AMAZON FACILITY

Draft Environmental Impact Report

SCH No. 2020069007

City of Cypress

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Prepared by:

LSA



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LIST OF ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AA	All Appropriate Inquiries
AAQS	ambient air quality standards
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADT	average daily trips
AELUP	Airport Environs Land Use Plan
afy	acre-feet per year
APN	Assessor's Parcel Number
Applicant/Developer	Duke Realty
APS	Alternative Planning Strategy
AQMP	Air Quality Management Plan
AST	Aboveground Storage Tanks
ASTM	American Society for Testing Materials
AUHSD	Anaheim Union High School District
Basin	South Coast Air Basin
Basin Plan	Santa Ana RWQCB's Water Quality Control Plan
bgs	below ground surface
BMPs	Best Management Practices
BTU	British Thermal Units
C_2H_3Cl	vinyl chloride
CAA	(Federal) Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
CalARP	California Accidental Release Program
CalEEMod	(CAPCOA's) 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
CAMUTCD	Caltrans 2014 California Manual on Uniform Traffic Control Devices
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Commission
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFR	Code of Federal Regulations
cfs	cubic feet per second
cfs/acre	cubic feet per second per acre
CGS	California Geological Survey
CH_4	methane
CHMIRS	California Hazardous Material Incident Report System
CHRIS	California Historical Resources Information System
City	City of Cypress
CMP	Congestion Management Program
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide

CO_2e	carbon dioxide equivalent
COSR	Conservation/Open Space/Recreation
County	County of Orange
CPD	Cypress Police Department
CPT	cone penetrometer test
CPUC	California Public Utilities Commission
CRECs	Controlled Recognized Environmental Conditions
CSD	Cypress School District
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
cy	cubic yard(s)
DAMP	Drainage Area Management Plan
dB	decibel(s)
dBA	A-weighted decibel(s)
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EDR	Environmental Data Resources, Inc.
EIA	United States Energy Information Administration
EIR	Environmental Impact Report
EMFAC	EMission FACtor Model
ESA	Environmental Site Assessment
ETW	equivalent test weight
FAA	Federal Aviation Administration
FAR	floor area ratio; also Federal Aviation Regulations
FBMSMs	Facility Based Mobile Source Measures
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Federal Insurance Rate Map

ft	foot/feet
FTA	Federal Transit Administration
g	acceleration due to gravity
GHG	greenhouse gas
GIS	Geographic Information System
gpm	gallons per minute
GSAs	Groundwater Sustainability Agencies
GSWC	Golden State Water Company
GVWR	gross vehicle weight rating
GWh	gigawatt-hours
GWP	global warming potential
H_2S	hydrogen sulfide
HA	Hydrologic Area(s)
HBW	home-based work
HCD	Department of Housing and Community Development
HCM	*Highway Capacity Manual*
HCP	Habitat Conservation Plan
HFCs	hydrofluorocarbons
HHDT	Heavy-Heavy-Duty Trucks
HMBEP	Hazardous Materials Business Emergency Plan
HMD	Hazardous Materials Disclosure
HRECs	Historical Recognized Environmental Conditions
HRI	California State Historic Resources Inventory
HSA	Hydrologic Subarea(s)
HSC	California Health and Safety Code
HU	Hydrologic Unit(s)
HVAC	heating ventilation and air conditioning
I-405	Interstate 405
I-605	Interstate 605
ICU	Intersection Capacity Utilization
IEPR	Integrated Energy Policy Report

inch/sec	inch(es) per second
IGP	Industrial General Permit
IPaC	(USFWS) Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
ITE	Institute of Transportation Engineers
JFTB	Joint Forces Training Base
kWh	kilowatt hours
LACM	Natural History Museum of Los Angeles County
lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
LDA	Light-Duty-Auto
L_{dn}	day-night average noise level
LDT1	Light-Duty-Trucks - with a gross vehicle weight rating of less than 6,000 lbs and equivalent test weight of less than or equal to 3,750 lbs
LDT2	Vehicles under the LDT2 category have a gross vehicle weight rating of less than 6,000 lbs and equivalent test weight between 3,751 lbs and 5,750 lbs
LEA	Local Enforcement Agency
LED	light-emitting diode
L_{eq}	equivalent continuous sound level
L_{max}	maximum A-weighted sound level
L_{min}	minimum A-weighted sound level
LOS	level of service
LST	Localized Significance Threshold
LUST	Leaking Underground Storage Tank
Ma	million years ago
MATES	SCAQMD's *Multiple Air Toxics Exposure Study*
MBTA	Migratory Bird Treaty Act
MDV	Medium-Duty-Vehicle
mg/L	milligrams per liter
mg/m^3	milligrams per cubic meter
mgd	million gallons per day

mL	milliliters
MLD	Most Likely Descendant
MMT	million metric tons
mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSA	Metropolitan Statistical Area
MT	metric tons
MT CO_2e	metric tons of carbon dioxide equivalent
MT CO_2e/SP/yr	metric tons of carbon dioxide equivalent per service population per year
MT CO_2e/yr	metric tons of carbon dioxide equivalent per year
MTBE	methyl tertiary butyl ether
MUN	municipal and domestic supply
MW	megawatt
MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Southern California
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NALMA	North American Land Mammal Age
National Register	National Register of Historic Places
NCCP/HCP	Natural Communities Conservation Plan/Habitat Conservation Plan
NFIP	National Flood Insurance Program
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
OCFA	Orange County Fire Authority

OCFCD	Orange County Flood Control District
OCPL	Orange County Public Libraries
OCSD	Orange County Sanitation District
OCTA	Orange County Transportation Authority
OCTAM	Orange County Transportation Analysis Model
OCWD	Orange County Water District
OCWR	Orange County Waste and Recycling
OFFROAD	Off-Road Emissions Inventory Program Model
OHP	(California) Office of Historic Preservation
OPR	(California) Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
P.A.C.E.	Positive Actions thru Character Education
Partner	Partner Engineering and Science, Inc.
Pb	lead
PCB	polychlorinated biphenyls
PCE	passenger car equivalents
PFCs	perfluorocarbons
PGA	peak ground acceleration
pH	percentage of hydrogen
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1970
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
proposed project	Amazon Facility Project
PVC	polyvinyl chloride
R&D	Research and Development
RCP	Regional Comprehensive Plan
RECs	recognized environmental conditions

RHNA	Regional Housing Needs Assessment
ROGs	reactive organic gases
RPS	Renewables Portfolio Standard
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SAFE	*Safer Affordable Fuel-Efficient*
SAFE Vehicles Rule	*The Safer Affordable Fuel-Efficient* (SAFE) *Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks*
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill
SBCTA	San Bernardino County Transportation Authority
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCG	Southern California Geotechnical, Inc.
SCH	State Clearing House
SCS	Sustainable Communities Strategy
SEMS	Standard Emergency Management System
sf	square foot/feet
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SHL	(California) State Historical Landmarks
SHMA	Seismic Hazard Mapping Act
SHPO	State Historic Preservation Officer
SLF	Sacred Lands File
SO_2	sulfur dioxide
SO_X	sulfur oxides
SP	service population

SPHI	(California) State Points of Historical Interest
sq mi	square mile(s)
SRA	Source Receptor Area
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TAZ	traffic analysis zone
TDS	total dissolved solids
TIA	*Traffic Impact Analysis for the Katella Avenue Amazon Facility Project, Cypress, Orange County, California*
TMDL	Total Maximum Daily Load
UNFCCC	United Nations Framework Convention on Climate Change
USACE	United States Army Corps of Engineers
USC	United States Code
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
UTRs	utility tractors
v/c	volume-to-capacity
VC	vinyl chloride
VdB	vibration velocity decibels
VMT	vehicle miles traveled
VOCs	volatile organic compounds
vph	vehicles per hour
vph	vehicles per hour
West-Comm	West Cities Police Communications Center
Working Group	GHG CEQA Significance Threshold Working Group
WQMP	Water Quality Management Plan

ZE/NZE	zero- and near-zero emissions
ZEVs	zero emission vehicles

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 Cypress (City) to evaluate environmental impacts associated with the proposed Amazon Facility Project (proposed 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 (e.g., air quality, noise, and traffic).

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 would be located on an approximately 22.9-acre site (project site) at the southwest corner of Katella Avenue and Holder Street in the City. In its existing setting, the project site is characterized by several buildings that were recently vacated by Mitsubishi Motors of America, a paved parking lot with existing light poles, and landscaping. The existing buildings consist of a 180,000 sf three-story office building located on the northern portion of the project site, three research and development buildings located on the west-central portion of the project site consisting of a two-story building (25,000 sf) and two one-story buildings (30,000 sf and 15,000 sf), and a 150,000 sf warehouse building located on the southwestern portion of the project site. The

project site is bounded on the north by Katella Avenue, on the west by commercial/industrial uses, on the south by the Stanton Storm Channel, and on the east by Holder Street.

The project site is within the boundaries of the Cypress Corporate Center Amended Specific Plan, which covers an approximately 110-acre area in the southeastern portion of the City. The Specific Plan designates the project site for Business Park uses. The Specific Plan is the regulatory plan that constitutes the zoning for the project site.

The proposed project proposes the development of a "last mile" logistics facility for Amazon, Inc. on the project site, which is currently occupied by a 150,000- square-foot (sf) warehouse, a 180,000 sf corporate headquarters office building, and 70,000 sf of research and development buildings recently vacated by Mitsubishi Motors of America. Except for the existing 150,000 sf warehouse building on the southwest portion of the project site and the existing 180,000 sf office building along the northern edge of the project site, the remaining buildings on the project site would be demolished as part of the proposed project. Approximately 5,000 sf of second-floor office/mezzanine space in the existing warehouse would be removed. Although the existing warehouse building on the project site would be reoccupied, the office building would remain unoccupied. The proposed project would expand the paved parking area on the project site and enhance the landscaping along Katella Avenue and Holder Street.

Required discretionary actions associated with the project include the following: certification of the EIR; approval of a Conditional Use Permit; and approval of a Design Review Permit.

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 a virtual public scoping meeting on Wednesday, Thursday, June 18, 2020, to present the proposed project and to solicit input from interested parties regarding environmental issues that should be addressed in this EIR. The issues and concerns raised in response to the Notice of Preparation (NOP) or at the scoping meeting included:

- **Traffic:** Suggestions to include specific road segments, intersections, ramps, and mainlines in the Traffic Analysis. Suggestions to include a Transportation Demand Management (TDM) analysis. Suggestion that the analysis of additional traffic generated by the project with other cumulative projects should be included. Concern regarding truck traffic on Katella Avenue. Suggestions and concerns regarding the opening of Holder Street between Katella Avenue and Orangewood Avenue.

- **Noise:** Concern about daytime and nighttime noise related to truck beeping, employees, and vehicles entering and exiting. Request for quantification of the noise generated by delivery trucks and vans, including noise generated by idling engines, loading and unloading, and sound emanating from vehicles traveling along the path of delivery to and from the proposed distribution center.

- **Aesthetics:** General concern regard aesthetic impacts related to the conversion of the project site to a distribution facility.

- **Land Use:** Concern that the proposed project is not an allowable use under the zoning for the project site.

- **Air Quality:** Concern related to sensitive receptor exposure to Toxic Air Contaminants. Suggestions to adhere to guidelines from the SCAQMD and its Air Quality Handbook and recommendations on the identification of mitigation measures, alternatives, permits, and appropriate data sources.

- **Greenhouse Gas Emissions:** General concern about significant greenhouse gas emissions from mobile source emissions.

- **Public Services:** General concern regarding impacts to public services, including the provision of public services to the project and to the surrounding residential and business communities.

- **Utilities and Service Systems:** General concern regarding impacts to City infrastructure requiring upgrades.

- **Economic Impacts:** Suggestion that an economic impact report should be prepared for the project.

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, 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.

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. The No Project Alternative assumes that a new user would occupy the existing buildings on the project site and operate them as a corporate headquarters, which is permitted by right under the Cypress Corporate Center Specific Plan. The project site would remain in generally the same condition as it was at the time the Notice of Preparation (NOP) was published. Although it is assumed that the new occupant would complete minor renovations to the interiors of the existing buildings to meet its needs, no building demolition or new development of any kind would occur on the project site. No discretionary approvals would be required.

- **Alternative 2 – Reduced Project Alternative:** The Reduced Project Alternative includes the operation of a last-mile logistics facility on the project site similar to the proposed project; however, the Reduced Project Alternative would have a reduced capacity. The number of delivery vans operating from the project site would be reduced by 30 percent. Similar to the proposed project, the Reduced Project Alternative would demolish the existing on-site research and development buildings, retain the existing 150,000 sf warehouse and 180,000 sf office building, and enhance the landscaping along Katella Avenue, Holder Street and adjacent to the southern property line. The Reduced Project Alternative would provide the same number of trailer parking spaces and loading docks on the northern side of the warehouse building as the proposed project and would also provide a covered delivery van staging area on the eastern side of the warehouse building. However, due to the reduced number of delivery vans operating out of the project site, the Reduced Project Alternative would construct a smaller driveway loop and delivery van holding area that would accommodate 30 percent fewer delivery vans than the proposed project. Similar to the proposed project, the Reduced Project Alternative would provide a new fourth, right-in/right-out driveway on Katella Avenue and modify the westbound and eastbound left-turn pockets on Katella Avenue at Holder Street to provide additional left-turn storage.

- **Alternative 3 – Office Alternative.** The Office Alternative assumes that all of the existing buildings on the project site would be demolished and replaced with 486,088 sf of space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. The office buildings would feature Class A-level tenant amenities, including a large plaza with outdoor dining space and work stations. Parking would be provided in a multi-story parking structure located near the center of the project site that would also screen the project from the residential uses to the south. The southern portion of the project site would feature a 4-acre landscaped open space that would serve as a buffer between the parking structure and the residential uses to the south. The Office Alternative would retain and

reconfigure the existing driveways along Holder Street, but would not construct a new right-in/right-out driveway along eastbound Katella Avenue or modify and modify the westbound and eastbound left-turn pockets on Katella Avenue at Holder Street to provide additional left-turn storage. Because general office uses are permitted under the Cypress Corporate Center Specific Plan, the Office Alternative would not require any discretionary approvals from the City.

1.5.2 Identification of the Environmentally Superior Alternative

CEQA requires the identification of an Environmentally Superior Alternative among the project and 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 and the proposed project. Putting aside the No Project Alternative, the Reduced Project Alternative is the Environmentally Superior Alternative because the project site would be developed at a reduced capacity, thereby reducing the most of the proposed project's environmental impacts compared to the other alternatives (other than the No Project Alternative). The Reduced Project Alternative would also meet all of the project objectives, but to a lesser extent than the proposed project. Accordingly, it is determined that the Reduced Project Alternative is the Environmentally Superior Alternative because it would meet all of the project's objectives and would 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, 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, Noise, Public Services, Transportation and Traffic, Tribal Cultural Resources, and Utilities.

