or designee, shall ensure that the drainage facilities specified in the Final Hydrology and Hydraulic Analyses are incorporated into the final project design.	Prior to issuance of grading permits.	Project Applicant / Lake Forest Director of Public Works, or designee, and the OCFCD	
4.11 Land Use and Planning				
There are no significant impacts related to land use and planning. No mitigation is required.				
4.12 Mineral Resources				
There are no significant impacts related to mineral resources. No mitigation is required.				
4.13 Noise and Vibration				
RCM NOI-1:	**City of Lake Forest Municipal Code, Section 11.16.060(D)**. During construction, construction activities shall be limited to between the hours of 7:00 a.m. and 8:00 p.m. Mondays through Saturdays. No construction shall be permitted outside of these hours or on Sundays or federal holidays, without a specific exemption issued by the City of Lake Forest.	During construction.	Construction Contractor / City of Lake Forest	
RCM NOI-2:	**Pre-Construction Vibration Assessment.** After a specific project equipment list has been determined and prior to the issuance of a building permit, the following actions shall be implemented: 1) A qualified structural engineer, as approved by the Director of Community Development, or designee shall identify all structures that are located within the distances established in Table 2 of Section 11.16.090 of the City's Municipal Code and that have the potential to be affected by ground-borne vibration originating from the construction; and 2) A qualified acoustical engineer shall compile a list of proposed construction equipment and compare to the City's accepted vibration criteria. If it is determined that the proposed equipment would generate vibration levels below the City's standard of 0.3 inches per second (in/sec) peak particle velocity (PPV), no further vibration assessment is necessary. However, if vibration levels would potentially exceed the City's standard of 0.3 in/sec PPV, the Project Applicant shall develop a Vibration Monitoring and Construction Contingency Plan for approval by the Director of Community Development, or designee, to ensure that vibration levels would not exceed the City's accepted vibration damage criteria of 0.3 in/sec PPV. If a Vibration Monitoring and Construction Contingency Plan is deemed necessary, monitoring of vibration during initial construction activities shall be required. Monitoring results may indicate the need for more or less intensive measurements. The Vibration Monitoring and Construction Contingency Plan, at the discretion of the Director of Community Development or designee, shall include the following items as necessary: ● Identification of structures where monitoring would be conducted; ● A vibration monitoring schedule;	After a specific project equipment list has been determined and prior to issuance of a building permit.	Project Applicant / Lake Forest Director Community Development or designee	

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures (MMs) and Regularly Compliance Measures (RCMs)	Timing	Responsible Party / Approving Agency	Date Completed and Initials
● Defined structure-specific vibration limits; ● Photographic, elevation, and crack surveys to document before and after construction conditions; and ● Identification of construction contingencies for when vibration levels approach the limits. When vibration levels approach the limits specified in Section 11.16.090 of the City's Municipal Code, construction shall be suspended and contingencies identified in the approved Vibration Monitoring and Construction Contingency Plan shall be implemented as necessary to lower vibration levels, which could include shielding or protecting the affected building from potential vibration impacts as a possible alternative to changing construction methods.			
4.14 Population and Housing			
There are no significant impacts related to population and housing. No mitigation is required.			
4.15 Public Services			
There are no significant impacts related to public services. No mitigation is required.			
4.16 Recreation			
There are no significant impacts related to recreation. No mitigation is required.			
4.17 Transportation			
MM TRA-1: **Bike Lanes.** Prior to issuance of a certificate of occupancy for the proposed industrial building, the project Applicant shall retain a licensed Civil Engineer by the State of California to prepare Civil Street Improvements and Signing & Striping Plans (collectively Construction Plans) for the implementation of bike lanes in both directions on Commercentre Drive between Alton Parkway and Dimension Drive. These bike lanes on Commercentre Drive would connect the proposed project site on Enterprise Way to the existing bike lanes on Alton Parkway, which eventually connects to the Irvine Transportation Center, a multi-model transit hub including Metrolink and Amtrak commuter train services and OCTA bus services. Based on a preliminary design assessment, the Construction Plans shall include an asphalt slurry seal of Commercentre Drive to modify the existing lane striping for the addition of standard striped bike lanes and green bike markings. The project Applicant shall use these Construction Plans to obtain a Public Works Encroachment Permit to construct said improvements for bike lanes on Commercentre Drive. The construction of said improvements shall be completed per the plans and to the satisfaction of the Public Works Department. The project Applicant shall use these Construction Plans to obtain a Public Works Encroachment Permit to construct said improvements for bike lanes on Commercentre Drive.	Prior to issuance of a certificate of occupancy.	Project Applicant / City of Lake Forest	
4.18 Tribal Cultural Resources			
MM TCR-1: **Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.** A. 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. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor 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 later of the following (1) written confirmation to the Kizh 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) prior to approval of final building permit, a determination and written notification by the Kizh 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 Kizh TCRs.	Prior to commencement of ground-disturbing activities.	Project Applicant/Lead Agency / City of Lake Forest Community Development Department	