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/Developer to 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 Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
4.1: Aesthetics		
Threshold 4.1.1: Would the project have a substantial adverse effect on a scenic vista? **No Impact.** The City is almost entirely developed and neither the project site nor other properties in the project vicinity provide substantial views of any water bodies, mountains, hilltops, or any other significant visual resources. As such, the City has not designated any scenic corridors or scenic vistas within the City. The project site is located in a flat area and is surrounded by urban development, including commercial and office uses to the north, warehouse uses to the east and west, and residential uses to the south. In addition, the proposed project includes the protection-in-place of two existing buildings and does not propose the construction of any new buildings that would block the view of any natural features from the project site or surrounding areas. Further, the proposed project involves the demolition of three existing buildings on the project site, which could help improve views of the surrounding area; however, due to adjacent intervening land uses, any viewshed improvement would be negligible. For these reasons, the development of the proposed project would not have a substantial adverse effect on a scenic vista. Therefore, there would be no impact, and no mitigation is required.	No mitigation is required.	No Impact.
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.** The project site is not located in the vicinity of a State Scenic Highway. The nearest State-designated Scenic Highway to the project site is a 4-mile portion of SR-91 approximately 11 miles east of the project site. The nearest State highway that is eligible for official designation as a State Scenic Highway is a portion of PCH approximately 5 miles southwest of the project site. Due to distance and intervening land uses, no portion of the project site or surrounding area is viewable from the officially designated portion of SR-91 or the eligible portion of PCH. As such, the project would not result in impacts related to the substantial damage of scenic resources within a State Scenic Highway. Therefore, there would be no impact, and no mitigation is required.	No mitigation is required.	No Impact.
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? **Less Than Significant Impact.** The Cypress General Plan Land Use Policy Map designates the project site as "Specific Plan Area" in recognition that the project site is subject to the Cypress Corporate Center Amended Specific Plan. The project site has a zoning designation of PC-2, Cypress Corporate Center, which is intended to provide for the development of uses as allowed by the Specific Plan. Therefore, the Specific Plan largely governs development standards and design guidelines pertaining to aesthetics associated with the project site. The proposed project is 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. Additionally, the proposed project would conform to all applicable development standards and design guidelines of the Specific Plan that regulate scenic quality. Therefore, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality. As such, impacts would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
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.** Light resulting from construction activities 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 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.** As part of the project, lighting throughout the project site, including wall-mounted lighting on the existing warehouse building and pole-mounted lighting throughout the parking lot, would be upgraded. The proposed project would not introduce new sources of light to the project site. Although the proposed project includes upgraded lighting, these light sources would be comparable to lighting in the existing condition and would replace some of the lighting associated with the current uses on site. The proposed project would comply with the development regulations outlined in Section III.C.8., Lighting, of the Specific Plan, which require that parking lots be lighted, and that lighting be designed to minimize power consumption, confine direct illumination to the premises of the development, and protect residences adjacent to the south from light and glare impacts. Landscaping and screening requirements set forth in the Specific Plan would also reduce impacts created by lighting. In addition, all project lighting is required to meet all applicable lighting standards in the City's Zoning Ordinance. The existing warehouse on the project site that would be protected-in-place is predominantly concrete and does not produce glare. As part of the project, the existing warehouse building would be repainted, but no new building materials would be added that could act as sources of glare. Therefore, the existing materials would not have the potential to produce a substantial degree of glare. Nighttime lighting and glare sources from the proposed project could also include lighting from interior and exterior building lighting, security lighting, signage, parking lot lighting, and vehicle headlights. The nighttime glare produced by these sources would be similar to the existing nighttime glare produced by the buildings and parking lots on the project site and the surrounding industrial uses and would not result in enough glare to be considered substantial or affect nighttime views. For these reasons, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the surrounding urban area, and project impacts would be less than significant. No mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Cumulative Aesthetic Impacts. **Less Than Significant Impact.** The cumulative impact area for aesthetics related to the proposed project is the City of Cypress. As shown in Table 4.A, Summary of Related Projects, in Chapter 4.0, Existing Setting, Environmental Analysis, Impacts, and Mitigation Measures, a residential project, a sports park, and a mixed-use project (including residential, retail, and hotel uses) are approved or under construction within the City. Each of these projects, as well as all proposed projects in the City, would be subject to their own consistency analysis for policies and regulations governing scenic quality and would be reviewed for consistency with any applicable Specific Plan goals and policies and Zoning Code development standards. If there were any potential for significant impacts to aesthetics, appropriate mitigation measures would be identified to reduce and/or avoid impacts related to aesthetics. As described in Section 4.1.6, Project Impacts, implementation of the proposed project would not result in a significant impact related to aesthetics. The proposed project and all related projects are required to adhere to City and State regulations designed to reduce and/or avoid impacts related to aesthetics. With compliance with these regulations, cumulative impacts related to aesthetics would be less than significant. Therefore, implementation of the proposed project would not result in a significant cumulative impact related to aesthetics.	No mitigation is required.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
4.2: Air Quality		
Threshold 4.2.1: Would the project conflict with or obstruct implementation of the applicable air quality plan? **Less Than Significant Impact.** The proposed project would not conflict with or obstruct implementation of the 2016 AQMP because the project's construction and operational emissions would not exceed the SCAQMD regional significance thresholds or Localized Significance Thresholds (LSTs), and the proposed project is consistent with the land use and growth intensities reflected in the adopted General Plan. Furthermore, the project would not exceed any applicable regional or local thresholds. Therefore, impacts related to the conflict with or obstruction of implementation of the applicable air quality plan would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.2.2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard? **Less Than Significant Impact.** Project construction-source emissions would not exceed the numerical thresholds of significance established by the SCAQMD for any criteria pollutant. Operational emissions would be expected from area source emissions, energy source emissions, and mobile source emissions. Operational emissions from the existing development were subtracted from the project operational emissions to determine the new emissions from the proposed project. The project's daily regional emissions from on-going operations would not exceed any of the thresholds of significance. Therefore, impacts related to the cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable NAAQS or CAAQS would be less than significant.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.2.3: Would the project expose sensitive receptors to substantial pollutant concentrations? **Less Than Significant Impact.** Results of the LST analysis indicate that the project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction. Additionally, the project will not exceed the SCAQMD localized significance thresholds during operational activity. Further, Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations. Additionally, 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. Because the project would not exceed the LSTs with compliance with regulatory requirements, impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.2.4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? **Less Than Significant Impact.** **<u>Construction</u>.** Construction equipment exhaust on the project site during construction would emit odors; however, this would be temporary in nature and would cease to occur after construction is completed. No other sources of objectionable odors would occur during construction of the proposed project, and no mitigation is required. **<u>Operation.</u>** Potential odors could result from temporary storage of typical solid waste (refuse) associated with the proposed project's (long-term operational) uses. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed project operations would be less than significant and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Cumulative Air Quality Impacts. **Less Than Significant Impact.** The cumulative impact area for air quality related to the proposed project is the South Coast Air Basin. Air pollution is inherently a cumulative impact measured across an air basin. The incremental effects of projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively considerable per SCAQMD guidelines. The proposed project's construction- and operation-related regional daily emissions are less than the SCAQMD significance thresholds for all criteria pollutants. Therefore, the proposed project would not have a cumulatively considerable increase in emissions, and the proposed project's cumulative air quality impacts would be less than significant.	No mitigation is required.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
4.3: Biological Resources		
Threshold 4.3.1: 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 the U.S. Fish and Wildlife Service? **No Impact.** The project site is currently characterized by several buildings, a paved parking lot, and landscaping. In its existing condition, the project site contains only a small amount of ornamental vegetation near the center of the site, along Katella Avenue, Holder Street, and along the southern edge of the project site adjacent to the Stanton Storm Channel. The disturbed condition of the project site is generally not suitable to support special-status plant or animal species. **Special-Status Habitat/Vegetation.** The United States Fish and Wildlife Service's (USFWS) Critical Habitat for Threatened & Endangered Species map does not identify any locations of critical habitat within the project site or immediately surrounding area. According to the California Natural Diversity Database (CNDDB), no sensitive plant species have been documented on the project site or in the immediately surrounding area. The Orange County Transportation Authority's (OCTA) 2016 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which was adopted for the purpose of permitting freeway capital improvement projects proposed by OCTA and OCTA's habitat preserve, restoration, and monitoring activities, includes a Plan Area that covers the entirety of Orange County, including Cypress. The City of Cypress is not a party to the OCTA NCCP/HCP, and development activity within the City is not subject to the provisions of the OCTA NCCP/HCP. Therefore, the OCTA NCCP/HCP does not apply to the proposed project. No special-status species are anticipated to be directly affected by the project due to the lack of suitable habitat on the project site. Therefore, no impacts to sensitive or special-status species would result from implementation of the proposed project, and no mitigation is required.	No mitigation is required.	No Impact.
Threshold 4.3.2: 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 the U.S. Fish and Wildlife Service? **No Impact.** The project site is highly disturbed and developed with several buildings, a paved parking lot, and landscaping, and does not support any special-status or sensitive riparian habitat as identified in regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS. Therefore, no impacts related to riparian habitat or other sensitive natural communities identified in a local or regional plan would result from project implementation, and no mitigation is required.	No mitigation is required.	No Impact.
Threshold 4.3.3: 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 managed by USFWS, the project site does not contain federally protected wetlands. The project site is located entirely outside of streambeds, banks, and riparian habitat. No potential waters of the United States or CDFW jurisdictional areas are located on the project site. Although construction activities have the potential to result in temporary indirect effects to water quality including a potential increase in erosion and sediment transport into downstream aquatic areas and the contamination of waters from construction equipment, these potential indirect effects to hydrology and water quality would be avoided or substantially minimized through the implementation of Best Management Practices (BMPs) and a Water Quality Management Plan as discussed in Section 4.9, Hydrology and Water Quality. Specifically, adherence to Regulatory Compliance Measure 4.9-1-1, provided in Section 4.9, Hydrology and Water Quality, during construction would address erosion-related impacts during construction through implementation of construction site BMPs to avoid erosion and sedimentation impacts to downstream aquatic areas and water quality. As such, there would be no impacts on State or federally protected wetlands.	No mitigation is required. Refer to Regulatory Compliance Measure 4.9-1, which is provided below in Section 4.9, Hydrology and Water Quality.	No Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Threshold 4.3.4: 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.** Due to the lack of sensitive or special-status species or their habitats on the project site, the project would not result in impacts on candidate, sensitive, or special-status animal species. The proposed project would avoid impacts on nesting resident and/or migratory birds either by avoiding vegetation removal during the avian nesting season (February 1 through August 31) or by implementing Regulatory Compliance Measure 4.3-1. The proposed project has the potential to impact active migratory bird nests if and to the extent that those trees are removed during the avian nesting season and they contain nests. Regulatory Compliance Measure 4.3-1, included here, would address any impacts to nesting resident and/or migratory birds should it be necessary to conduct vegetation removal during the nesting season and nests are present. With implementation of Regulatory Compliance Measure 4.3-1, the proposed project's potential impacts on nesting migratory birds would be less than significant. The proposed project would avoid impacts on the nests of raptors (which are migratory birds) if the existing trees in the ornamental vegetation areas are removed outside the raptor nesting season (February 1 through June 30) and they contain raptor nests. The proposed project has the potential to impact active raptor nests if and to the extent that (1) those ornamental trees are removed during the raptor nesting season, and (2) special-status or common species of raptors establish nests in the future in any of those ornamental trees prior to their removal. Regulatory Compliance Measure 4.3-1, would also address any impacts to nesting raptors should it be necessary to conduct vegetation removal during the nesting season and raptors are present. With implementation of Regulatory Compliance Measure 4.3-1, the proposed project exhibits no potential to disrupt a wildlife corridor or in any way disrupt movement of native wildlife.	No mitigation is required. Although project-related impacts would be less than significant, incorporation of the following Regulatory Compliance Measure would be required to reduce biology resource impacts. **Regulatory Compliance Measure 4.3-1:** **Nesting Bird Survey and Avoidance:** If vegetation removal, construction, or grading activities are planned to occur within the active nesting bird season (February 1 through August 31), the City of Cypress, (or designee), shall confirm that the Applicant/Developer has retained a qualified biologist who shall conduct a preconstruction nesting bird survey no more than 3 days prior to the start of such activities. The nesting bird survey shall include the work area and areas adjacent to the site (within 500 feet, as feasible) that could potentially be affected by project-related activities such as noise, vibration, increased human activity, and dust, etc. For any active nest(s) identified, the qualified biologist shall establish an appropriate buffer zone around the active nest(s). The appropriate buffer shall be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Project activities shall be avoided within the buffer zone until the nest is deemed no longer active, as determined by the qualified biologist.	Less Than Significant Impact.
Threshold 4.3.5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? **Less Than Significant Impact.** The Landmark Tree Ordinance in the City's Municipal Code protects designated landmark trees, which are specifically identified in the City's *Inventory of Landmark Trees* (July 1996). As shown in this inventory, there are no landmark trees on the project site. The removal of any on-site trees or vegetation would not conflict with the City's Landmark Tree Ordinance. Per Article IV of the Municipal Code, Street Trees, any tree within the public right-of-way belongs to the City of Cypress. Any work to street trees conducted as part of the proposed project would be done in accordance with the City Council's adopted Parkway Tree Policy. Therefore, through compliance with the local policies and ordinances relating to tree protection, any impacts to local street trees would be considered less than significant.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.3.6: 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.** There is no adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other habitat conservation plan in the City. Although the OCTA NCCP/HCP includes a Plan Area that covers the entirety of Orange County, including Cypress, the City is not a party to the OCTA NCCP/HCP, and development activity within the City is not subject to the provisions of the OCTA NCCP/HCP. Therefore, the OCTA NCCP/HCP does not apply to the proposed project, and the proposed project would not conflict with any local, regional, or State HCP or NCCP. The proposed project would not result in impacts related to conflict with any provisions of an HCP or NCCP, and no mitigation is required.	No mitigation is required.	No Impact.
Cumulative Biological Resources Impacts. **Less Than Significant Impact.** Although the project site is located in the OCTA NCCP/HCP that covers the entirety of Orange County, the City is not a party to the OCTA NCCP/HCP, and development activity within the City is not subject to the provisions of the OCTA NCCP/HCP. Therefore, the OCTA NCCP/HCP does not apply to the proposed project. Additionally, the project site is not located within a designated habitat reserve. Therefore, the proposed project would not contribute to the cumulative loss of biological resources, and impacts on biological resources would be less than cumulatively significant.	No mitigation is required.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
4.4: Cultural Resources		
Threshold 4.4.1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? **No Impact.** According to the City of Cypress General Plan, there are no known archaeological resources located in Cypress. Further, the SCCIC record search results and field survey identified no previously recorded cultural resources on or in soils on the project site. As such, there are no historical resources as defined in Section 15064.5 of the State CEQA Guidelines located within the project site. The proposed project will not cause a substantial adverse change in the significance of a historical resource, and no mitigation is required.	No mitigation is required.	No Impact.
Threshold 4.4.2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? **Less than Significant with Mitigation Incorporated.** The SCCIC record search included the project site and the areas within 0.25 mile of the project site. No archaeological resources have been previously recorded within the project site. Further, the field survey did not identify any cultural resources within the project site. However, because the project site is located in close proximity to the historic-period natural alignment of a freshwater source and native sediments at the project site date to a timeframe that includes precontact human occupation in the region, there is a potential to encounter subsurface archaeological resources from either the precontact or historic periods. With implementation of Mitigation Measure 4.4.1, which requires monitoring by a qualified archaeologist and includes procedures for recovering any significant or unique archaeological resource and for preparation of a report documenting any cultural resources that are recovered at the project site, impacts to previously unrecorded cultural resources would be less than significant.	**Mitigation Measure 4.4.1** **Cultural Resources Monitoring and Accidental Discovery.** Prior to the issuance of grading permits, and in adherence to the recommendations of the Cultural Resources Study for the Amazon Distribution Center Project (2020), the Applicant/Developer shall retain a qualified archaeological monitor, with approval of the City of Cypress (City) Community Development Director or designee. A monitoring plan shall be prepared by the archaeologist and implemented upon approval by the City. The monitor shall be present full-time during the first 10 working days when excavation activities will extend below Artificial Fill deposits into native soils. No archaeological monitoring is required during demolition of existing buildings or clearing/grubbing of existing landscape. If cultural materials are discovered during grading or excavation, the construction contractor shall divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find. Project personnel shall not collect or move any archaeological materials or human remains and associated materials. To the extent feasible, project activities shall avoid these deposits. Where avoidance is not feasible, the archaeological deposits shall be evaluated for their eligibility for listing on the California Register of Historical Resources. If the deposits are not eligible, avoidance is not necessary. If the deposits are eligible, adverse effects on the deposits must be avoided, or such effects must be mitigated. Mitigation can include, but is not necessarily limited to: excavation of the deposit in accordance with a data recovery plan (see California Code of Regulations [CCR] Title 4(3) Section 5126.4(b)(3)(C)) and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; production of a report detailing the methods, findings, and significance of the archaeological site and associated materials; curation of archaeological materials at an appropriate facility for future research and/or display; an interpretive display of recovered archaeological materials at a local school, museum, or library; and public lectures at local schools and/or historical societies on the findings and significance of the site and recovered archaeological materials. The City Community Development Director, or designee, shall be responsible for reviewing any reports produced by the archaeologist to determine the appropriateness and adequacy of the findings and recommendations.	Less Than Significant with Mitigation Incorporated.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Threshold 4.4.3: Would the project disturb any human remains, including those interred outside of dedicated cemeteries? **Less Than Significant Impact.** Although no human remains are known to be on the project site or are anticipated to be discovered during project construction, there is always a possibility of encountering unanticipated cultural resources, including human remains. Disturbing human remains could violate the State's Health and Safety Code as well as destroy the resource. Adherence to regulatory standards included in Regulatory Compliance Measure 4.4.1 would reduce the impact of the proposed project on human remains to less than significant. No mitigation is required.	**Regulatory Compliance Measure 4.4.1** **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 of Orange (County) Coroner has made a determination of origin and disposition pursuant to State Public Resources Code (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 items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.	Less Than Significant Impact.
Cumulative Cultural Resources Impacts. **Less Than Significant with Mitigation Incorporated.** 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 Cypress, could contribute to a cumulatively significant impact due to the overall loss of historical and archaeological artifacts unique to the region. Each development proposal received by the City is required to comply with the requirements of CEQA, including an environmental review, if applicable. If there were any potential for significant impacts to archaeological resources as a result of present or reasonably foreseeable projects in Cypress, an investigation would be required to determine the nature and extent of the resources and identify appropriate mitigation measures. When archaeological resources are assessed and/or protected as they are discovered, impacts to these resources are less than significant. As such, implementation of Regulatory Compliance Measure 4.4.1 and Mitigation Measure 4.4.1 would ensure that the proposed project, together with cumulative projects, would not result in a significant cumulative impact to unique archaeological and historical resources.	Refer to Regulatory Compliance Measure 4.4.1 and Mitigation Measure 4.4.1, provided above.	Less Than Significant with Mitigation Incorporated.
4.5: Energy		
Threshold 4.5.1: 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.** **Construction.** Project construction activities would consume an estimated 284,422 gallons of diesel fuel and 2,343 gallons of gasoline fuel. Project construction would represent a "single-event" fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose. The proposed project's construction-related electricity consumption would represent less than 0.001 percent of Orange County's total electricity consumption in 2018. The equipment used for project construction would conform to California Air Resources Board (CARB) regulations and California emissions standards. Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations and best available control measures (BACM). More specifically, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. To ensure adherence to these regulations, the Applicant/Developer would be required to comply with Regulatory Compliance Measure 4.5-1, which requires the placement of signage on the project site informing the construction workers that engines must be shut off at or before five minutes of idling. In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with the preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. With adherence to Regulatory Compliance Measure 4.5-1, the proposed project would result in less than significant impacts related to energy during construction.	**Regulatory Compliance Measure 4.5-1:** **Idling Restriction Signage.** Prior to the issuance of grading permits, the City of Cypress (City) Community Development Director shall confirm that the grading plans for the project include a requirement that a sign shall be posted on site stating that construction workers shall shut off engines at or before five minutes of idling.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Operation. The proposed project would result in an estimated annual VMT of 15,539,663 and would result in the consumption of an estimated 668,330 gallons of petroleum fuel (diesel or gasoline) each year. Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting (State of California 2019). Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.). Project building operations and project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the project by SoCalGas; electricity would be supplied to the project by SCE. The proposed project would result in less than significant impacts related to the wasteful, inefficient, or unnecessary consumption of energy resources, during project operation. No mitigation is required.		
Threshold 4.5.2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? **Less Than Significant Impact.** 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 sources. 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, 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.	No mitigation is required.	Less Than Significant Impact.
Cumulative Energy Impacts. **Less Than Significant Impact.** The proposed project would result in an increased demand for electricity and natural gas service. Although the proposed project would result in a net increase in demand for electricity, this increase would not require SCE to expand or construct infrastructure that could cause substantial environmental impacts. 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. The proposed project's share of cumulative consumption of natural gas in the SoCalGas service area would be negligible. It is anticipated that SoCalGas would be able to meet the natural gas demand of the related projects without additional facilities. Furthermore, 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, this transportation energy use would not represent a major amount of energy use when 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 related projects are required to comply with various federal and State government legislation to improve energy efficiency in buildings, equipment, and appliances, and reduce VMT. Compliance with Regulatory Compliance Measure 4.5-1 would ensure that the proposed project does not result in an inefficient, wasteful, and unnecessary consumption of energy. Therefore, the proposed project's contribution to impacts related to the inefficient, wasteful, and unnecessary consumption of energy would not be cumulatively considerable, and no mitigation is required.	Refer to Regulatory Compliance Measure 4.5-1 above.	Less Than Significant Impact.
4.6: Geology and Soils		
Threshold 4.6.1(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 evidences of known fault? (Refer to Division of Mines and Geology Special Publication 42) **No Impact.** According to the California Department of Conservation 2010 Fault Activity Map, there are no known earthquake faults that run through the project site nor is there any other evidence of a known fault that runs through the project site. Therefore, the proposed project would not result in any impact related to the rupture of a known earthquake fault, and there would be no impact.	No mitigation is required	No Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Threshold 4.6.1(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.** A design-level peak ground acceleration (PGA) of 0.54 g has been calculated for the project site. This indicates that strong seismic ground shaking generated by seismic activity is considered a potentially significant impact that may affect people or structures associated with the proposed project. With the implementation of Mitigation Measure GEO-1 and adherence to the regulatory standards described in Regulatory Compliance Measure GEO-1, potential project impacts related to seismic ground shaking would be reduced to a less than significant level.	**Mitigation Measure 4.6-1:** **Compliance with the Recommendations in the Project Geotechnical Assessment.** The Applicant/Developer's construction contractor shall implement the recommendations of the *Geotechnical Investigation, Amazon Distribution Center, SWC Katella Avenue and Holder Street, Cypress, California* (Geotechnical Assessment) (Southern California Geotechnical, Inc. [SCG], December 4, 2019; Geotechnical Assessment) prepared for the proposed project, as applicable to the satisfaction of the City of Cypress' (City) Chief Building Official or designee, including, but not limited to: Subgrade preparation in the new pavement areas shall initially consist of the removal of all soils disturbed during demolition operations. Any soils disturbed as a result of demolition shall be removed, and the exposed subgrade soils within the new pavement areas shall be evaluated by the geotechnical engineer to verify their suitability to serve as the new pavement subgrade. Overexcavation shall occur in areas where lower strength, or unstable soils are identified by the geotechnical engineer during grading. Exposed subgrade soils within the new pavement areas shall be evaluated by the geotechnical engineer to verify their suitability to serve as the new pavement subgrade. This evaluation shall include probing and proof rolling to identify any soft, loose, or otherwise unstable soils that must be removed. Some localized areas of deeper overexcavation may be required if very moist, loose, porous, low density or otherwise unsuitable materials are encountered at the pavement subgrade elevation. To address very moist soils, stabilization of exposed overexcavation subgrade soils may be necessary. If highly unstable soils are identified, and if the construction schedule does not allow for delays associated with drying, mechanical stabilization shall be used usually consisting of coarse crushed stone or geotextile. In this event, the geotechnical engineer shall be contacted for supplementary recommendations. Typically, an unstable subgrade can be stabilized using a suitable geotextile fabric, such as Mirafi 580I, HP 570 or HP 270, and/or a 12 to 18-inch thick layer of coarse (2 to 4 inch particle size) crushed stone. Crushed asphalt and concrete debris resultant from demolition could also be used as a subgrade stabilization material. Other options, including lime treatment can also be used. After a suitable overexcavation subgrade has been achieved, exposed soils shall be scarified to a depth of at least 12 inches, moisture treated (or air dried) to 0 to 4 percent above optimum moisture content, and recompacted to at least 90 percent of ASTM D-1557 maximum dry density. The subgrade shall then be raised to grade with on-site soils or imported structural fill. For pavement, the aggregate base course shall be compacted to at least 95 percent of the ASTM D-1557 maximum dry density. Asphaltic concrete shall be compacted to at least 95 percent of the batch plant-reported maximum density. The aggregate base course may consist of crushed aggregate base (CAB) or crushed miscellaneous base (CMB), which is a recycled gravel, asphalt and concrete material. The gradation, R-Value, Sand Equivalent, and Percentage Wear of the CAB or CMB should comply with appropriate specifications contained in the current edition of the "Greenbook" Standard Specifications for Public Works Construction.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
	Preparation of the subgrade soils within new Portland Cement Concrete (PCC) pavement areas shall be performed as previously described for new asphalt pavement areas. The concrete shall have a 28-day compressive strength of at least 3,000 psi. Reinforcing within all pavements shall be designed by the structural engineer. The maximum joint spacing within all of the PCC pavements shall be equal to or less than 30 times the pavement thickness. The actual joint spacing and reinforcing of the PCC pavements shall be determined by the structural engineer. Additional site testing and final design evaluation shall be conducted by the Project Geotechnical Consultant to refine and enhance these requirements. The Applicant/ Developer shall require the Project Geotechnical Consultant to assess whether the requirements in that report need to be modified or refined to address any changes in the project features that occur prior to the start of grading. If the Project Geotechnical Consultant identifies modifications or refinements to the requirements, the Applicant/ Developer shall require appropriate changes to the final project design and specifications. Design, grading, and construction shall be performed in accordance with the requirements of the Cypress Municipal Code and the California Building Code (CBC) applicable at the time of grading, appropriate local grading regulations, and the requirements of the Project Geotechnical Consultant as summarized in a final written report, subject to review by the Cypress Director of Public Works, or designee, prior to commencement of grading activities. Grading plan review shall also be conducted by the Director of Public Works, or designee, prior to the start of grading to verify that the requirements developed during the geotechnical design evaluation have been appropriately incorporated into the project plans. Design, grading, and construction shall be conducted in accordance with the specifications of the Project Geotechnical Consultant as summarized in a final report based on the CBC applicable at the time of grading and building, and the City's Building Code. On-site inspection during grading shall be conducted by the Project Geotechnical Consultant and the Cypress Director of Public Works/City Engineer, or designee, to ensure compliance with geotechnical specifications as incorporated into project plans. Prior to the final grading permits, the Project Geotechnical Consultant shall submit a Final Testing and Observation Geotechnical Report for Rough Grading to the Cypress Director of Public Works/City Engineer, or designee. **Regulatory Compliance Measure GEO-1:** **California Building Code Compliance Seismic Standards.** All structures shall be designed in accordance with the seismic parameters presented in the Geotechnical Assessment prepared for this project (NMG Geotechnical, Inc., 2019) and applicable sections of the most current California Building Code (CBC). Prior to the issuance of building permits for planned structures, the Project Soils Engineer and the City of Cypress Chief Building Official, or designee, shall review building plans to verify that the structural design conforms to the requirements of the Geotechnical Assessment and the City of Cypress Municipal Code. **Mitigation Measure 4.6-2** **Procedures for Unexpected Paleontological Resources Discoveries.** In the event that paleontological resources are encountered, work in the immediate area of the discovery	

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
	shall be halted and the Applicant/Developer shall retain a professional Paleontologist who meets the qualifications established by the Society of Vertebrate Paleontology to assess the discovery. The qualified, professional Paleontologist shall make recommendations regarding the treatment and disposition of the discovered resources, as well as the need for subsequent paleontological mitigation, which may include, but not be limited to, paleontological monitoring, collection of observed resources, preservation, stabilization and identification of collected resources, curation of resources into a museum repository, and preparation of a monitoring report of findings). The City of Cypress shall ensure that the recommendations from the qualified, professional Paleontologist shall be followed by the Applicant/ Developer.	
Threshold 4.6.1(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? **Less Than Significant with Mitigation Incorporated.** Based on the results of the Geotechnical Assessment, the maximum estimated vertical settlement was calculated to be approximately 3.6 inches for the cone penetrometer test (CPT) locations within the project site. This is within the commonly accepted limitations of structural mitigation (4 inches). Additionally, predicted liquefaction-induced total settlement with respect to most of the project site would be addressed by incorporating overexcavation (if necessary) and soil stabilization techniques (Mitigation Measure GEO-1). With the incorporation of Mitigation Measure GEO-1, the potential adverse effects of seismic-related ground failure including liquefaction would be less than significant.	Refer to Mitigation Measure 4.6-1, above.	Less Than Significant Impact.
Threshold 4.6.1(iv): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides? **No Impact.** The project site and vicinity are relatively flat, and the site is not located within a zone of earthquake induced landslide as mapped by the CGS. Historically, there have been no recorded landslides within the City's boundaries. No landslides are anticipated as the result of the proposed project, and there would be no impact.	No mitigation is required.	No Impact.
Threshold 4.6.2: Would the project result in substantial soil erosion or the loss of topsoil? **Less Than Significant Impact.** The ground surface cover surrounding the buildings generally consists of paved parking lots, drive lanes, and loading dock areas, and landscape planters throughout the site. However, the ground surface cover on the north side of the existing office building along Katella Avenue consists of turf grass and in the southeastern portion of the site, east of the existing warehouse building, the ground surface cover consists of exposed soil with sparse to moderate grass and weed growth. The total surface area of these existing unpaved areas is approximately 2 acres. During project construction activities, soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and siltation compared to existing conditions. The Construction General Permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) (Regulatory Compliance Measure 4.9-1, in Section 4.9, Hydrology and Water Quality). The SWPPP would detail Erosion Control and Sediment Control BMPs to be implemented during project construction to minimize erosion and retain sediment on site. With compliance with the requirements of the Construction General Permit and with implementation of the construction BMPs, construction impacts related to on-site erosion would be less than significant, and no mitigation is required. Although the project would increase impervious surface area, impervious surface areas associated with development of the project site are not prone to erosion or siltation, because no loose soil would be included in these areas. Therefore, operational impacts related to substantial on-site erosion would be less than significant, and no mitigation is required.	Refer to Regulatory Compliance Measure 4.9-1, which is provided below in Section 4.9, Hydrology and Water Quality.	Less Than Significant Impact.
Threshold 4.6.3: 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-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse? **Landslides and Unstable Slopes.** **Less Than Significant Impact.** Because the project site is located in a relatively flat area, landslides or other forms of natural slope instability do not represent a significant hazard to the project. In addition, as stated above, the site is not within a State-designated hazard zone for earthquake-induced landslide. Therefore, potential impacts related to landslides would be less than significant, and no mitigation is required.	Refer to Mitigation Measure 4.6-1 and Regulatory Compliance Measure 4.6-1, which are provided above.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Lateral Spreading. **Less Than Significant Impact.** The Geotechnical Assessment indicates that lateral spreading is not a potential concern with respect to the proposed project. Therefore, potential impacts related to lateral spreading would be less than significant, and no mitigation is required. **Subsidence.** **Less Than Significant Impact.** As stated in the Geotechnical Assessment, minor ground subsidence (estimated to be approximately 0.1 ft) is expected to occur in the soils below the zone of removal, due to settlement and the weight of construction equipment. However, this amount of settlement is considered negligible and the project site is not located within an area of known subsidence that may be associated with groundwater, peat loss, or oil extraction. Therefore, the proposed project would not be subject to potential geotechnical hazards related to subsidence, and no mitigation is required. **Liquefaction and Compressible/Collapsible Soils.** **Less Than Significant with Mitigation Incorporated.** Implementation of Mitigation Measure GEO-1 and adherence to the regulatory standards described in Regulatory Compliance Measure GEO-1 would be required to address the proposed project's impacts with respect to liquefaction and compressible soils. Provided that design and remedial grading and ground improvement (as necessary) are performed in accordance with the applicable requirements in the CBC (adopted by the City as its Building Code with certain amendments), and current standards of practice in the area, excessive settlement resulting from liquefaction and compression of existing undocumented fill and native alluvial soils on the project site would be reduced to a less than significant level. **Wet Soils.** **Less Than Significant with Mitigation Incorporated.** Due the presence of shallow groundwater, excavations deeper than 5–6 ft are likely to encounter groundwater and/or soft, wet soil. Implementation of Mitigation Measure GEO-1, which requires that the ground stabilization recommendations in the Geotechnical Assessment be implemented during grading and construction, would address soft ground conditions due to shallow groundwater. With implementation of Mitigation Measure GEO-1, the proposed project's impacts related to wet soils would be less than significant.		
Threshold 4.6.4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property? **Less Than Significant Impact**. The project site stratigraphy consists of Artificial Fill and Alluvium (SCG 2019). These soil types have low shrink-swell potential and, therefore, are not susceptible to expansion. As stated in the Geotechnical Assessment, based on its very low expansive classification, no design considerations related to expansive soils are considered warranted for the project site. Since the potential for expansive soils is low, the proposed project would not create substantial potential risks to life or property, and there would be less than significant impacts.	No mitigation is required. Refer to Regulatory Compliance Measure 4.6-1, which is provided above.	Less Than Significant Impact.
Threshold 4.6.5: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? **No Impact.** The proposed project would not include the use of septic tanks or alternative wastewater disposal systems because sanitary sewer and wastewater facilities are available in the vicinity of the project site. Therefore, the project would have no impact with respect to septic tanks or alternative wastewater disposal systems.	No mitigation is required.	No Impact.

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Threshold 4.6.6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? **Less Than Significant with Mitigation Incorporated.** The project site contains Artificial Fill, which has no paleontological sensitivity, and Young Alluvium, Unit 2, which has low paleontological sensitivity from the surface to a depth of 10 ft and high paleontological sensitivity below 10 ft. With a maximum excavation depth of 10 ft, the proposed project is expected to remain in deposits with no or low paleontological sensitivity. However, in the event that paleontological resources are encountered during construction, Mitigation Measure 4.6-2 would require work in the immediate area of the discovery to be halted and a qualified paleontologist to assess the discover. These procedures would mitigate potential impacts to scientifically significant nonrenewable paleontological resources.	Refer to Mitigation Measure 4.6-2.	Less Than Significant Impact.
Cumulative Geology and Soils Impacts. **Less Than Significant Impact.** The three related projects closest to the project site are approximately one mile away and are not relevant with respect to cumulative geotechnical impacts. Therefore, it is not anticipated that development of these related projects would have any geotechnical impact on the project, nor would the project have geotechnical impacts on any nearby projects. Therefore, the proposed project and the applicable related projects would not have the potential to cause cumulatively significant adverse impacts related to geology, soils and paleontological resources.	No mitigation is required.	Less Than Significant Impact.
4.7: Greenhouse Gas Emissions		
Threshold 4.7.1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? **Less Than Significant Impact.** During construction of the proposed project, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. Operational activities associated with the Project will result in emissions of CO_2, CH_4, and N_2O from the following primary sources: area source emissions; energy source emissions; mobile source emissions; on-site cargo handling equipment emissions; water supply, treatment, and distribution; and solid waste. The annual GHG emissions associated with the operation of the proposed project were subtracted from the Project GHG emissions to determine the new emissions from the proposed project. The proposed project would generate 1,435.15 MT CO_2e/yr. As such, the proposed project would not exceed the SCAQMD's recommended numeric threshold of 3,000 MTCO_2e if it were applied. Thus, the Project does not have the potential to result in a cumulatively considerable impact with respect to GHG emissions. Impacts were determined to be less than significant and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.7.2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? **Less Than Significant Impact.** Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan and SCAG's 2016–2040 RTP/SCS. Although measures in the Scoping Plan apply to state agencies and not the proposed project, the project's GHG emissions would be reduced by compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted. The proposed project would not conflict with any of the 2017 Scoping Plan elements as any regulations adopted would apply directly or indirectly to the Project. Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40% below 1990 levels by 2030 (38). Therefore, the proposed project would be consistent with the CARB Scoping Plan, and impacts are considered less than significant. Based on the nature of the proposed project, it is anticipated that implementation of the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS. Therefore, the proposed project would not conflict with an adopted plan, policy, or regulation pertaining to GHG emission, and impacts are considered less than significant. No mitigation is required.	No mitigation is required.	Less Than Significant Impact.

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Cumulative Greenhouse Gas Impacts. **Less Than Significant Impact.** Climate change is a global environmental problem in which: (a) any given development project contributes only a small portion of any net increase in GHGs, and (b) global growth is continuing to contribute large amounts of GHGs across the world. Land use projects may contribute to the phenomenon of global climate change in ways that would be experienced worldwide, and with some specific effects felt in California. However, no scientific study has established a direct causal link between individual land use project impacts and global warming. The analysis of impacts related to GHG emissions is inherently cumulative. The proposed project would have no conflict with applicable statewide and regional climate action measures. Therefore, GHG emission impacts associated with the proposed project would be less than significant.	No mitigation is required.	Less Than Significant Impact.
4.8 Hazards and Hazardous Materials		
Threshold 4.8.1: 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.** **Construction.** Construction of the proposed project would temporarily increase the regional transport, use, and disposal of construction-related hazardous materials and petroleum products (e.g., diesel fuel, lubricants, paints and solvents, and cement products containing strong basic or acidic chemicals). Construction activities would be required to comply with applicable State and federal regulations for proper transport, use, storage, and disposal of excess hazardous materials and hazardous construction waste. In addition, the proposed project would comply with Regulatory Compliance Measures 4.9-1 and 4.9-2, which require compliance with the waste discharge permit requirements to avoid potential impacts to water quality due to spills or runoff from hazardous materials used during construction. Therefore, with adherence to the regulatory standards included in Regulatory Compliance Measures 4.9-1 and 4.9-2, impacts related to the routine transport, use, or disposal of hazardous materials during construction would be less than significant. **Operations.** Operation of the proposed distribution center would involve the use of materials common to all urban developments that are labeled hazardous, such as solvents and commercial cleansers and petroleum products and would include the limited use of pesticide and herbicides for landscape maintenance. Trucks accessing the businesses on site would contain oil and gasoline, to power their engines, which could have the potential to result in minor releases of such substances through drips or leaks from truck loading areas. The proposed project's uses are not anticipated to be associated with major hazardous materials and would not create unusually high quantities of hazardous waste. Prior to the issuance of grading permits, conditions of approval would be applied to the proposed project by the Orange County Fire Authority (OCFA) to reduce hazardous material impacts and insure that any hazardous waste that is generated on-site would be transported to an appropriate disposal facility by a licensed hauler in accordance with State and federal law. Therefore, implementation would result in less than significant impacts related to the routine transport, use, or disposal of hazardous materials.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1 and 4.9-2, which are provided below in Section 4.9, Hydrology and Water Quality.	Less Than Significant Impact.
Threshold 4.8.2: 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.** Operation of the proposed project would include the brief storage and transport of traditional consumer products that could contain minimal amounts of hazardous substances such as petroleum products, pesticides, fertilizer, pain products, solvents, and cleaning products. The proposed project may also potentially store and transport car batteries and lithium batteries. These products and substances could create a potential for explosion or accidental release of hazardous materials into the environment. However, the proposed project is a last-mile logistics facility and would accept and sort packages and then send them out for delivery resulting in short storage times for these products at the facility. Therefore, the potential for release of hazardous materials is considered to be negligible given that all materials are prepackaged in limited quantities for retail consumption and use, and a release is likely to be easily contained. Any hazardous materials on site would be handled in accordance with all applicable regulations, including containment, reporting, and remediation requirements, in the event of a spill or accidental release. Compliance with applicable regulations would ensure that potential hazardous material impacts associated with the operation of the proposed project would be less than significant; no mitigation is required.	No mitigation is required.	Less Than Significant Impact.

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Threshold 4.8.3: 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.** There are no schools located within 0.25 mile of the project site. In addition, the proposed project's uses would not pose a significant threat of hazardous emissions or significant handling of hazardous materials or substances. Therefore, impacts on schools would be less than significant; no mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.8.4: 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? **Potentially Significant Impact.** Database searches of the project site, including a GeoTracker search and a search of Superfund sites, determined that the project site is not included on a list of hazardous materials sites that could create a significant hazard to the public or the environment and is not a recorded Superfund site. The project site was identified as a Leaking Underground Storage Tank (LUST), UST, California Hazardous Material Incident Report System (CHMIRS), Historical UST, Historical CORTESE, CERS, RCRA-SQG, FINDS and ECHO site in the regulatory database reports. The Phase I ESA concluded that there is no evidence of RECs in connection with the project site; however, HRECs and environmental issues were identified. Although HRECs and environmental issues were identified, the Phase I ESA did not recommend any further investigation of the project site. However, upon redevelopment of the project site, the proper decommissioning of the hydraulic lift(s) and clarifiers, if remaining intact, may be required by local regulatory agencies. A lack of maintenance and proper decommissioning procedures could result in potentially significant impacts related to hazardous conditions on the project site. Therefore, the proposed project is required to implement Mitigation Measure 4.8-1, which requires periodic inspection of hydraulic lift(s) and clarifiers during routine service and adherence to all local regulatory agency requirements related to the proper decommissioning of those facilities, which may include soil sampling. With implementation of Mitigation Measure 4.8-1 impacts related to hazardous materials sites would be less than significant.	**Mitigation Measure 4.8-1:** If the clarifiers are left intact and functional, the Applicant/Developer shall periodically inspect them during routine service to ensure that they remain in good condition. If the hydraulic lift(s) and/or clarifiers on the project site are left remaining intact, the Applicant/Developer shall adhere to all local regulatory agency requirements related to the proper decommissioning of those facilities, which may include soil sampling.	Less Than Significant with Mitigation Incorporated.
Threshold 4.8.5: 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 for people residing or working in the project area? **Less Than Significant Impact.** The project site is located approximately 0.6 mile east of the Joint Forces Training Base (JFTB) Los Alamitos. The project site is located in the Federal Aviation Administration's (FAA) Part 77 Notification Area (Exhibit D1) and the AELUP height restriction zone for JFTB Los Alamitos. Implementation of the proposed project would not result in a safety hazard for people working in the project area because the project would reuse the existing warehouse, retain the existing office building along Katella Avenue, and demolish the remaining buildings on the project site. The proposed project does not include the construction of any new structures and, therefore, would not need to comply with FAA standards and requirements that require the FAA be notified of any proposed structure(s) that would penetrate the 100 to 1 imaginary surface that surrounds the runway at JFTB Los Alamitos. Therefore, implementation of the proposed project would result in less than significant impacts related to safety hazards for people working in the project area; no mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.8.6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? **No Impact.** The project site is not located along an emergency evacuation route. Therefore, implementation of the proposed project would not interfere with the adopted emergency response plan and/or the emergency evacuation plan. No impact would occur; no mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.8.7: 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.** The project site is located within a fully urbanized area. There are no wildlands adjacent or in the vicinity of the project site, and the project site is not designated as a Fire Hazard Severity Zone on the Statewide CAL FIRE Map. Therefore, there would be no risk of loss, injury, or death involving wildland fires. No impact would occur, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.

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Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Cumulative Hazards and Hazardous Materials Impacts. No Impact. The project vicinity is largely urbanized with residential, commercial, and industrial uses. As the area continues to develop, the addition of more development could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. For the proposed project, impacts due to hazardous materials would be less than significant. Although some of the related projects have potential impacts associated with hazardous materials, the environmental concerns associated with hazardous materials are site specific. Each project is required to address any issues related to hazardous material or wastes. Federal, State, and local regulations require mitigation to protect against site contamination by hazardous materials. Therefore, there would be no cumulative hazardous materials impacts.	No mitigation is required.	No Impact.
	Regulatory Compliance Measure 4.8-1 If the clarifiers are left intact and functional, the Applicant/Developer shall periodically inspect them during routine service to ensure that they remain in good condition. If the hydraulic lift(s) and/or clarifiers on the project site are left remaining intact, the Applicant/Developer shall adhere to all local regulatory agency requirements related to the proper decommissioning of those facilities, which may include soil sampling.	
4.9: Hydrology and Water Quality		
Threshold 4.9.1: Would the project violate any water quality standards or waste discharge requirements? **Less Than Significant Impact.** The proposed project would comply with existing NPDES regulations and would implement construction and operational BMPs. Construction and operational BMPs would reduce pollutants of concern in stormwater runoff, and would ensure that water quality impacts are less than significant.	No mitigation is required. Although project-related impacts would be less than significant, incorporation of the following Regulatory Compliance Measures would be required to reduce hydrology and water quality impacts. **Regulatory Compliance Measure 4.9-1:** **Construction General Permit.** Prior to commencement of construction activities, the Applicant/Developer shall obtain coverage under the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit),* NPDES No. CAS000002, Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ, or any other subsequent permit. This shall include submission of Permit Registration Documents (PRDs), including permit application fees, a Notice of Intent (NOI), a risk assessment, a site plan, a Stormwater Pollution Prevention Plan (SWPPP), a signed certification statement, and any other compliance-related documents required by the permit, to the State Water Resources Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). Construction activities shall not commence until a Waste Discharge Identification Number (WDID) is obtained for the project from the SMARTS and provided to the Director of the City of Cypress Community Development Department, or designee, to demonstrate that coverage under the Construction General Permit has been obtained. Project construction shall comply with all applicable requirements specified in the Construction General Permit, including, but not limited to, preparation of a SWPPP and implementation of construction site best management practices (BMPs) to address all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate risk level identified for the project. The SWPPP shall identify the sources of pollutants that may affect the quality of stormwater and shall include BMPs (e.g., Sediment Control, Erosion Control, and Good Housekeeping BMPs) to control the pollutants in stormwater runoff. Construction Site BMPs shall also conform to the requirements specified in the latest edition of the Orange County Stormwater Program *Construction Runoff Guidance Manual for Contractors, Project*	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
	Owners, and Developers to control and minimize the impacts of construction and construction-related activities, materials, and pollutants on the watershed. Upon completion of construction activities and stabilization of the project site, a Notice of Termination shall be submitted via SMARTS. **Regulatory Compliance Measure 4.9-2:** **Groundwater Dewatering Permit.** If groundwater dewatering is required during construction or excavation activities and the dewatered groundwater is discharged to the sanitary sewer system, the Applicant/Developer shall obtain a discharge permit from the Director of the City of Cypress Public Works Department. If the dewatered groundwater is discharged to the stormdrain system, the Applicant/Developer shall obtain coverage under the *General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimis) Threat to Water Quality (*Order No. R8-2020-0006, NPDES No. CAG998001), which covers discharges to surface waters that pose an insignificant (de minimis) threat to water quality within. This shall include submission of a Notice of Intent for coverage under the permit to the RWQCB at least 45 days prior to the start of dewatering. The Applicant/Developer shall provide the Waste Discharge Identification Number (WDID) to the Director of the City's Public Works Department, or designee, to demonstrate proof of coverage under the *De Minimis* Permit. Groundwater dewatering shall not be initiated until a WDID is received from the Santa Ana Regional Water Quality Control Board (RWQCB) and is provided to the Director of the City's Public Works Department, or designee. Groundwater dewatering activities shall comply with all applicable provisions in the permit, including water sampling, analysis, treatment (if required), and reporting of dewatering-related discharges. Upon completion of groundwater dewatering activities, a Notice of Termination shall be submitted to the Santa Ana RWQCB. **Regulatory Compliance Measure 4.9-3:** **Water Quality Management Plan.** Prior to the issuance of grading or building permits, the Applicant/Developer shall submit a Final Water Quality Management Plan (WQMP) to the City of Cypress Engineer, or designee, for review and approval in compliance with the 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 (Order No. R8-2009-0030, NPDES No. CAS618030, as amended by Order No. R8-2010-0062) (North Orange County MS4 Permit). The Final WQMP shall be prepared consistent with the requirements of the *Technical Guidance Document for Water Quality Management Plans* (December 2013) and the Water Quality Management Plan template, or subsequent guidance manuals. The Final WQMP shall specify the BMPs to be incorporated into the project design to target pollutants of concern in runoff from the project area. The City shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design. **Regulatory Compliance Measure 4.9-4:** **Industrial General Permit.** Prior to commencement of industrial activities and issuance of a Certificate of Occupancy, the Applicant/Developer shall obtain coverage under the State Water Resources Control Board Industrial General Permit (Order WQ 2014-0057-	