Table 7.A: Mitigation and Monitoring Reporting Program

Draft EIR Mitigation Measures (MMs) and Regularly Compliance Measures (RCMs)	Timing	Responsible Party / Approving Agency	Date Completed and Initials
MM TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funeral/Non-Ceremonial). A. Upon discovery of any TCRs, 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 Kizh monitor and/or Kizh archaeologist. 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.	During construction, upon discovery of any tribal cultural resources.	Construction Contractor and Kizh monitor and/or Kizh archaeologist / City of Lake Forest Community Development Department	
MM TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects. A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed. C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.	During construction, upon discovery of human remains or associated funerary or ceremonial objects.	Construction Contractor and County Coroner/ City of Lake Forest Director of Community Development Department	
4.19 Utilities and Service Systems			
There are no significant impacts related to utilities and service systems. No mitigation is required.			
4.20 Wildfire			
There are no significant impacts related to wildfire. No mitigation is required.			

Source: Compiled by LSA (2025).

8.0 LIST OF PREPARERS AND PERSONS CONSULTED

8.1 CITY OF LAKE FOREST

The following individuals from the City of Lake Forest (City) were involved in the preparation of this Draft Environmental Impact Report (EIR):

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- Amy Stonich, AICP, Assistant Director of Community Development, Community Development Department
- Jennifer Mansur, AICP, Senior Planner, Community Development Department
- Tran Tran, Traffic Engineering Manager, Public Works Department
- Scott Ma, Traffic Engineering Consultant, Hartzog and Crabhill
- Dennis Jue, Contract Deputy City Engineer, Ardurra
- Terry Kelley/ Nicole Jules, Contract Plan Check Engineer, Ardurra

8.2 EIR PREPARERS

The following individuals were involved in the preparation of this Draft EIR. The nature of their involvement is summarized below.

8.2.1 LSA Associates, Inc.

The following individuals were involved in the preparation of this Draft EIR:

- Pam Reading, Principal in Charge
- Laurel Huntzinger, Associate/Project Manager
- Ashley Honer, Environmental Planner
- Amy Fischer, President/COO, Principal Air Quality Specialist
- Jessica Coria, Associate Director of Air Quality and Climate Change Services
- Cara Cunningham, Associate Air Quality Specialist
- Bianca Martinez, Air Quality Specialist
- JT Stephens, Executive Vice President, Principal Noise and Vibration Specialist
- Moe Abushanab, Mechanical Noise Engineer
- Kelly McDonald, Biologist
- Kelly Vreeland, Senior Paleontologist
- Olivia Gastaldo, Environmental Planner
- Lynnea Palecki, Assistant Environmental Planner
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- Lisa Ahn, Technical Editor
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- Mathew Phillips, Graphics Specialist
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8.3 TECHNICAL REPORT PREPARERS

The following individuals were involved in the preparation of the technical reports in support of this Draft EIR. The nature of their involvement is summarized below.

8.3.1 Apex Companies, LLC

The following individuals were involved in the preparation of the *Phase I Environmental Site Assessment* (March 2021):

- Kellie Wing, Program Manager
- Shannon Gillespie, Program Manager

8.3.2 BCR Consulting, LLC

The following individuals were involved in the preparation of the *Cultural Resources Assessment* (June 2021):

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- Joseph Orozco, M.A., RPA

8.3.3 ELMT Consulting

The following individuals were involved in the preparation of the *Biological Resources Report* (May 2021):

- Thomas J. McGill, Ph.D, Managing Director
- Travis J. McGill, Director

8.3.4 Kier & Wright Civil Engineers & Surveyors, Inc.

The following individual was involved in the preparation of the *Preliminary Hydrologic & Hydraulic Drainage Report* (April 2023):

- D. Garrett Readler, P.E.

The following individual was involved in the preparation of the *Preliminary Water Quality Management Plan* (October 2024):

- D. Garrett Readler, P.E.

8.3.5 LSA Associates, Inc.

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- Cara Cunningham, Associate Air Quality Specialist
- Bianca Martinez, Air Quality Specialist

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- Bianca Martinez, Air Quality Specialist
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The following individuals were involved in the preparation of the *Traffic Impact Analysis* (May 2025):

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- Dean Arizabal, Principal Transportation Planner
- Debmalya Sinha, Senior Transportation Planner
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The following individuals were involved in the preparation of the *Geotechnical Investigation* (April 2021):

- Gregory K. Mitchell, Principal Engineer, GE 2364
- Robert G. Trazo, GE 2655

The following individuals were involved in the preparation of the *Results of Infiltration Testing* (April 2021)

- Gregory K. Mitchell, Principal Engineer, GE 2364
- Jose Zuniga, Staff Engineer

8.4 PROJECT APPLICANT

8.4.1 IPT Enterprise Business Center LLC

- Chris Stanford, Managing Director of Development, Ares Industrial Management
- Carlos Palafax, Vice President, Ares Industrial Management
- Zach Desper, Associate, Ares Industrial Management

8.5 PERSONS CONSULTED

The following individuals were consulted during the preparation of this Draft EIR:

- Gabrieleno Band of Mission Indians—Kizh Nation
    - Andrew Salas, Chairperson
    - Matthew Teutimez, Tribal Biologist

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