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
	DWQ as amended by Orders 2015-0122-DWQ and the 2018 Amendment documents) (Industrial General Permit) if the proposed on-site activities include transportation uses that require compliance with the Industrial General Permit (e.g. vehicle maintenance shops, equipment cleaning operations, or any type of vehicle maintenance [including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication]). The Industrial General Permit regulates the discharge of stormwater associated with industrial activity as defined by the United States Environmental Protection Agency. The proposed industrial activity at the proposed project falls under the Standard Industrial Code 4212 (Local Trucking without Storage), which is regulated under the Industrial General Permit. The proposed project shall comply with all applicable requirements specified in the Industrial General Permit, including the preparation of a SWPPP and implementation of BMPs to control and minimize the impacts of industrial-related activities, materials, and pollutants on the watershed.	
Threshold 4.9.2: Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? **Less Than Significant Impact.** Construction and operation of the proposed project would not involve direct groundwater extraction, and increased water use would not substantially affect groundwater supplies. Additionally, groundwater dewatering would be localized and temporary, and the volume of groundwater removed would not be substantial.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.9.3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? **Less Than Significant Impact.** The proposed project would comply with the requirements of the Construction General Permit and would implement construction BMPs to reduce impacts related to on-site, off-site, or downstream erosion or siltation. In addition, the proposed project would implement operational BMPs in accordance with the North Orange County MS4 Permit to minimize downstream erosion or siltation impacts during operation because downstream receiving waters are susceptible to hydromodification.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1 and 4.9-3 provided above, and Regulatory Compliance Measure 4.9-5, provided below. **Regulatory Compliance Measure 4.9-5:** **Final Hydrology and Hydraulic Analysis.** The Applicant/Developer shall submit a Final Hydrology Study to the City of Cypress Director of Engineering, or his/her designee, for review and approval prior to issuance of grading and building permits. The Final Hydrology Study 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 Study shall demonstrate that the on-site drainage facilities and on-site underground detention systems are designed in compliance with 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 (Order No. R8-2009-0030, NPDES No. CAS618030, as amended by Order No. R8-2010-0062) (North Orange County MS4 Permit)* and the City peak flow restrictions from the City of Cypress Master Plan of Drainage. The Final Hydrology Study shall also demonstrate that the on-site drainage facilities and on-site underground detention systems are adequately sized to accommodate stormwater runoff from the design storm so that post-development runoff volume for the 25-year, 24 hour frequency storm does not exceed the pre-development flow rate, does not exceed the hydromodification requirements, and does not exceed the maximum allowable discharge for the project site ($Q_{allowable}$). The City Director of Engineering, or designee, shall ensure that the drainage facilities specified in the Final Hydrology Study are incorporated into the final project design.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Threshold 4.9.4: 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? **Less Than Significant Impact.** The proposed project would comply with existing NPDES requirements and would implement construction and operational BMPs. Operational BMPs would reduce stormwater flows to 20.6 cubic feet per second (cfs). With implementation of the proposed BMPs, impacts related to a substantial increase in the rate or amount of surface runoff, flow, and volume that would result in flooding would be less than significant.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1 and 4.9-5, provided above.	Less Than Significant Impact.
Threshold 4.9.5: Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? **Less Than Significant Impact.** The proposed project would comply with existing NPDES requirements to prevent substantial additional sources of polluted runoff being discharged to the storm drain system, and would target pollutants of concern in runoff from the project site through implementation of construction and operational BMPs. The proposed project includes proposed operational BMPs to reduce stormwater runoff so as to not exacerbate the existing stormdrain capacity deficit.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1, 4.9-3, and 4.9-5, provided above.	Less Than Significant Impact.
Threshold 4.9.6: Would the project otherwise substantially degrade water quality? **Less Than Significant Impact.** The proposed project would comply with existing NPDES regulations and would implement construction and operational BMPs. Construction and operational BMPs would reduce pollutants of concern in stormwater runoff, and would ensure that water quality impacts are less than significant.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1, 4.9-2, and 4.9-3, provided above.	Less Than Significant Impact.
Threshold 4.9.7: Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? **No Impact.** The project site is not located within a 100-year floodplain; therefore, the project would not place housing or structures within a 100-year flood hazard area. According to the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Map (FIRM) No. 0 No. 06059C0117J (December 3, 2009), the project site is located within Zone X, which comprises areas of 0.2 percent annual chance flood (500-year flood).	No mitigation is required.	No Impact.
Threshold 4.9.8: Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows? **No Impact.** The project site is not located within a 100-year floodplain; therefore, the project would not place housing or structures within a 100-year flood hazard area. According to the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Map (FIRM) No. 0 No. 06059C0117J (December 3, 2009), the project site is located within Zone X, which comprises areas of 0.2 percent annual chance flood (500-year flood).	No mitigation is required.	No Impact.
Threshold 4.9.9: Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? **Less Than Significant Impact.** The project site is located within the inundation zone of Prado Dam. Although the project would construct new structures in an inundation zone, the proposed project would not increase the chance of inundation from failure of Prado Dam. Additionally, the City's emergency evacuation plans would be implemented if these dams were susceptible to rupture during heavy rains or other events.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.9.10: Would the project be subject to inundation by seiche, tsunami, or mudflow? **No Impact.** The project site is relatively flat and not at risk of mudflow, and is not located within an inundation zone of a seiche or tsunami.	No mitigation is required.	No Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Threshold 4.9.11: Would the project result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash) **Less Than Significant Impact.** The proposed project would comply with existing NPDES regulations and would implement construction and operational BMPs. Construction and operational BMPs would reduce pollutants of concern in stormwater runoff, and would ensure that water quality impacts are less than significant.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1, 4.9-2, and 4.9-3, provided above.	Less Than Significant Impact.
Threshold 4.9.12: Would the project result in significant alteration of receiving water quality during or following construction? **Less Than Significant Impact.** The proposed project would comply with existing NPDES regulations and would implement construction BMPs. Construction BMPs would reduce pollutants of concern in stormwater runoff, and would ensure that water quality impacts are less than significant.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1, 4.9-2, and 4.9-3, provided above.	Less Than Significant Impact.
Threshold 4.9.13: Could the proposed project result in increased erosion downstream? **Less Than Significant Impact.** The proposed project would comply with the requirements of the Construction General Permit and would implement construction BMPs to reduce impacts related to on-site, off-site, or downstream erosion or siltation. In addition, the proposed project would implement operational BMPs in accordance with the North Orange County MS4 Permit to minimize downstream erosion or siltation impacts during operation because downstream receiving waters are susceptible to hydromodification.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1, 4.9-2, and 4.9-3, provided above.	Less Than Significant Impact.
Threshold 4.9.14: Would the project result in increased impervious surfaces and associated increased runoff? **Less Than Significant Impact.** The proposed project would increase impervious surface area on site and therefore would increase stormwater runoff from the project site. The proposed project would include operational BMPs to reduce peak discharges from the project site.	No mitigation is required. Refer to Regulatory Compliance Measure 4.9-5, provided above.	Less Than Significant Impact.
Threshold 4.9.15: Would the project create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes? **Less Than Significant Impact.** The proposed project would comply with existing NPDES requirements and would implement construction and operational BMPs. Operational BMPs would reduce stormwater flows to 20.6 cfs. With implementation of the proposed BMPs, impacts related to a substantial increase in the rate or amount of surface runoff, flow, and volume that would result in flooding would be less than significant.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1 and 4.9-5, provided above.	Less Than Significant Impact.
Threshold 4.9.16: Would the project be tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired? **Less Than Significant Impact.** The proposed project would comply with the requirements of the Construction General Permit and would implement construction and operational BMPs to target and reduce pollutants in stormwater runoff from the project site, including those contributing to downstream water quality impairments.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1 and 4.9-3, provided above.	Less Than Significant Impact.
Threshold 4.9.17: Would the project be tributary to other environmentally sensitive areas? If so, can it exacerbate already existing sensitive conditions? **Less Than Significant Impact.** The project would not discharge directly into a CWA Section 303(d) impaired water, and would implement construction and operational BMPs to reduce pollutant loading to receiving waters.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1 and 4.9-3, provided above.	Less Than Significant Impact.
Threshold 4.9.18: Would the project have a potentially significant environmental impact on surface water quality to either marine, fresh, or wetland waters? **Less Than Significant Impact.** The proposed project would comply with existing NPDES regulations and would implement construction and operational BMPs. Construction and operational BMPs would reduce pollutants of concern in stormwater runoff, and would ensure that water quality impacts are less than significant.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1, 4.9-2, and 4.9-3, provided above.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Threshold 4.9.19: Would the project have a potentially significant adverse impact on groundwater quality? **Less Than Significant Impact.** Because minimal infiltration would occur and no groundwater injection would occur, project activities would not substantially degrade groundwater quality.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1 and 4.9-2, provided above.	Less Than Significant Impact.
Threshold 4.9.20: Would the project cause or contribute to an exceeded applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses? **Less Than Significant Impact.** Because minimal infiltration would occur and no groundwater injection would occur, project activities would not substantially degrade groundwater quality.	No mitigation is required. Refer to Regulatory Compliance Measure 4.9-1, provided above.	Less Than Significant Impact.
Threshold 4.9.21: Would the project impact aquatic, wetland, or riparian habitat? **Less Than Significant Impact.** Although the proposed project's receiving waters (Anaheim Bay) is a wetland that supports aquatic and riparian habitat, runoff from the project would not directly discharge into Anaheim Bay. Further, the propose project would implement construction and operational BMPs to reduce pollutant loading to receiving waters.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1 and 4.9-3, provided above.	Less Than Significant Impact.
Threshold 4.9.22: Would the project include new or retrofitted stormwater treatment control Best Management Practices (e.g., water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g., increased vectors or odors)? **Less Than Significant Impact.** The project would include implementation of post-construction BMPs to reduce impacts related to hydrology and water quality. The post-construction BMPs would be routinely inspected and maintained to reduce impacts related to vectors and odors.	No mitigation is required.	Less Than Significant Impact.
Cumulative Hydrology and Water Quality Impacts. **Less Than Significant Impact.** The proposed project and other related projects would comply with the applicable NPDES and City requirements and would implement construction and operational BMPs and drainage facilities to reduce impacts related to hydrology and water quality.	No mitigation is required.	Less Than Significant Impact.
4.10: Land Use and Planning		
Threshold 4.10.1: Would the project physically divide an established community? **No Impact.** The area surrounding the project site is developed with a variety of commercial, warehouse, office, and residential uses. The project site is developed with existing structures and the proposed project would not result in new structures on the project site or changes to the existing parcel configuration of adjacent parcels. As a result, the project would not result in physical divisions in any established community. No mitigation is required.	No mitigation is required.	No Impact.
Threshold 4.10.2: 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? **Less Than Significant Impact.** The proposed project would be consistent with the 2020–2045 RTP/SCS, the City's General Plan, and the Specific Plan. Therefore, the proposed project would result in less than significant impacts related to potential conflicts with applicable land use plans, policies, and regulations, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Cumulative Land Use and Planning Impacts. **Less Than Significant Impact.** The cumulative impact area for land use for the proposed project is the City of Cypress. Several development projects are approved and/or pending within the City. The City of Cypress is an urbanized area with a wide variety of established land uses. The land around the project site has been developed with a variety of commercial, warehouse, office, and residential uses. Although the proposed project requires the approval of a conditional use permit, the proposed project would result in the development of a last mile logistics facility, consistent with the uses permitted on the project site by the Specific Plan. Should the City Council approve the proposed project, the proposed project would be consistent with the Specific Plan and cumulative land use impacts would be considered less than significant.	No mitigation is required.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
4.11: Noise		
Threshold 4.11.1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? **Less Than Significant Impact.** **Construction.** Noise generated by the project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. Reference construction noise levels were modeled to determine project construction noise levels at the nearby sensitive receiver locations. Although temporary construction noise level impacts would be below the threshold of 80 dBA L_{eq}, the proposed project would comply with the permitted construction hours from 7:00 a.m. to 8:00 p.m. on weekdays and Saturdays specified in the Cypress Corporate Center Amended Specific Plan (Specific Plan). No construction shall be permitted outside of these hours or on Sundays or federal holidays (refer to Regulatory Compliance Measure 4.11-1 in this section). Therefore, the noise impacts due to project construction are considered less than significant at all receiver locations, and no mitigation is required. **Operation.** Operational noise consists of noise generated by vehicles accessing the project site as well as noise generated by on-site activities. To describe the project operational noise level increases, the project operational noise levels are combined with the existing ambient noise levels measurements for the nearby receiver locations potentially impacted by project operational noise sources. The difference between the combined project and ambient noise levels describe the project noise level increases to the existing ambient noise environment. The proposed project will generate daytime and nighttime operational noise level increases ranging from 0.0 to 3.6 dBA L_{eq} at the nearby receiver locations. Project-related operational noise level increases will satisfy the noise level increase significance criteria. Therefore, the incremental project operational noise level increase is considered less than significant at all receiver locations, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.11.2: Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels? **Less Than Significant Impact.** 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 intrusion. Construction activities that would have the potential to generate low levels of ground-borne vibration within the project site include grading. At distances ranging from 56 feet to 1,449 feet from the project site boundary, construction vibration levels are estimated to range from 5.1 to 76.5 VdB, and the highest expected construction vibration levels are estimated to range from 34.1 to 76.5 VdB and will remain below the FTA *Transit Noise and Vibration Impact Assessment Manual* maximum acceptable vibration criteria at all receiver locations. Therefore, the project-related vibration impacts are considered less than significant. Since the trucks transiting on site will be travelling at very low speeds on smooth surfaces, it is expected that delivery truck vibration impacts at nearby receiver locations will satisfy the vibration perceptibility threshold of 65 VdB and, therefore, will be less than significant. No mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.11.3: 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? **Less Than Significant Impact.** The closest airport is the Los Alamitos Joint Forces Training Base (JFTB), Los Alamitos airfield. The project site is located approximately 0.6 mile northeast of the JFTB. The noise contour boundaries of JFTB show that the project is located outside of the 65 dBA CNEL noise contour boundary. Therefore, since industrial land use is considered normally acceptable with exterior noise levels of 50–70 dBA CNEL, the JFTB noise impacts are considered less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Cumulative Noise Impacts. **Less Than Significant Impact.** **Construction.** Construction activities associated with the proposed project and other construction projects in the area may overlap, resulting in construction noise in the area. However, construction noise impacts primarily affect the areas immediately adjacent to each construction site. Construction noise for the proposed project was determined to be less than significant. Cumulative development in the vicinity of the project site could result in elevated construction noise levels at sensitive receptors in the area surrounding the project site. However, each project would be required to comply with the applicable city's Municipal Code limitations on construction. Therefore, cumulative construction noise impacts would be less than significant. **Operation.** The results of the opening year cumulative 2021 (baseline plus project) peak-hour level of service (LOS) analysis for the study area intersections show that all study area intersections are forecast to operate at satisfactory LOS during both peak hours. Project-related traffic would result in noise level increases between 0.0 to 3.3 dBA CNEL along roadway segments in the vicinity of the project site under the project opening year (2021) condition. These levels are below the significance criteria for off-site traffic noise. Therefore, none of the roadway segments in the vicinity of the project site would experience a substantial noise level increase greater than the applicable noise thresholds and the proposed project would not have a cumulatively significant traffic noise impact. Long-term stationary noise sources associated with the development at the proposed project, combined with other cumulative projects, could cause local noise level increases. Noise levels associated with the proposed project and related projects together could result in higher noise levels than considered separately. On-site noise sources associated with the proposed project would not exceed any applicable noise standards. Additionally, each of the related projects would be required to comply with the City's noise level standards and include mitigation measures if standards are exceeded. Therefore, cumulative noise impacts from stationary noise sources would be less than significant. No mitigation is required.	No mitigation is required.	Less Than Significant Impact.
4.12: Public Services		
Threshold 4.12.1(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? **Potentially Significant Impact.** The proposed project is not expected to induce any substantial population growth within the City of Cypress and as such, would be able to be adequately be served by Fire Station No. 84. The proposed project would be designed to comply with all OCFA requirements, including providing adequate fire flow/structure protection to the project site and providing adequate access for emergency vehicles. Written correspondence with the OCFA indicated that all development projects submitted for review by OCFA must use a fair share approach to mitigate fire service response impacts and facility/equipment needs. To further address any potential impacts to fire services, Mitigation Measure 4.12-1, which requires the Applicant/Developer to enter into a Secured Fire Protection Agreement prior to the issuance of any building permits, would have to be implemented.	**Mitigation Measure 4.12-1:** **Secured Fire Protection Agreement.** Prior to the issuance of any building permits, the Applicant/Developer shall enter into a Secured Fire Protection Agreement with the Orange County Fire Authority (OCFA). This Agreement shall specify the Applicant/ Developer's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. Said agreement shall be reached as early as possible in the planning process, preferably for each phase or land use sector of the project, rather than on a parcel-by-parcel basis. The obligation must be satisfied prior to the issuance of the first building permit.	Less Than Significant Impact.
Threshold 4.12.1(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? **Less Than Significant Impact.** There would be little to no impact on the population growth of the City as a result of the proposed project. Although there may be an incremental increase in calls for service, the related population growth and anticipated commercial/retail activity would not be considered substantial. Moreover, the proposed project is expected to be adequately served by existing police facilities. Therefore, the proposed project would not require the construction of new police protection facilities or the upgrade of existing facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response items, or other performance objective for police protection. Potential impacts related to the provision services for operation of the proposed project would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Threshold 4.12.1(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 is not expected to cause an increase in students as a result of project implementation would not result in any incremental increases in the demand for school facilities. 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. Because the proposed project would reduce the building square footage on the project site by demolishing several of the existing on-site buildings and would not result in the construction of any new covered and enclosed structures on the project site, the Applicant/Developer would not be required to pay such fees. Therefore, potential impacts to school services and facilities associated with implementation of the proposed project would be less than significant. No mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.12.1(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 is not expected to result in any incremental increase in the demand for park facilities or existing recreation facilities in the project vicinity. Therefore, the proposed project would not result in additional physical impacts associated with the provision of new or physically altered park facilities. Impacts to parks and recreation facilities would be less than significant, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Cumulative Public Services Impacts. **Less Than Significant Impact.** Impacts related to fire protection services, police services, schools, and parks would overall be less than significant upon implementation of the project mitigation measures.	See Mitigation Measure 4.12-1 under Threshold 4.12.1(i) above.	Less Than Significant Impact.
4.13: Transportation		
Threshold 4.13.1: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? **Less Than Significant Impact.** The proposed project would be required to comply with General Plan policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Additionally, a trip generation analysis was conducted to determine the number of trips that would occur following implementation of the proposed project to evaluate the project's consistency with Orange County CMP requirements and the City's General Plan policies with respect to traffic congestion. In order to determine impacts at intersections associated with implementation of the project (i.e., the existing plus project condition), the proposed project trips were added to existing baseline traffic volumes at the study area intersections. With the addition of the project, all study area intersections would continue to operate at satisfactory LOS during both peak hours. Project impacts are based on conflicts with policies for the LOS significance criteria of the City of Cypress (for Cypress intersections) and/or the City of Stanton (for Stanton intersections). Therefore, impacts were determined to be less than significant. No mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.13.2: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? **Less Than Significant Impact.** The project VMT per employee for project baseline (2020) conditions is 18.68. As The proposed project's VMT per employee does not exceed the 15.0 percent below VMT per employee for the region threshold recommended in the Technical Advisory. The proposed project is consistent with the City's General Plan land use. Therefore, the vehicle trips associated with a commercial/industrial use on the project site have already been incorporated into the land use and growth assumptions included in the 2020–2045 RTP/SCS. In addition, the proposed project would be consistent with applicable goals in the 2020–2045 RTP/SCS. Therefore, the proposed project is consistent with the Southern California Association of Governments (SCAG) RTP/SCS. Therefore, a cumulative analysis that makes a comparison of areawide daily total VMT without and with the project was not performed. Impacts were determined to be less than significant and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Threshold 4.13.3: 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 proposed project does not propose any major traffic infrastructure improvements. In addition, the project would not include any land uses that would be incompatible with surrounding uses. The proposed project would generate a similar vehicle mix to the other surrounding warehouse land uses in the Cypress Corporate Center Amended Specific Plan and the Katella Avenue Corridor. Thus, the project would not introduce truck traffic to an area where such traffic does not currently exist. Additionally, all new driveways at the project site would be subject to the provisions of the City of Cypress design standards to alleviate design feature and safety hazards, which would reduce any potential impacts to less than significant levels. Therefore, the proposed project's impacts with respect to design feature hazards would be less than significant. No mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.13.4: Would the project result in inadequate emergency access? **Less Than Significant Impact.** The project site would be accessed via a new right-in/right-out driveway on Katella Avenue and three full-access driveways on Holder Street. The project driveways would be designed and improved to conform to the City's standards. In addition, the final site plans would be reviewed by the Orange County Fire Authority to confirm that adequate emergency access would be provided. Therefore, the project's impacts associated with emergency access would be less than significant. No mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Cumulative Transportation Impacts **Less Than Significant Impact.** With the addition of the proposed project, all study area intersections are forecast to operate at satisfactory LOS during both peak hours under the opening year cumulative 2021 (baseline and plus project) condition. Therefore, a significant project impact is not expected to occur at any study area intersection in the opening year cumulative 2021 condition. Therefore, cumulative impacts were determined to be less than significant. No mitigation is required.	No mitigation is required.	Less Than Significant Impact.
4.14: Tribal Cultural Resources		
Threshold 4.14.1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? **No Impact.** A cultural resources record search was completed on May 21, 2020, at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) at California State University, Fullerton. No archaeological resources have been previously recorded within the project site or within 0.25-mile of the project site. Additionally, Native American consultation was conducted in compliance with Assembly Bill 52 (AB 52). As part of the consultation process, a review of the Sacred Land File (SLF) by the NAHC yielded negative results. Subsequently Native American representatives were contacted by the City to determine their desire to consult on the proposed project. During that process, the Gabrieleno Band of Mission Indians – Kizh Nation (Tribe) stated that the project site is within its tribal territory and requested consultation with the City. An AB 52 consultation call regarding the proposed project was held on August 20, 2020. No information regarding specific known tribal cultural resources on the project site was provided by the Tribe. Therefore, no 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 area, and there are no known tribal cultural resources on the project site. The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource defined as a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is 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), and no mitigation is required.	No mitigation is required.	No Impact
Threshold 4.14.2: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Refer to Regulatory Compliance Measure 4.4-1, which is provided above in Section 4.4, Cultural Resources. **Mitigation Measure 4.14-1:** **Tribal Cultural Resources**. Prior to the issuance of a grading permit, the Applicant/Developer shall retain one Gabrieleno Native American Tribal group to	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
Potentially Significant Impact. Native American consultation was conducted in compliance with AB 52. As part of the consultation process, a review of the SLF by the NAHC yielded negative results. Subsequently Native American representatives were contacted by the City to determine their desire to consult on the proposed project. During that process, the Tribe stated that the project site is within its tribal territory and requested consultation with the City. Regulatory Compliance Measure 4.4-1 requires compliance with the State's Health and Safety Code for the treatment of human remains. Adherence to regulatory standards included in Regulatory Compliance Measure 4.4-1 would reduce the impact of the proposed project on human remains to less than significant and addresses tribal concerns regarding the treatment of human remains. The project site is not likely to contain any human remains due to the fact that soils on the site have been previously disturbed from past grading activities on the project site and surrounding area. Nevertheless, the City is recommending the inclusion of Mitigation Measure 4.14-1 to protect any potentially unknown tribal cultural resources on the project site. Implementation of Mitigation Measure 4.14-1 would reduce any potential impacts to previously undiscovered tribal cultural resources to a less than significant level. No additional mitigation is required.	provide a tribal monitor for all ground-disturbing construction activities on the project site. Evidence that a tribal monitor has been retained shall be provided to the City of Cypress (City) Community Development Director, or designee, prior to the issuance of a grading permit. If tribal cultural resources (as defined in Public Resources Code (PRC) Section 21074) are discovered during construction activities, ground-disturbing activities in the immediate vicinity of the find shall be halted until the find is assessed by the tribal monitor. Ground-disturbing construction activities shall be allowed to continue in other portions of the project while the find is being assessed. If the find is determined to be a tribal cultural resource, the Gabrieleno Native American Tribe whose representative is responsible for tribal monitoring shall coordinate with the Applicant/Developer to determine appropriate treatment of the resource. The Native American tribal monitor shall complete monitoring logs on a daily basis that provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The tribal monitor shall also provide appropriate insurance certificates. Tribal monitoring shall not be conducted after initial excavation of native (previously undisturbed) soil has occurred (i.e., no tribal monitoring shall be required for landscaping activities occurring after completion of project grading and trenching, as this soil will have been previously monitored). On-site tribal monitoring shall be considered complete after project grading and trenching are completed, and no disturbance to native (previously undisturbed) soils is anticipated.	
Cumulative Tribal Cultural Resources Impacts. **Potentially Significant Impact.** Adherence to the regulatory standards in Regulatory Compliance Measure 4.4-1, provided in Section 4.4, Cultural Resources, and implementation of Mitigation Measure 4.14-1 would ensure that the proposed project, together with the related projects, would not result in significant cumulative impacts to tribal cultural resources.	See Mitigation Measure 4.14-1 under Threshold 4.14.2 above.	Less Than Significant Impact.
4.15: Utilities and Service Systems		
Threshold 4.15.1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? **Less Than Significant Impact.** The project site is served by existing on-site utilities in the existing project and the proposed project would reconfigure existing on-site utilities due to the removal of several buildings on the project site. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, or electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. The proposed project would implement Regulatory Compliance Measures 4.15-1 and 4.15-2. With adherence to these Regulatory Compliance Measures, the proposed project would result in less than significant impacts related to these facilities. No mitigation is required.	No mitigation is required. Refer to Regulatory Compliance Measures 4.9-1 and 4.9-3, which are provided above in Section 4.9, Hydrology and Water Quality, and Regulatory Compliance Measure 4.5-1, which is provided above in Section 4.5, Energy. In addition, although project-related impacts would be less than significant, incorporation of the following Regulatory Compliance Measures would be required to reduce utility impacts. **Regulatory Compliance Measure 4.15-1:** **Sewer Improvement Standards.** All required sewer improvements shall be designed and constructed to City of Cypress (City) and Orange County Sanitation District (OCSD) standards and shall be approved by the City of Cypress Engineer prior to development. These improvements may be constructed in a phased sequence depending upon the development process. Facilities shall be dedicated to the City and/or OCSD at the completion of construction. **Regulatory Compliance Measure 4.15-2:** **Water Conservation.** The Applicant/Developer shall comply with all State laws for water conservation measures and use of reclaimed water. Voluntary water conservation strategies shall be encouraged. The Building Division shall determine compliance prior to issuance of building permits. **Regulatory Compliance Measure 4.15-3**	Less Than Significant Impact.

Table 1.A: Summary of Potential Environmental Impacts, Project Design Features, Mitigation Measures, Compliance Measure, and Level of Significance

Potential Environmental Impact	Project Design Features, Mitigation Measures, and Compliance Measures	Level of Significance After Mitigation
	Construction and Demolition Ordinance. The Construction Contractor shall comply with the provisions of City Ordinance No. 1166 and the 2019 California Green Building Standards Code, which would reduce construction and demolition waste. Ordinance No. 1166 is codified in Article VIII, Materials Questionnaire for Certain Construction and Demolition Project within the City of Cypress in the City of Cypress Municipal Code.	
Threshold 4.15.2: 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.** The proposed project would result in a decrease in water demand on the project site compared to existing uses. Therefore, 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 with the implementation of Regulatory Compliance Measure 4.15-2. Therefore, with implementation of Regulatory Compliance Measure 4.15-2, impacts to water supplies would be less than significant. No mitigation is required.	No mitigation is required. Refer to Regulatory Compliance Measure 4.15-2, which is provided above.	Less Than Significant Impact.
Threshold 4.15.3: 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 result in a decrease of wastewater generation compared to existing uses. Therefore, the proposed project would not result in a significant contribution to the capacity of wastewater treatment facilities. Additionally, fees required by the Orange County Sanitation District (OCSD) would sufficiently offset potential impacts generated by the proposed project. Therefore, the proposed project would result in less than significant impacts related to the wastewater treatment capacity and no mitigation measures are required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.15.4: 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.** The proposed project would result in a decrease in solid waste generation on the project site compared to existing conditions. Therefore, 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. Therefore, the proposed project would result in less than significant impacts related to solid waste and landfill facilities, and no mitigation is required.	No mitigation is required.	Less Than Significant Impact.
Threshold 4.15.5: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? **Less Than Significant Impact.** The proposed project would comply with applicable regulations related to solid waste. Therefore, the proposed project would not result in any potential conflicts with applicable regulations related to solid waste with adherence to Regulatory Compliance Measure 4.15-3. No mitigation is required.	No mitigation is required. Although project-related impacts would be less than significant, incorporation of the following Regulatory Compliance Measure would be required to reduce utility impacts. **Regulatory Compliance Measure 4.15-3:** Construction and Demolition Ordinance. The Construction Contractor shall comply with the provisions of City Ordinance No. 1166 and the 2019 California Green Building Standards Code, which would reduce construction and demolition waste. Ordinance No. 1166 is codified in Article VIII, Materials Questionnaire for Certain Construction and Demolition Project within the City of Cypress in the City of Cypress Municipal Code.	Less Than Significant Impact.
Cumulative Utilities and Service Systems Impacts. **Less Than Significant Impact.** The proposed project's potential impacts to wastewater, portable water, solid waste, electricity, natural gas, and telecommunications services are not cumulatively considerable.	No mitigation is required.	Less Than Significant Impact.

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2.0 INTRODUCTION

This Environmental Impact Report (EIR) has been prepared to evaluate environmental impacts associated with the proposed Amazon Facility project (proposed project) in Cypress, California. The City of Cypress (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 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. CEQA 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 described 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 more 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:

Jeff Zwack, City Planner
City of Cypress Community Development Department
5275 Orange Avenue
Cypress, CA 90630
Phone: (714) 229-6720
Email: CityPlanner@cypressca.org

2.1 PURPOSE AND TYPE OF EIR/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 potential impacts associated with the proposed project and identifies feasible mitigation and alternatives for any identified potentially significant impacts.

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

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* §15151 states the following regarding the 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."

Public Resources Code 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/Scoping Meeting

On June 5, 2020, an NOP for the proposed project was distributed by the City via the State Clearinghouse (SCH) and was circulated for review from June 5 to July 6, 2020. The SCH issued a

project number for this EIR (SCH No. 2020069007). In accordance with *State CEQA Guidelines* Section 15082, the NOP was circulated to the agencies and individuals that are listed in Appendix A, and was posted at the Orange County Clerk's Office for a 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 on the City's website during the review period. The City held a virtual public scoping meeting on Thursday, June 18, 2020, to present the proposed project and to solicit input from interested parties regarding environmental issues that should be addressed in this EIR.

Responses to the NOP were received from the following agencies:

- California Department of Transportation (Caltrans) District 12
- City of Los Alamitos
- Native American Heritage Commission (NAHC)
- Orange County Transportation Authority (OCTA)
- South Coast Air Quality Management District (SCAQMD)

In addition, the following organizations and interested parties submitted written comments on the NOP:

- Allyssa J. Holcomb (on behalf of Warland Investments Company)
- Barbara and Joel Stacy Oldham
- Barry McGeorge
- Bruce Seaton
- Derek Balsillie
- Dixie Fried
- George Pardon
- Johnnie Strohmyer
- Patricia Rudner
- Sheila Duran
- Susan Monroe
- Steve Blount

2.2.2 Areas of Controversy

Issues and concerns raised in response to the NOP or at the scoping meeting included:

- **Traffic:** Suggestions to include specific road segments, intersections, ramps, and mainlines in the Traffic Analysis. Suggestions to include a Transportation Demand Management (TDM) analysis. Suggestion that the analysis of additional traffic generated by the project with other cumulative projects should be included. Concern regarding truck traffic on Katella Avenue. Suggestions and concerns regarding the opening of Holder Street between Katella Avenue and Orangewood Avenue.

- **Noise:** Concern about daytime and nighttime noise related to truck beeping, employees, and vehicles entering and exiting. Request for quantification of the noise generated by delivery trucks and vans, including noise generated by idling engines, loading and unloading, and sound emanating from vehicles traveling along the path of delivery to and from the proposed distribution center.

- **Aesthetics:** General concern regard aesthetic impacts related to the conversion of the project site to a distribution facility.

- **Land Use:** Concern that the proposed project is not an allowable use under the zoning for the project site.

- **Air Quality:** Concern related to sensitive receptor exposure to Toxic Air Contaminants. Suggestions to adhere to guidelines from the SCAQMD and its Air Quality Handbook and recommendations on the identification of mitigation measures, alternatives, permits, and appropriate data sources.

- **Greenhouse Gas Emissions:** General concern about significant greenhouse gas emissions from mobile source emissions.

- **Public Services:** General concern regarding impacts to public services, including the provision of public services to the project and to the surrounding residential and business communities.

- **Utilities and Service Systems:** General concern regarding impacts to City infrastructure requiring upgrades.

- **Economic Impacts:** Suggestion that an economic impact report should be prepared for the project.

This is not an exhaustive list of areas of controversy, but rather key issues that were raised during the scoping process. In accordance with Section 15064(e) of the State CEQA Guidelines, "economic and social changes resulting from the project shall not be treated as significant effects on the environment." Therefore, economic issues are not addressed under CEQA and will not be address in this EIR. This EIR addresses each of the remaining 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, as well as written comment cards received at 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.cypressca.org/government/departments/community-development/planning-division/development-information). Additionally, a copy of this EIR will be available for public review at the Cypress Civic Center by appointment only. Please contact Kirsten Graham at (714) 229-6748 to schedule an appointment.

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:

Jeff Zwack, City Planner
City of Cypress Community Development Department
5275 Orange Avenue
Cypress, CA 90630
Email: CityPlanner@cypressca.org

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; Air Quality; Energy, Geology and Soils and Paleontological Resources; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Noise; Public Services; Transportation and Traffic; Tribal Cultural Resources; and Utilities and Service Systems.

2.4 FORMAT OF THE EIR

This EIR contains the information and analysis required by CEQA and the *State CEQA Guidelines,* including Section 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, air quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, transportation, tribal cultural resources and utilities and service system. 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* §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* §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* §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* §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 adverse environmental effects or reducing them to a less than significant level. The alternatives analyzed in Chapter 5.0 include three alternatives: (1) the No Project Alternative, (2) the Reduced Project Alternative, and (3) the Office Alternative.

- **Chapter 6.0: Other CEQA Considerations.** Chapter 6.0 contains discussions on the following topics as required by *State CEQA Guidelines* §15126: (1) growth-inducing impacts of the proposed project; and (2) whether there are any significant irreversible environmental changes

caused by the proposed project, 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.** *State CEQA Guidelines* §15091(d) requires that public agencies adopt a mitigation monitoring and reporting program for any changes that it has either required in a project or made a condition of approval to avoid or substantially lessen significant environmental effects. Chapter 7.0 provides a list of all proposed project mitigation measures, defines the parties responsible for implementation and review/, and identifies the timing for implementation of each mitigation measure.

- **Chapter 8.0: Significant Unavoidable Impacts.** Chapter 8.0 summarizes the significant unavoidable adverse impacts that cannot be avoided or mitigated as identified in Chapters 4.0 and 6.0.

- **Chapter 9.0: List of Preparers.** Chapter 9.0 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 10.0: References.** Chapter 10.0 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* §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 Cypress, Community Development Department. These documents include:

- City of Cypress General Plan (available online at: https://www.cypressca.org/government/departments/community-development/planning-division/city-plans)

- City of Cypress Municipal Code (available online at: https://qcode.us/codes/cypress/)

- Cypress Corporate Center Amended Specific Plan

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3.0 PROJECT DESCRIPTION

This section describes the proposed Amazon Facility project (proposed project) evaluated in this Environmental Impact Report (EIR). A description of the proposed project's location, objectives, and required approvals is provided.

3.1 PROJECT OVERVIEW

Duke Realty (the Applicant/Developer) proposes to construct the proposed project on an approximately 22.3-acre site located at the southwest corner of Katella Avenue and Holder Street at 6400–6450 Katella Avenue in the City of Cypress. The proposed project proposes the development of a "last mile" logistics facility for Amazon, Inc. on the project site, which is currently occupied by a 150,000-square-foot (sf) warehouse, a 180,000 sf corporate headquarters office building, and 70,000 sf of research and development buildings recently vacated by Mitsubishi Motors of America. Except for the existing 150,000 sf warehouse building on the southwest portion of the project site and the existing 180,000 sf office building along the northern edge of the project site, the remaining buildings on the project site would be demolished as part of the proposed project. Approximately 5,000 sf of second-floor office/mezzanine space in the existing warehouse would be removed. Although the existing warehouse building on the project site would be reoccupied, the office building would remain unoccupied. The office building will remain in place to provide screening from views of the project site along Katella Avenue. The proposed project would expand the paved parking area on the project site and enhance the landscaping along Katella Avenue and Holder Street and adjacent to the southern property line.

3.2 PROJECT LOCATION AND EXISTING ENVIRONMENTAL SETTING

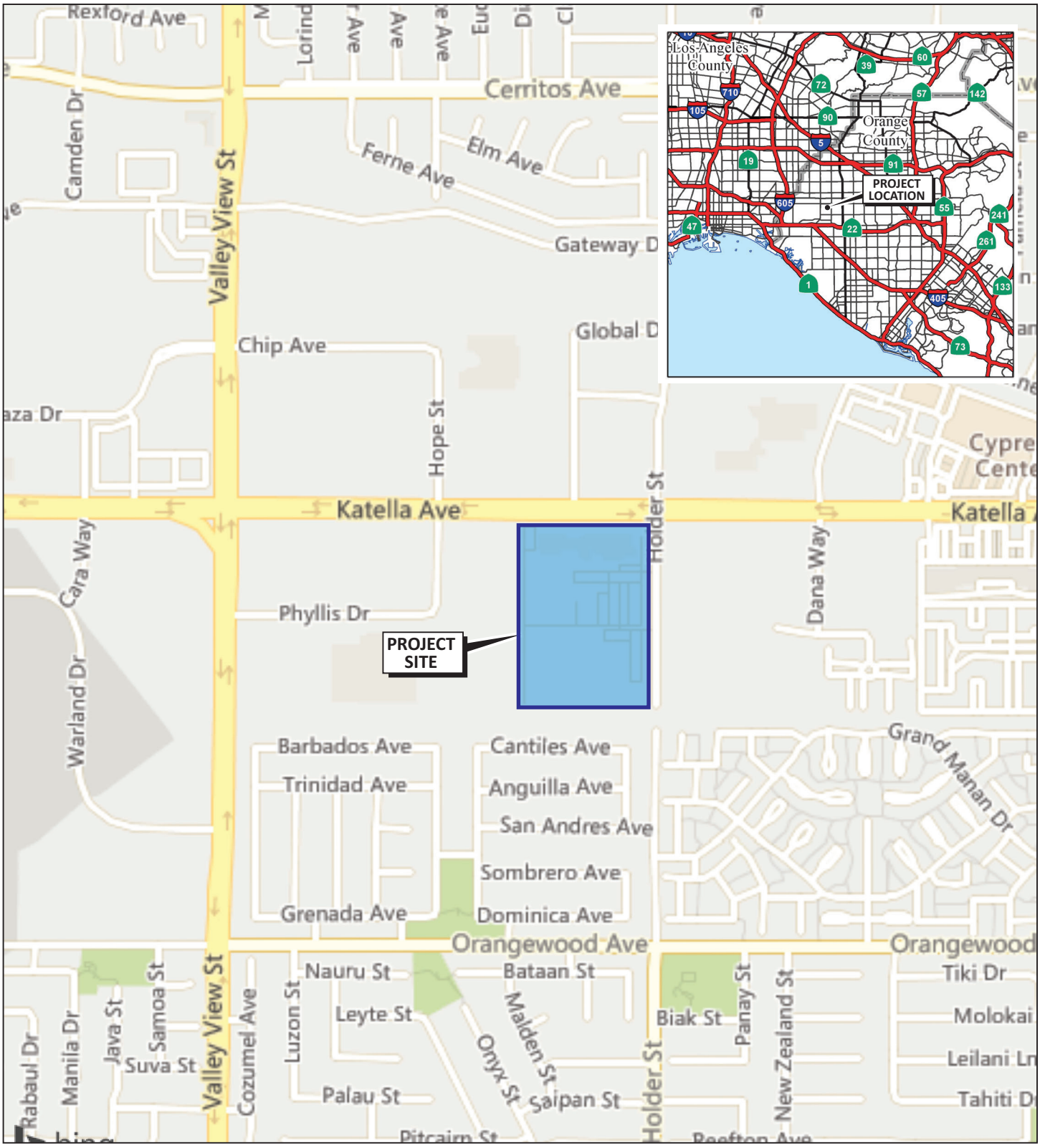
3.2.1 Regional Location

The project site is located in the southeastern portion of the City of Cypress, California, approximately 0.5 mile west of the City of Stanton, 0.5 mile north of the City of Garden Grove, and 0.5 mile south of the City of Buena Park. As illustrated in Figure 3.1, Regional and Project Location, the project site is approximately 1.7 miles north of the Garden Grove Freeway (State Route 22) and 3.3 miles east of the San Gabriel River Freeway (Interstate 605).

3.2.2 Existing Project Site Conditions

The project site is on the southwest corner of Katella Avenue and Holder Street in Cypress (refer to Figure 3.2, Project Vicinity Land Uses). As shown in Figure 3.2, the project site is bounded on the north by Katella Avenue, on the west by commercial/industrial uses, on the south by the Stanton Storm Channel, and on the east by Holder Street. Figure 3.3, Existing Conditions, shows the existing conditions on the project site. In its existing setting, the project site is characterized by several buildings that were recently vacated by Mitsubishi Motors of America, a paved parking lot with existing light poles, and landscaping. The existing buildings consist of a 180,000 sf three-story office building located on the northern portion of the project site, three research and development buildings located on the west-central portion of the project site consisting of a two-story building (25,000 sf) and two one-story buildings (30,000 sf and 15,000 sf), and a 150,000 sf warehouse

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FIGURE 3.1

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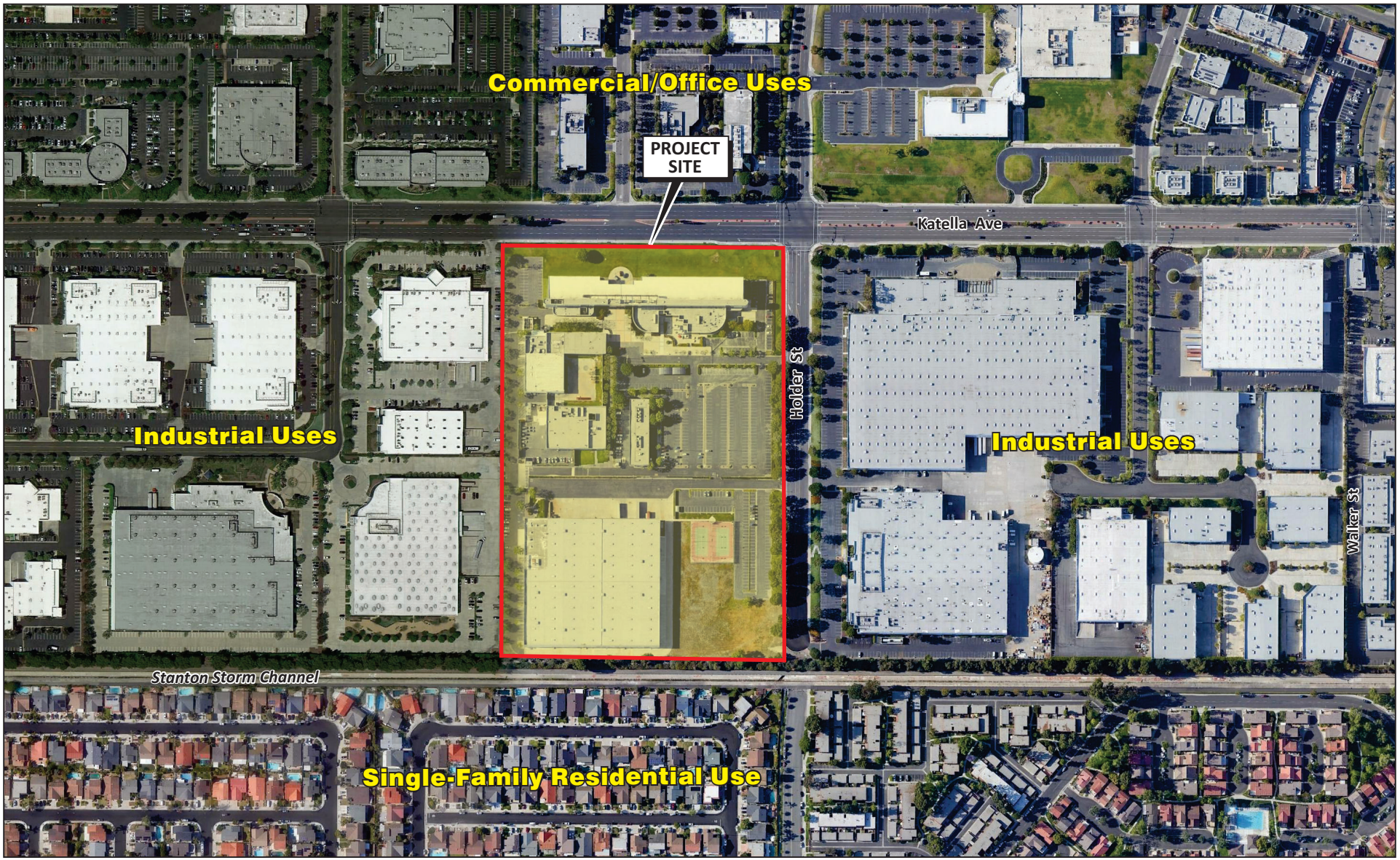
SOURCE: Bing Maps

Amazon Facility

Regional and Project Location

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FIGURE 3.2

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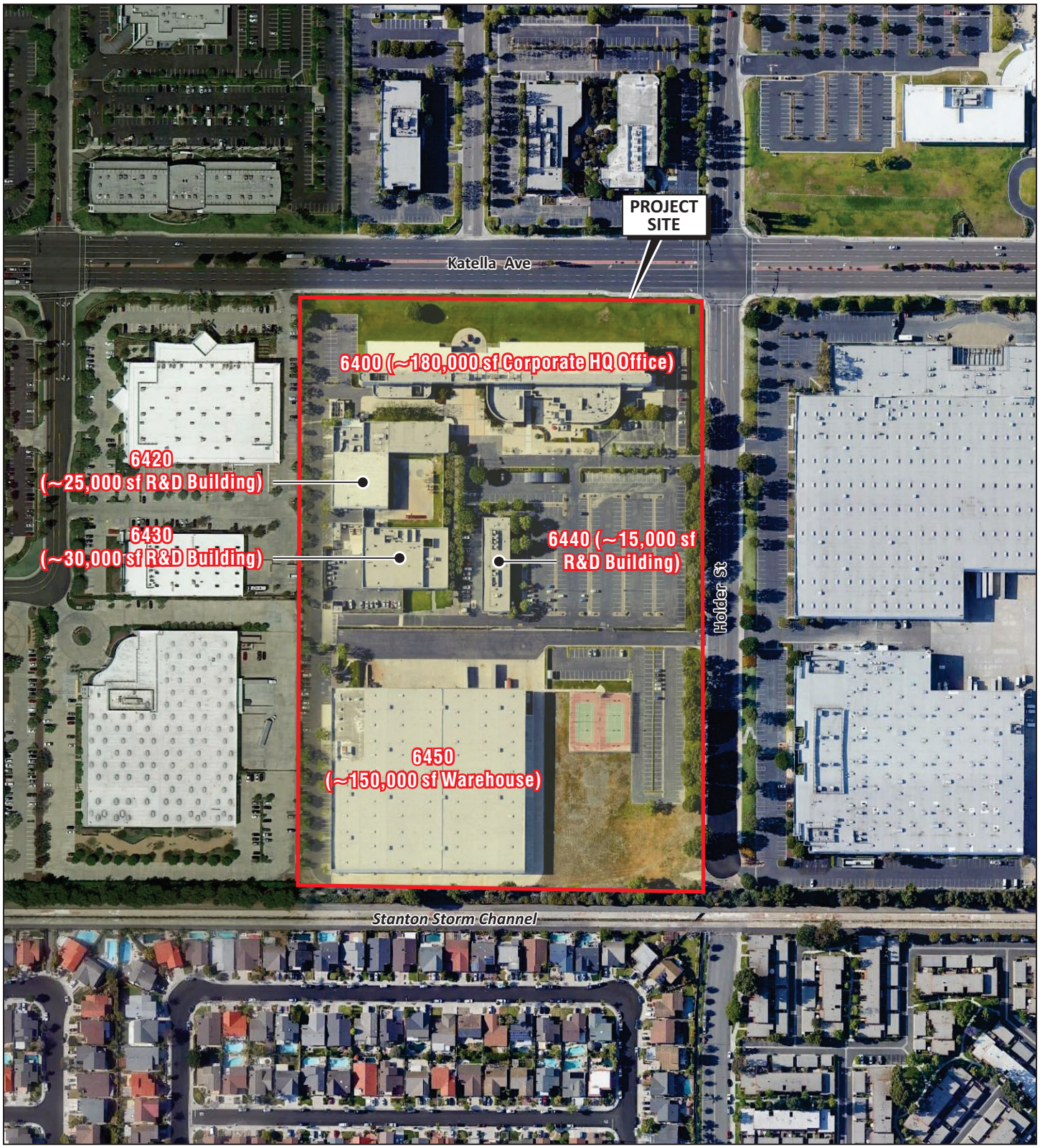
SOURCE: Google Earth

Amazon Facility

Project Vicinity Land Uses

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FIGURE 3.3

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SOURCE: Google Earth

Amazon Facility

Existing Conditions

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building located on the southwestern portion of the project site. A loading dock is located along the northern wall of the warehouse building. Additionally, a pair of tennis courts is located in the southeastern area of the project site. Exposed soil and decomposed turf grass is present east of the existing warehouse. An 8--foot (ft) high landscaped berm along the entire length of the southern boundary of the project site serves as a buffer between the project site and the residential uses to the south.

Existing water, sewer, and dry utilities along Katella Avenue and Holder Street serve the project site. Most of the project site is currently paved and includes some ornamental landscaping around the existing buildings, and along the edges of the project site. Public sidewalks exist on the northern and eastern borders of the project site along Katella Avenue and Holder Street, respectively. Vehicular access to the project site is provided via two driveways off Holder Street on the eastern edge of the site.

3.2.3 Surrounding Land Uses

As shown in Figure 3.2, the project site is bounded by the following uses in its immediate vicinity:

- **North:** Commercial/office uses are located directly north of the project site across Katella Avenue.
- **East:** Warehouse uses are located east of the project site.
- **South:** Single-family residential uses are located south of the project site, on the other side of the Stanton Storm Channel.
- **West:** Warehouse uses are located west of the project site.

The Cypress Corporate Center Amended Specific Plan (Specific Plan) (March 1989) designates approximately 71 acres of the Specific Plan area including the project site as developed with Business Park uses, and the remaining approximately 39 acres within the Specific Plan area located west of the project site as vacant and planned for Business Park uses, specifically Office/ Warehouse/R&D (Research and Development), Support Commercial and Warehouse/R&D. This area, designated as vacant, has since been developed with commercial/industrial uses.

3.3 GENERAL PLAN, SPECIFIC PLAN AND ZONING

3.3.1 General Plan/Specific Plan

The City of Cypress (City) General Plan Land Use Policy Map designates the project site as “Specific Plan Area” in recognition that the project site is subject to the Cypress Corporate Center Amended Specific Plan (Specific Plan) (Figure 3.4, General Plan Land Uses). The project site is within the boundaries of the Cypress Corporate Center Amended Specific Plan, which covers an approximately 110-acre area in the southeastern portion of the City. The Specific Plan designates the project site for Business Park uses.

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LEGEND

- Specific Plan Area
- Specific Plan Boundaries
- Parcels Outside the City
- City Limits

Residential:

- Low Density (0-5 du/ac)
- Medium Density (5.1-15 du/ac)
- High Density (15.1-20 du/ac)
- Mobile Home Park (0-12 du/ac)

Commercial:

- General Neighborhood (0.5:1 FAR)
- Business Park (1.0:1 FAR)
- Light Industrial (0.5:1 FAR)

Community Services and Facilities:

- Government
- Education Facilities
- Public Parks
- Golf Course (Privately - Owned)
- Race Track (Privately - Owned)
- Cemetery (Privately - Owned)
- Flood Control Facilities
- Rail Road

Specific Plans

- (A) Lusk Company Industrial Park (PC-1)
- (B) Cypress Corporate Center (PC-2)
- (C) Mc Donnell Center (PC-3)
- (D) Warland / Cypress Business Center (PC-4)
- (E) Cypress View Limited (PC-5)

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SOURCE: City of Cypress

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FIGURE 3.4

Amazon Facility
General Plan Land Uses

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The proposed project includes a "last mile" logistics facility. Since this use is relatively new and does not clearly fit into any of the existing Specific Plan permitted uses, the City has determined that the appropriate entitlement would be a Conditional Use Permit.

3.3.2 Current Zoning

The project site currently has a zoning designation of PC-2, Cypress Corporate Center, which is intended to provide for the development of uses as allowed by the Specific Plan. The Cypress Corporate Center Amended Specific Plan is the regulatory plan that constitutes the zoning for the project site. Therefore, the Specific Plan largely governs the permitted uses and development standards associated with the project site. As noted above, the proposed project will require the approval of a Conditional Use Permit.

3.4 PROJECT CHARACTERISTICS

3.4.1 Project Objectives

The following provides the objectives established for the proposed project, several of which include implementation of goals and policies from the City's General Plan and the Specific Plan:

1. Provide a new development consistent with the intent of the Cypress Corporate Center Amended Specific Plan on a recently vacated parcel.

2. Provide new jobs in an area of the City that has experienced the loss of two major employers in recent years.

3. Provide for the development of a last mile logistics facility located directly adjacent to Katella Avenue, which is one of the City's major travel corridors.

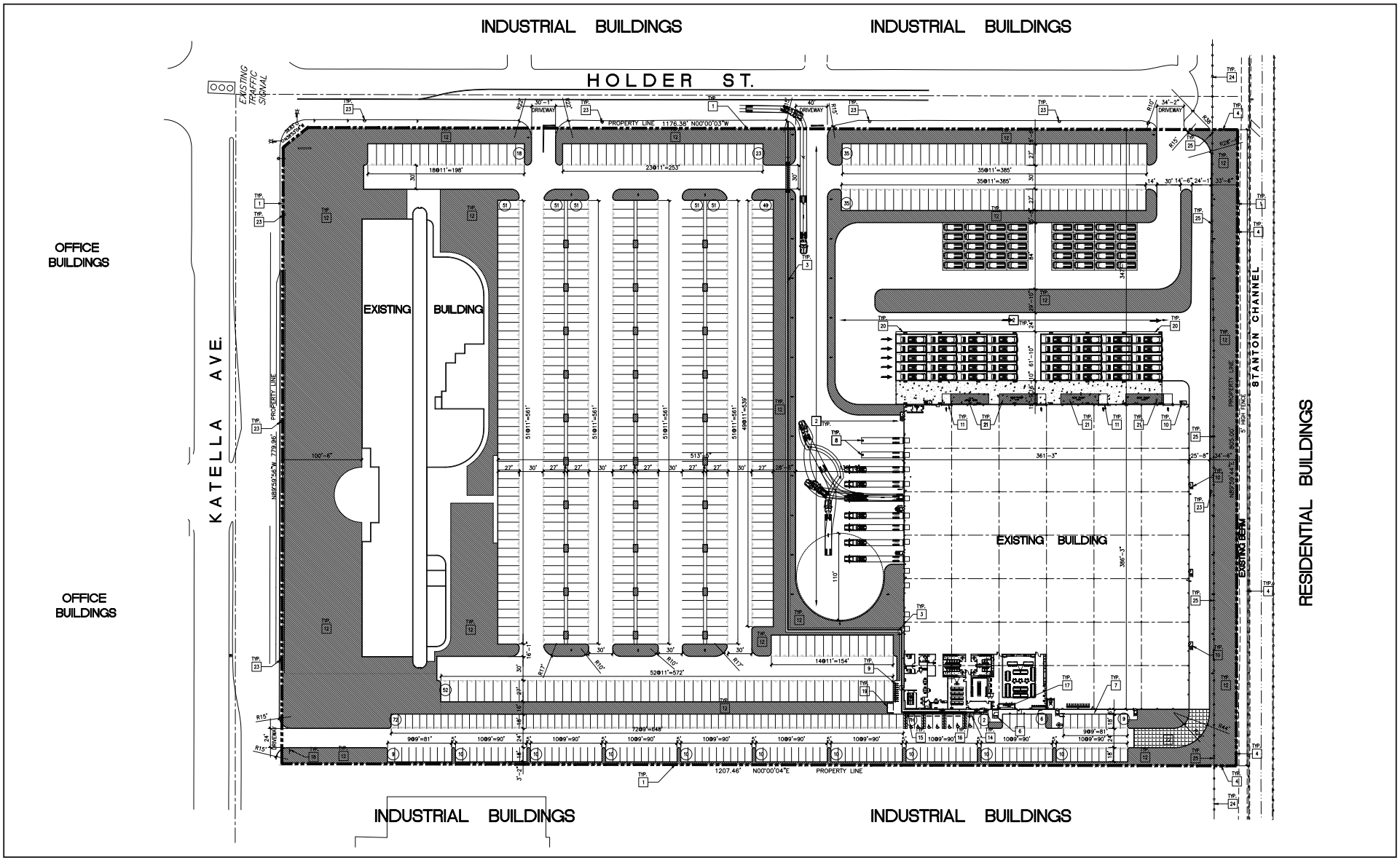
4. Ensure a sensitive transition between commercial or business park uses and residential uses by implementing precise development standards with such techniques as buffering, landscaping, and setbacks (General Plan Policy LU-2.1).

5. Maintain the streetscape along Katella Avenue in a manner that is consistent with the goals and objectives of the Cypress Corporate Center Specific Plan.

3.4.2 Project Characteristics

The proposed project proposes the development of a "last mile" logistics facility for Amazon, Inc. on the project site, as shown on Figure 3.5, Conceptual Site Plan, which is currently occupied by several buildings recently vacated by Mitsubishi Motors of America. Except for the existing 150,000 sf warehouse building on the southwest portion of the project site and the existing 180,000 sf office building along the northern portion of the project site, the remaining buildings on the project site would be demolished as part of the proposed project. Approximately 5,000 sf of second-floor office/mezzanine space in the existing warehouse would be removed. Although the existing warehouse building on the project site would be reoccupied, the office building would remain

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FIGURE 3.5

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SOURCE: Architects Orange

Amazon Facility

Conceptual Site Plan

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unoccupied and will be left in place solely for aesthetic/screening purposes. The proposed project would expand the paved parking area on the project site and enhance the landscaping along Katella Avenue and Holder Street and adjacent to the southern property line.

The proposed project's last mile logistics facility would accept consumer packaged items from transport trucks to the warehouse, sort the packages within the warehouse building, utilize rolling carts to load packages into delivery vans, and then send them out for delivery to customers via Sprinter vans or similar type vehicles. The delivery vans would be staged, packed, and sent out for delivery to the community in scheduled waves, generally after the morning peak hour period, to avoid any excessive concentration of traffic on Katella Avenue. The parking area would accommodate employees, delivery vans, and limited truck trailer offloading. A canopy would be installed over the delivery van staging area on the eastern side of the warehouse building.

3.4.2.1 Parking

The proposed project would provide a total of 779 parking spaces for cars/vehicles and Sprinter delivery vans. Parking on the project site would consist of 82 standard parking spaces, 4 standard Americans with Disabilities Act (of 1990) (ADA)-accessible parking spaces, 1 ADA-accessible parking space for delivery vans, 98 clean air/vanpool/electric vehicle parking spaces, 10 electric vehicle charging spaces, and 584 parking spaces for delivery vans that would feature electric vehicle chargers. The proposed project would also provide 9 trailer parking spaces and loading docks on the north side of the warehouse building. The proposed project would provide bike racks outside the southwest corner of the warehouse.

3.4.2.2 Site Access and Circulation

Primary access to the project site will be provided via three existing driveways from Holder Street. A new, fourth employee right-in/right-out driveway would be provided on Katella Avenue. Up to approximately 40 delivery vans would be staged in a driveway loop on the eastern side of the warehouse building, with space for up to 40 additional vans in a holding area. Four new loading ramps would be installed on the eastern side of the warehouse to facilitate delivery van loading in the driveway loop. A grass/paver fire lane would be installed in the southwestern corner of the project site.

3.4.2.3 Infrastructure Improvements

The following infrastructure improvements would serve the future development included in the project:

- **Water.** Golden State Water Company owns and maintains a network of water mains in Cypress. The project site has an existing private water system connected to a 10-inch water main in Katella Avenue. The existing on-site system would be reconfigured due to the removal of several of the existing buildings.

- **Sewer Service.** The City owns and maintains a 12-inch diameter sewer main in Katella Avenue. The proposed project would use the existing on-site sewer infrastructure, with some reconfigurations due to the removal of several of the existing buildings. The City's sewer

network connects to the Orange County Sanitation District (OCSD) network of sewer trunks and eventually discharges to an OCSD sewage treatment plant.

- **Dry Utilities.** Dry utilities would be provided to the proposed project from existing infrastructure available on the project site.

- **Drainage.** In the existing condition, the project site generally drains from northeast to southwest into existing storm drain infrastructure, which in turn discharges to Orange County drainage channel C02S01 (the Stanton Storm Channel). In the proposed condition, drainage would generally conform to existing drainage paths. The inclusion of Best Management Practices (BMPs) would reduce increases in stormwater and mitigate hydromodification concerns. In the proposed condition, runoff on site will sheet flow to the proposed BMPs (Filterra Bioscape Vaults, bioretention basins with underdrains, and underground detention). The proposed BMPs would treat runoff prior to entering the existing storm drain located on the west side of the project site or the existing storm drain on Holder Street, which drains to Stanton Channel (Orange County Drainage Channel C02S01). Stormwater runoff from Stanton Channel continues to Bolsa Chica Channel, and is ultimately discharged to Anaheim Bay.

- **Off-Site Improvements.** The proposed project would improve the existing concrete sidewalk on the northern edge of the project site and the adjacent pavement along Katella Avenue and modify the westbound and eastbound left-turn pockets on Katella Avenue at Holder Street to provide additional left-turn storage.

3.4.2.4 Construction Duration, Phasing, and Grading

Construction activities of the proposed project would include demolition; site preparation; grading; paving; and architectural coating activities. Construction of the proposed project would be completed in one phase and is anticipated to commence in January 2021 and last through August 2021.

Construction of the proposed project would require approximately 4,100 cubic yards (cy) of cut and 24,200 cy of fill, resulting in a net import of approximately 20,100 cy of material. Excavation depths would reach a maximum of up to 10 ft. Excavation depths would range between 5 to 10 ft for utility and storm drain improvements and would be 3 ft or less for parking lots and landscaping. Demolition activities would involve the use of standard demolition equipment such as concrete/industrial saws, excavators, and dozers. Grading activities would involve the use of standard earthmoving equipment such as tractors, bulldozers, excavators, 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.

3.4.2.5 Green Building Characteristics

The proposed project would be designed to meet sustainability goals, including the California Green Building Standards Code, Title 24 energy efficiency requirements, and Assembly Bill 1881 water efficient landscape requirements.

3.4.2.6 Landscape Plan

As shown in Figure 3.6, Conceptual Landscape Plan, landscaping for the proposed project would be provided throughout the project site. Landscaping for the proposed project would be in accordance with the requirements outlined in the Specific Plan and would provide "finger" and "island" planters in the parking areas. A variety of trees, shrubs, and grass landscaping are proposed throughout the project site. The existing grass street frontage on the northern border of the project site would remain in place under the proposed project. Additionally, the existing planting along the drainage channel on the southern edge of the project site and the existing trees and shrub hedge along the fence on the western edge of the project site would remain in place. Additionally, the existing pine trees on the eastern edge of the project site will remain in place. Additional trees, shrubs and ground cover would be added to the existing landscaping along the drainage channel on the southern edge of the project site and the existing pine trees on the eastern edge of the project site.

3.4.2.7 Architectural Design

The architectural design of the proposed project would include complementary colors and a variety of building materials and would be consistent with all design guidelines provided in the Specific Plan. The exterior design of the proposed last mile logistics facility would include clear anodized mullions, blue reflective glazing, and white painted walls. The proposed project would preserve the existing office building along Katella Avenue in place for aesthetic/screening purposes.

3.4.3 Discretionary Actions

Discretionary approvals required for the proposed project are outlined in the table below:

Discretionary Action	Agency Responsible
Certification of this EIR	Cypress City Council
Conditional Use Permit	Cypress City Council
Site Plan/Design Review	Cypress Design Review Committee

EIR = Environmental Impact Report

The following provides a description of the City's primary discretionary approvals for the proposed project.

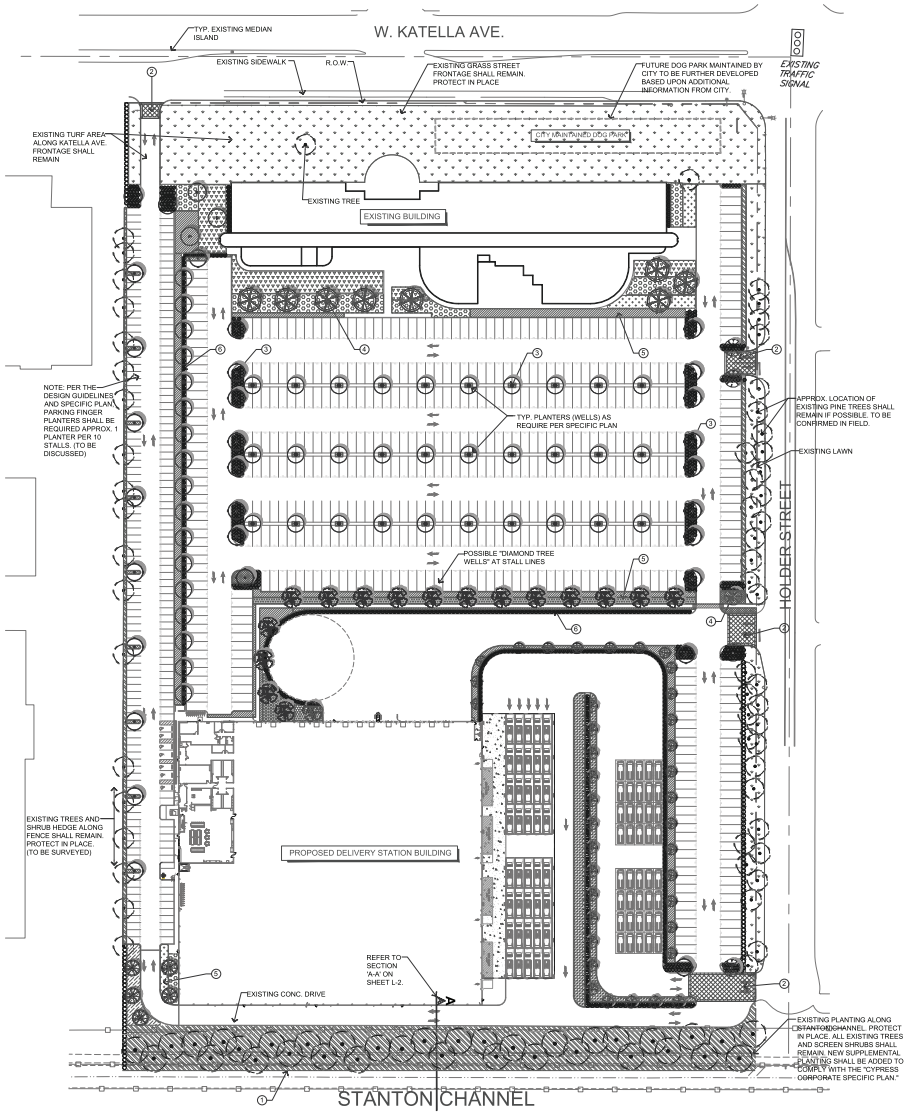
3.4.3.1 Conditional Use Permit

A Conditional Use Permit would be required for the proposed last mile logistics facility. Since the proposed use is relatively new and does not clearly fit into any of the existing Specific Plan permitted uses, the City has determined that the appropriate entitlement would be a Conditional Use Permit.

3.4.3.2 Site Plan/Design Review

Site Plan/Design Review of the proposed project would be conducted pursuant to Section 4.19.060 of the City's Municipal Code. As part of this review, the City would consider whether the proposed project is in compliance with all zoning requirements and consider the aesthetics and design of the proposed project relative to the aesthetic qualities within the City.

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PLANTING LEGEND

TREES		
SYMBOL	TREE NAME	QTY.
	LARGE FLOWERING ACCENT TREE KOELREUTERIA BIPINNATA, CHINESE FLAME TREE 36" BOX SIZE. DOUBLE STAKE.	8
	NEW PARKING LOT SHADE TREE RHUS LANCEA, AFRICAN SUMAC 24" BOX SIZE. DOUBLE STAKE. PLANT WITH DEEP ROOT BARRIER PANELS AS REQUIRED.	28
	SECONDARY PARKING LOT TREE TRISTANIA CONFERTA, BRISBANE BOX 24" BOX SIZE. DOUBLE STAKE. PLANT WITH DEEP ROOT BARRIER PANELS AS REQUIRED.	47
	SMALL FLOWERING ACCENT TREE LAGERSTROEMIA I. 'WATERMELON RED', CRAPE MYRTLE 24" BOX SIZE. DOUBLE STAKE.	5
	LARGE CA NATIVE TREE PLATANUS RACEMOSA, CALIFORNIA SYCAMORE 24" BOX SIZE. DOUBLE STAKE.	5
	LARGE ACCENT TREE ERYTHRINA LYSISTEMON, CORAL TREE 36" BOX SIZE. DOUBLE STAKE.	5
	EVERGREEN CA NATIVE TREE QUERCUS AGRIFOLIA, COAST LIVE OAK 24" BOX SIZE. DOUBLE STAKE.	17
	PODOCARPUS GRACILIOR, FERN PINE 15 GAL. SIZE. DOUBLE STAKE.	21
	PLATANUS ACERIFOLIA, LONDON PLANE TREE 24" BOX SIZE. DOUBLE STAKE.	17
	EXISTING TREES SHALL REMAIN. PROTECT IN PLACE.	

SHRUBS	
SYMBOL	NAME
	DODONAEA V. 'PURPUREA', PURPLE HOPSEED BUSH 5 GAL. SIZE @ 72" O.C.
	PHOTINIA X FRAXERI, RED TIP PHOTINIA 5 GAL @ 60" O.C.
	WESTRINGIA FRUTICOSA, COAST ROSEMARY 5 GAL @ 60" O.C.
	CALLISTEMON 'LITTLE JOHN', DWARF BOTTLE BRUSH 5 GAL. SIZE @ 48" O.C.

GROUND COVERS	
SYMBOL	NAME
	LANTANA X 'NEW GOLD', DWARF YELLOW LANTANA 1 GAL. SIZE @ 30" O.C.
	ROSMARINUS O. 'PROSTRATUS', PROSTRATE ROSEMARY 1 GAL. SIZE @ 30 "O.C.
	SALVIA 'BEE'S BLISS', CREEPING SAGE 5 GAL. SIZE @ 42" O.C.
	SALVIA GREGGII, AUTUMN SAGE 1 GAL. SIZE @ 30" O.C.
	MUHLENBERGIA RIGENS, DEER GRASS 5 GAL. SIZE @ 42" O.C.
	BACCHARIS PILULARIS, COYOTE BRUSH 1 GAL. SIZE @ 30" O.C.
	ACACIA REDOLENS 'DESERT CARPET', ACACIA 1 GAL. SIZE @ 48" O.C.
	EXISTING STREET FRONTAGE LANDSCAPE SHALL REMAIN IF POSSIBLE. CONSISTING OF LAWN (GRASS) FRONTAGE WITH EXISTING PINE TREES. REPAIR AS REQUIRED IF DAMAGED AS A RESULT OF NEW CONSTRUCTION.
	EXISTING SHRUB HEDGE SHALL REMAIN. PROTECT IN PLACE.

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FIGURE 3.6

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SOURCE: Architects Orange

Amazon Facility

Conceptual Landscape Plan

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3.4.3.3 Certification of Final EIR

The City Council would certify that the Final EIR addresses the potential environmental effects of the proposed project and identifies appropriate mitigation measures to address any potentially significant effects.

3.4.4 Ministerial Actions

Ministerial approvals required for the proposed project are outlined in the table below:

Action	Agency Responsible
Construction General Permit	State Water Resources Control Board
Groundwater Dewatering Permit	Santa Ana Regional Water Quality Control Board
Proposed Construction or Alteration Determination, pursuant to 14 CFR, Part 77	Federal Aviation Administration

CFR = Code of Federal Regulations

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

OVERVIEW OF ENVIRONMENTAL SETTING

The project site is on the southwest corner of Katella Avenue and Holder Street at 6400–6450 Katella Avenue in the southeastern portion of the City of Cypress, California, approximately 0.5 mile west of the City of Stanton and 0.5 mile north of the City of Garden Grove, and 0.5 mile south of the City of Buena Park. The project site is bounded on the north by Katella Avenue, on the west by commercial/industrial uses, on the south by the Stanton Storm Channel, and on the east by Holder Street. As shown on Figure 3.1, Regional and Project Location, in Chapter 3.0, Project Description, regional access to the project site is provided via State Route 22 (SR-22), which is located approximately 1.7 miles south of the project site and the San Gabriel River Freeway (Interstate 605) located approximately 3.3 miles west of the project site.

In its existing condition, the project site is characterized by several buildings that were recently vacated by Mitsubishi Motors of America, a paved parking lot with existing light poles and landscaping. The existing buildings consist of a three-story office building located on the northern portion of the project site, three research and development buildings located on the west-central portion of the project site, and a warehouse building located on the southwestern portion of the project site. A loading dock is located along the northern wall of the warehouse building. Additionally, a pair of tennis courts is located in the southeastern area of the project site. Exposed soil and decomposed turf grass is present east of the existing warehouse. An 8-foot (ft) high landscaped berm along the entire length of the southern boundary of the project site serves as a buffer between the project site and the residential uses to the south.

Existing water, sewer, and dry utilities along Katella Avenue and Holder Street serve the project site. Most of the project site is currently paved and includes some ornamental landscaping around the existing buildings, and along the edges of the project site. Public sidewalks exist on the northern and eastern borders of the project site along Katella Avenue and Holder Street, respectively. Vehicular access to the project site is provided via two driveways off Holder Street on the eastern edge of the project site.

The project site is bounded by the following uses in its immediate vicinity:

- **North:** Commercial/office uses are located directly north of the project site across Katella Avenue.
- **East:** Warehouse uses are located east of the project site.
- **South:** Single-family residential uses are located south of the project site, on the other side of the Stanton Storm Channel.
- **West:** Warehouse uses are located west of the project site.

CHAPTER FORMAT

This chapter contains 17 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 15000–15397).

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). Each environmental topic section in Chapter 4.0 also 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 twelve subsections, as follows:

- **Introduction** briefly describes the topics and issues covered in the section.
- **Scoping Process** describes the number and a brief description of comments received from the public during the public scoping period.
- **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* and the City of Cypress (City) *Initial Study/Environmental Checklist*, 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 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.

- **Regulatory Compliance Measures and Mitigation Measures** describes relevant and applicable laws or regulations that must be adhered to with respect to the construction and/or operation of the proposed project and would reduce or lessen potential impacts related to a particular issue area and identifies project-specific measures that avoid, minimize, rectify, reduce, eliminate, or compensate for a potentially significant impact.

- **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.

THRESHOLDS OF SIGNIFICANCE

The threshold questions used in Section 4.9, Hydrology and Water Quality, of this EIR are consistent with those included in the City's *Initial Study/Environmental Checklist*. The additional threshold questions used in this EIR are consistent with Appendix G of the *State CEQA Guidelines*.

EFFECTS EVALUATED IN THIS EIR

The discussion of potential effects in this EIR is presented by environmental resource area. As part of the scoping and environmental analysis carried out for the proposed project, the following environmental issues were considered but no adverse impacts were identified. As a result, there is no further discussion about these issues in the document.

Agriculture/Forestry Resources: The proposed project is located within a suburban setting and does not affect any existing agricultural or forestry resources. Furthermore, there are no farmlands or timberlands designations within the project area in the City's General Plan Land Use Element (2001) or Zoning Ordinance.

Mineral Resources: The State Division of Mines and Geology identifies mineral resource areas throughout the State. According to the City's General Plan Conservation/Open Space/Recreation Element (2001), there are no mineral resources as defined by the State Division of Mines and Geology within the City. Therefore, no significant impacts related to mineral resources would result from project implementation.

Population and Housing: The proposed project would not cause or result in direct population growth or reduction because the proposed project would not provide or remove housing on the project site. The proposed last mile logistics facility would result in employment at the project site; however, this use is not anticipated to result in substantial population growth in the area because the project site was recently utilized as a corporate headquarters for Mitsubishi Motors of America.

Library Services: The proposed project would not have an impact on the existing Orange County Public Library (OCPL) system because there are no nearby libraries that could be impacted by construction activities associated with the proposed project. Additionally, the proposed project does not include residential uses and is not expected to result in population growth. Therefore, the proposed project would not result in increased demand for library services.

Recreation: The proposed project does not propose any residential uses and, therefore, would not increase the population or demand related to parks. Although the proposed project would provide employment on the project site, the number of employees would be minor considering the previous uses on the project site and the amount of parks and recreational space within the City. While it is possible that employees may visit parks and recreational facilities in the City during lunch breaks or after-work hours, it is unlikely that the use of parks by project employees would increase the use of those parks to a level that would contribute to substantial physical deterioration of those facilities.

Wildfire: The California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards in the State. These maps place areas of California into different fire hazard

severity zones (FHSZ), based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban conflagration could result in catastrophic losses. CAL FIRE designates areas as very high fire hazard severity zones (VHFHSZ) or non-VHFHSZ. According to the CAL FIRE Very High Fire Hazard Severity Zone Maps for the Orange County Region, the entire City of Cypress is designated as a non-VHFHSZ.[1] Because the project site is not located in or near a VHFHSZ, it would not result in any impacts related to wildfire.

RELATED 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 the 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 these related projects and the proposed project is provided in the cumulative impacts discussion under each individual impact category in Chapter 4.0.

In coordination with the Cities of Cypress, Garden Grove, Los Alamitos, and Stanton, a list of past, present, and probable future projects was developed. As shown in Table 4.A, below, the projects include various land uses, such as residential, commercial, industrial, hotel, and mixed-use. The locations of the related projects are shown on Figure 4.1, Related Projects. Although some projects on the list have been completed since issuance of the NOP, they remain on the list because they are part of the cumulative analysis for the EIR.

It is noted that some of the related projects may not be completed by 2021 (the proposed project's anticipated buildout year), may never be built, or may be approved and built at reduced densities. However, to provide a conservative forecast, the future baseline forecast assumes that all of the related projects will be fully built out by 2021.

[1] California Department of Forestry and Fire Protection (CAL FIRE). 2011. Very Fire Hazard Severity Zones in LRA as Recommended by CALFIRE. Website: https://osfm.fire.ca.gov/media/6739/fhszl_map30.pdf (accessed July 7, 2020).

Table 4.A: Summary of Related Projects

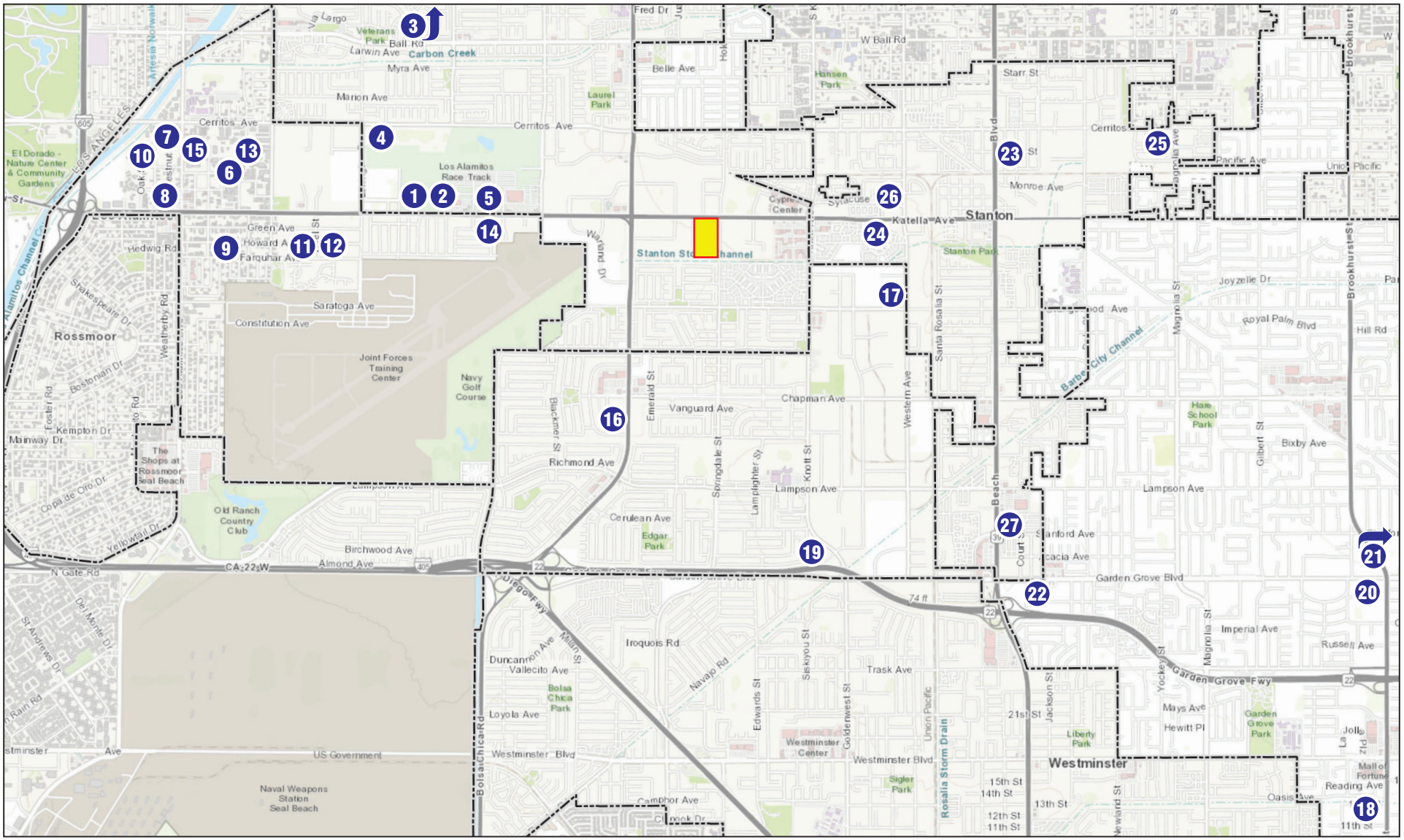
Project No.	Project Name	Location	Status	Project Description
City of Cypress				
1	Barton Place Mixed-Use (Ovation)	Northeast corner of Katella Avenue and Enterprise Drive	Project was completed as of December 2019.	244 du senior housing 35,600 sf shopping center 11,376 sf restaurant.
2	Barton Place Mixed Use (Westmont)	Northeast corner of Katella Avenue and Enterprise Drive	Under construction	129-unit (152-bed) assisted living 13,700 sf retail
3	Bonanni Development	4620 Lincoln Avenue	Approved	67 du apartments
4	Cypress Sports Park	Southeast corner of Lexington Street and Cerritos Avenue	Approved, not under construction yet.	9-acre sports park (6 soccer fields)
5	Cypress City Center	Northwest corner of Winners Circle and Katella Avenue	Approved	251 du apartments 20,800 sf retail 120-room hotel 10-screen multiplex movie theater
City of Los Alamitos				
6	Residential Development	10745 Cherry Street	Under construction	1 duplex
7	Los Alamitos Luxury Apartments	3342 Cerritos Avenue	Approved	107 du apartments
8	Residential Development	10922 Walnut Street	Under construction as of January 2019.	4 du apartments
9	Residential Development	3751 Farquhar Avenue	Construction complete.	4 du condominiums
10	Cottonwood Church Site Residential Development	3311 Sausalito Street	Construction complete.	50 du condominiums
11	Residential Development	4071 Farquhar Avenue	Construction complete.	5 du condominiums
12	Residential Development	4061 Farquhar Avenue	Construction complete.	5 du condominiums
13	Residential Development	10700 Reagan Street	Construction complete.	1 duplex
14	Commercial Development	5250 Katella Avenue	Under construction as of May 2019.	2,400 sf coffee shop 2,800 sf restaurant
15	Hotel Development	10650 Los Alamitos Boulevard	Construction complete. Anticipated opening in October 2020.	107-room hotel
City of Garden Grove				
16	Mixed Use Development	12101–12111 Valley View Street	Construction complete as of May 2020.	4,241 sf automatic car wash 1,870 sf drive-through restaurant 2,700 sf sit-down restaurant 2,846 sf movie theater

Table 4.A: Summary of Related Projects

Project No.	Project Name	Location	Status	Project Description
17	Commercial Development	7351 and 7421 Orangewood Avenue	Construction complete as of October 2019.	36,763 sf food manufacturing
18	Melia Homes	9861 11th Street	Under construction as of June 2020.	31 du apartments
19	Commercial Development	12821 Knott Street	Under plan check as of June 2020.	45,335 sf warehouse
20	Mixed Use Development	9860 Larson Avenue/ 10080 Garden Grove Boulevard	Under construction as of June 2020.	394 du senior affordable housing 12,938 sf retail
21	Commercial Development	10862 Garden Grove Boulevard	Under plan check as of June 2020.	9,229 sf medical office
22	Residential Development	8218 Garden Grove Boulevard	Under plan check as of June 2020.	46 du apartments
City of Stanton				
23	Commercial Development	10580–10600 Beach Boulevard	Under construction as of February 2019.	4,100 sf retail 850 sf warehouse
24	Residential Development	7320 Katella Avenue	Proposed	6-unit townhouses
25	Tina-Pacific Residential Development	Northwest corner of Magnolia and Pacific	Approved	161 du apartments
26	Lighthouse Church Residential	10871 Western Avenue	Approved	40 du single-family homes
27	The Mint	12736 Beach Boulevard	Recommended for City Council Approval.	300 du apartments and 6,250 sf retail

du = dwelling unit
sf = square foot/feet

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LSA

FIGURE 4.1

LEGEND

- Project Site
- # - Related Projects

N

0 2100 4200

FEET

SOURCE: Bing Maps

Amazon Facility

Location of Related Projects

I:\CCP1603.05A\G\Related_Projects.cdr (7/15/2020)

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The discussion of cumulative impacts "should be guided by the standards of practicality and reasonableness" (*Environmental Protection Info. Center v. Department of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 524). A proposal that has not crystallized to the point that it would be reasonable and practical to evaluate its cumulative impacts need not be treated as a probable future project (*City of Maywood v. Los Angeles Unified School District* (2012) 208 Cal.App.4th 362, 397).

Rather, a potential future project qualifies for inclusion in an analysis of cumulative impacts only to the extent the future project is "both probable and sufficiently certain to allow for meaningful cumulative impact analysis" (*Id.* at 398; see *City of Long Beach v. Los Angeles Unified School Dist.* (2009) 176 Cal.App.4th 889, 902 [when "review[ing] the agency's decision to include information in the cumulative impacts analysis[,] ... [w]e determine whether inclusion was reasonable and practical"]).

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4.1 AESTHETICS

This section provides a discussion of the existing visual and aesthetic resources on the project site and in the surrounding area, and evaluates the potential for changes in the visual character that could result from implementation of the Amazon Facility project (proposed project). This section also evaluates the potential loss of existing visual resources, effects on public views, visual compatibility with existing uses, and light and glare impacts.

Information presented in this section is based on the building elevations and landscape plan included in the development plans; the City of Cypress (City) Municipal Code; and the Cypress Corporate Center Amended Specific Plan (Specific Plan) (1989).

4.1.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. One comment letter included comments related to aesthetics. The letter from Allyssa J. Holcomb (on behalf of Warland Investments Company) received on July 6, 2020, expresses general concern regarding aesthetic impacts related to the conversion of the project site to a distribution facility. The proposed project's potential to result in aesthetic impacts is discussed under Thresholds 4.1.1 through 4.1.4 below.

4.1.2 Methodology

The assessment of aesthetic impacts is subjective by nature. This analysis attempts to identify and objectively examine factors that contribute to the perception of aesthetic impacts that would be caused by implementation of the proposed project. The impact analysis focuses on aesthetic-related changes to the project site and surrounding area that may result from the approval of the proposed project. The potential aesthetic impacts of the proposed project have been assessed based on consideration of several factors, including scale, mass, proportion, and the concepts 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. The degree to which these resources are present in a community is clearly subject to personal and cultural interpretation. However, it is possible to qualify certain resources as having aesthetic characteristics and establish general guidelines for assessing the aesthetic impacts of new development.

- **Scenic Vista:** A scenic vista is a generally public 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.

- **Sensitive Views:** Sensitive views are generally those associated with designated vantage points and public recreational uses, but the term can be more broadly applied to encompass any valued public vantage point. Sensitivity level has to do with the (1) intensity of use of a visual resource; (2) visibility of a visual resource; and (3) importance of the visual resource to users.

- **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 that creates an overall impression of an area within an urban context. 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:** A continuous or periodic intense light that may cause eye discomfort or be temporarily blinding to humans.

- **Light Sources:** 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. Any translucent enclosure of a light source is considered to be part of the light source.

- **Light and Glare.** 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, including any potential illuminated signage, would spill off the project site onto adjacent light-sensitive areas. The analysis also describes the affected street frontages, the direction in which the light would be focused, and the extent to which the proposed project would illuminate sensitive land uses. 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).

- **Regulations Governing Scenic Quality.** Visual impacts have been evaluated based on the project's consistency with design guidelines in the City's Specific Plan and development standards related to aesthetics in the City's Municipal Code.

4.1.3 Existing Environmental Setting

In its existing setting, the project site is characterized by several buildings that were recently vacated by Mitsubishi Motors of America, a paved parking lot with existing light poles and landscaping (refer to Figure 3.3, Existing Conditions, in Chapter 3.0, Project Description). The existing buildings consist of a 180,000 square-foot (sf) three-story office building located on the northern portion of the project site, three research and development buildings located on the west-central portion of the project site consisting of a two-story building (25,000 sf) and two one-story buildings (30,000 sf and 15,000 sf), and a 150,000 sf warehouse building located on the southwestern portion of the project site. Several loading docks are located along the northern wall of the warehouse building. Additionally, a pair of tennis courts is located in the southeastern area of the project site. Exposed soil and decomposed turf grass is present east of the existing warehouse. The project site is bounded on the north by Katella Avenue, on the west by commercial/industrial uses, on the south by the Stanton Storm Channel, and on the east by Holder Street.

The project site is visible from its northern and eastern boundaries by vehicles and pedestrians traveling along Katella Avenue and Holder Street, respectively. The project site is also partially visible by vehicles and pedestrians traveling along Hope Street, but most of the view is obstructed by intervening land uses and landscaping.

Land uses surrounding the project site reflect a developed, urban area that consists of commercial and office uses to the north, warehouse uses to the east and west, and residential uses to the south. Buildings in the vicinity of the project site include industrial buildings that range from one to three stories and are approximately 25 to 50 feet (ft) in height.

According to the United States Census Bureau, the City of Cypress is located within the Los Angeles—Long Beach—Anaheim, CA Urbanized Area.[1] 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.[2] Because the City is located in an urbanized area, the project site is also located within an urbanized area. Further, surrounding land uses in the vicinity of the project site are representative of urban densities.

The Cypress General Plan Land Use Policy Map designates the project site as "Specific Plan Area" in recognition that the project site is subject to the Cypress Corporate Center Amended Specific Plan (refer to Figure 3.4, General Plan Land Uses, in Chapter 3.0, Project Description). The project site is

1 United States Census Bureau. 2010. Los Angeles—Long Beach—Anaheim, CA Urbanized Area No. 51445. Website: https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua51445_los_angeles--long_beach--anaheim_ca/DC10UA51445_000.pdf (accessed June 25, 2020).

2 United States Census Bureau. 2010 Census Urban Area FAQs. Website: https://www.census.gov/programs-surveys/geography/about/faq/2010-urban-area-faq.html (accessed June 25, 2020).

within the boundaries of the Cypress Corporate Center Specific Plan, which covers an approximately 110-acre area in the southeastern portion of the City of Cypress. The Specific Plan designates the project site for Business Park uses.

The project site currently has a zoning designation of PC-2, Cypress Corporate Center, which is intended to provide for the development of uses as allowed by the Specific Plan. The Specific Plan is the regulatory plan that constitutes the zoning for the project site. Therefore, the Specific Plan largely governs development standards and design guidelines regulating scenic quality associated with the project site.

4.1.4 Regulatory Setting

4.1.4.1 Federal Regulations

No federal policies or regulations pertaining to aesthetics are applicable to the proposed project.

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.

The project site is not located in the vicinity of a State Scenic Highway. According to the List of Eligible and Officially Designated State Scenic Highways published by Caltrans, the only State-designated Scenic Highway in the County is a 4-mile portion of State Route 91 (SR-91) from State Route 55 (SR-55) to east of the Anaheim city limits.[1] This portion of SR-91 is approximately 11 miles east of the project site. The nearest State highway that is eligible for official designation as a State Scenic Highway is a portion of Pacific Coast Highway (PCH or State Route 1 [SR-1]), which is located approximately 5 miles southwest of the project site.

4.1.4.3 Regional Regulations

No regional policies or regulations pertaining to aesthetics are applicable to the proposed project.

4.1.4.4 Local Regulations

Cypress Zoning Ordinance. The City of Cypress Zoning Ordinance (refer to Appendix I of the City's Municipal Code) includes regulations related to zoning and lighting that are applicable to the proposed project. The Zoning Ordinance identifies development standards for various land uses, which aim at regulating aesthetics and scenic quality. The Zoning Ordinance sets forth exterior lighting standards, including the following:

[1] California Department of Transportation (Caltrans). 2015, last modified July 2019. List of Eligible and Officially Designated State Scenic Highways. Website: https://dot.ca.gov/-/media/dot-media/programs/design/documents/desig-and-eligible-aug2019_a11y.xlsx (accessed June 25, 2020).

- **Section 3.11.060.A (Exterior Fixtures):** Lighting fixtures shall be architecturally compatible with the character of the surrounding structure(s) and shall be energy efficient. Fixtures shall be appropriate in height, intensity, and scale to the use they are serving.

- **Section 3.11.060.B (Intensity):** The level of parking lot light projected onto any ground or wall surface shall not be less than two (2) footcandles nor more than five (5) footcandles at the base of the light fixture. Building-mounted decorative lights shall not exceed five (5) footcandles measured five (5) feet from the light source.

- **Section 3.11.060.C (Security Lighting):** Security lighting shall provide a minimum of two (2) footcandles and a maximum of three (3) footcandles at the ground level of the entrance.

- **Section 3.11.060.D (Shielding of Light Source):** Where the light source is visible from outside the project boundary, shielding shall be required to reduce glare so that neither the light source nor its image from a reflective surface shall be directly visible from any point beyond the property line. This requirement shall not apply to traffic safety lighting or public street lighting.

- **Section 3.14.050.C.4 (Required Improvements for Off-Street Parking Areas):** Lighting as specified by the building official and police department, with special attention to directing light and glare away from adjacent properties. The level of parking lot light shall not exceed one footcandle at a site's property lines.

Cypress Corporate Center Amended Specific Plan. The Specific Plan establishes development standards and design guidelines for land uses proposed as part of the proposed project. All buildings and open space areas included as part of the proposed project would be consistent with development standards and design guidelines related to aesthetics established in the Specific Plan. The following site development standards (Section III of the Specific Plan) related to aesthetics apply to the proposed project:

III. Business Park Development Regulations

C. Site Development Standards

1. **Signs.** Signs shall be permitted in accordance with Section VI, herein.

2. **Lighting.** Parking lots shall be lighted. All lighting, interior and exterior, shall be designed and located to minimize power consumption, to confine direct illumination to the premises and to protect residences adjacent to the south from light and glare impacts.

3. **Trucking and loading requirements.** Truck loading, rail loading, loading well deck facilities, or doors for such facilities shall not face a public street or residential area, or encroach into the required front and street side yard setbacks as follows:

    a. Trucking and loading facilities may face a local public street or adjacent residential neighborhood subject to the approval of a conditional use permit application by the

city planning agency. Truck and loading facilities are specifically prohibited from being visible from an arterial roadway.

b. In reviewing such application, the city planning agency shall be governed by the following:

1. Any loading facility shall be set back a minimum of forty-five feet (45') from the property line.

2. Any loading facility shall not exceed a maximum width of twenty feet (20'), excepting when facing a non-arterial street within the Planned Community Industrial/Commercial Zone No. 2.

3. Any loading facility shall be located within a fully enclosed structure (i.e., no exterior loading dock), with doors of a color compatible with the main building.

4. Installation of the loading facility will not create an overconcentration of such facilities on any one street, and the city planning agency shall endeavor to achieve variations in the street scene.

5. Adequate area shall be provided for the safe operation of trucks in loading areas.

6. Any landscaping which is displaced by construction of loading facilities shall be provided elsewhere, or waived by appropriate authority of the city.

7. Trucking areas shall be adequately paved for the type of operation intended.

4. **Trash areas.** All trash areas shall be shielded from view within a building or area enclosed by a solid wall not less than six (6) feet in height. No such area shall be located within forty (40) feet of any residential area.

5. **Screening.**

a. Abutting the Stanton Storm Channel. A landscaped berm shall be installed along the site boundary where the premises abuts the storm channel. Except as otherwise provided, the berm shall have a minimum total height of eight (8) feet not including trees and plants. Where there is a difference in elevation on opposite sides of the screen, the height shall be measured from the highest elevation.

b. Streets and intersections. Landscaping along all streets and boundaries shall have a height of no less than 36 inches nor more than 42 inches within twenty (20) feet of the point of intersections of:

1. a vehicular accessway or driveway and a street

2. a vehicular accessway or driveway and a sidewalk

3. two or more vehicular accessways, driveways or streets

c. Notwithstanding the requirements listed above, where the finished elevation of the property at the boundary line, or within five (5) feet inside the boundary, is lower than an abutting property elevation, such change in elevation may be used in lieu of, or in combination with, additional screening to satisfy the screening requirements for this section.

d. A screen as referred to above shall consist of one or any combination of the following types:

1. walls including retaining walls: a wall shall consist of concrete, stone, brick, tile or similar type of solid masonry material in a minimum of six (6} inches thick

2. berms: a berm shall be constructed of earthen material and it shall be landscaped in accordance with an approved landscape plan.

The following design guidelines (Section VI of the Specific Plan) related to aesthetics apply to the proposed project:

V. Design Guidelines

B. Landscape Concept Plan

1. **Streetscapes.**

a. Landscape Edge Adjacent to Surrounding Arterials: To create a unifying element surrounding the project area, a landscaped edge will be maintained adjacent to Valley View Street and Katella Avenue. Abutting the roadway edge will be a 30-foot minimum project landscape edge containing a 6-foot sidewalk within an 8-foot parkway. Between the sidewalk and the property line, a 20-foot planted area with a mix of evergreens and accent flowering trees shall be developed (Exhibit 12). The landscape area shall be bermed on a 3:1 slope so that the view of the parking area is buffered from the surrounding roadways.

Recommended plant materials within these streetscapes are as follows:

Trees: *Alnus rhombifolia* (White alder)
Tristania conferta (Brisbane box)
Jacaranda mimosifolia (Jacaranda)
Erythrina caffra (Coral tree)
Pinus canariensis (Canary Island pine)

Groundcovers: Turf (Marathon mix)
Vinca minor (Dwarf periwinkle)

2. **South Boundary:** Paralleling the Stanton Storm Channel on the southerly perimeter of the Cypress Corporate Center is an area designed to buffer residences south of the channel from uses in the center. The buffer zone will comprise a 5-foot high chain link fence on the south edge of a 10-foot service road maintained by the Orange County Flood Control District, and a minimum 8-foot-high, 35-foot-wide, densely planted landscaped berm (Exhibit 14).

   An additional five-foot-high decorative wrought iron, or equivalent, security fence will be placed on the north side of the berm, adjacent to the parking area.

   Recommended plant materials for typical edge buffers are as follows:

   Trees (mixture): *Pinus halepensis* (Aleppo pine)
   Brachychiton populneus (Bottle tree)

   Shrubs: *Acacia longifolia* (Sydney golden wattle)
   Melaleuca nesophila (Pink Melaleuca)
   Carissa grandiflora 'Tuttle' (Compact Natal plum)

3. **Landscape Materials:** In addition to the tree selections already specified, the following shrubs, groundcovers and lawn shall be incorporated into the site where appropriate. Alternative choices are subject to site plan approval. Additionally, developers shall have the option to incorporate species of existing trees located nearby subject to the approval of the design review committee.

   a. **Shrubs:** Shrubs shall be used for screening of parking areas and for special effects at entries and around buildings. Shrubs of like species should be used in large masses to avoid a spotty, disconnected ground plane.

      Carissa grandiflora (Natal plum)
      Hemerocallis species (Day lily)
      Ligustrum japonicum (Japanese privet)
      Pittosporum tobira (Tobira)
      Raphiolepis indica (India hawthorn)
      Trachelospernum jasminoides (Star jasmine)
      Xylosma congestum (Xylosma)

   b. **Groundcovers:** For use in planting beds and median strips, these groundcovers shall be easy to maintain and used to complement lawn areas.

      Hedera Helix 'Hahn's' (Hahn's ivy)
      Hypericum calycinum (Aarons beard)
      Potentilla verna (Spring cinquefoil)
      Vinca minor (Dwarf periwinkle)

4. **Parking Areas:** Landscaped fingers shall be constructed in all project areas. These "fingers" will be located a minimum of about one per ten parking spaces and the dimensions will be

approximately five feet wide by 20 feet long. These landscaped areas will increase the visual effect of the landscape edge along Valley View Street and Katella Avenue.

5. **Hardscape Design Elements:** Hardscape design elements, incorporated into the overall design theme for plaza/courtyard or transitional spaces within Cypress Corporate Center shall include, but not be limited to: light fixtures, bollards, benches, trash receptacles, and planters. These are depicted in Exhibit 16. Hardscape elements will function to allow a coordinated and consistent visual and physical connection between buildings and landscape materials within the project area.

   Building materials to be used as key hardscape elements are specified below. All materials utilized for walls, fences, paving, lighting and street furniture shall be coordinated with and complementary to architectural design details and materials.

   a. Walls and Fences
      - Concrete masonry: integral color, 6" coursing maximum.
      - Brick.
      - Concrete: textured, bush hammered, sandblasted, integral color in earth tones.
      - Wrought iron (as accents).
      - Exterior plaster or Portland plaster: integral or painted color (same as building stucco color).

   b. Paving (within enhanced areas)
      - Concrete, integrally colored, rock salt, broom finish, exposed aggregate finish with brick or wood edges, or stamped concrete.
      - Paving brick.
      - Paving brick tile.
      - Textured concrete.
      - Precast rough-textured pavers, integrally colored with a minimum coefficient of 0.6.
      - Quarry tile in earth tones.
      - Rough textured granite.
      - Rough textured marble.
      - River washed stones/cobblestones.

   c. Lighting
      - Exterior building lighting (spot or flood lights concealed in landscaping).
      - Onsite roads/parking light standards.
      - Pedestrian pathways (bollard lights).
      - Pedestrian plaza/courtyards (bollard lights).
      - Landscape lighting (spot or flood lights concealed in landscaping).
      - Signage lighting (self-contained or concealed in landscaping).

6. **Signage:** The intent of this subsection is to provide the guidelines and regulations necessary to achieve a visually coordinated, balanced and appealing signage system throughout the Cypress Corporate Center, particularly one that promotes compatibility with the architectural controls and landscape concepts contained within this specific plan.

7. **Sign Guidelines:** An overall sign program shall be submitted as part of the preliminary plan submittal to the Director of Planning. All informational signs shall be constructed with a concrete base and a metal or fiberglass message area to dimensions shown in previous Exhibit 16.[1]

4.1.5 Thresholds of Significance

The thresholds for aesthetics impacts used in this analysis are consistent with Appendix G of the State CEQA Guidelines and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant 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, would the project conflict with applicable zoning and other regulations governing scenic quality?**

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. A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Aesthetic components of a scenic vista generally include (1) scenic quality, (2) sensitivity level, and (3) view access. Although the City of Cypress does not provide a definition of scenic vistas, potential scenic vistas includes areas with views of the coastline, mountains, or other prominent scenic features that are considered significant visual resources for residents and businesses.

The City is almost entirely developed and neither the project site nor other properties in the project vicinity provide substantial views of any water bodies, mountains, hilltops, or any other significant visual resources. As such, the City has not designated any scenic corridors or scenic vistas within the City. The project site is located in a flat area and is surrounded by urban development, including

[1] For complete Sign Guidelines, refer to pages 23 to 27 of the Cypress Corporate Center Specific Plan.

commercial and office uses to the north, warehouse uses to the east and west, and residential uses to the south. In addition, the proposed project includes the protection-in-place of two existing buildings and does not propose the construction of any new buildings that would block the view of any natural features from the project site or surrounding areas. Further, the proposed project involves the demolition of three existing buildings on the project site, which could help improve views of the surrounding area; however, due to adjacent intervening land uses, any viewshed improvement would be negligible. For these reasons, the development of the proposed project would not have a substantial adverse effect on a scenic vista. Therefore, there would be no impact, 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. As previously discussed, the project site is not located in the vicinity of a State Scenic Highway. The nearest State-designated Scenic Highway to the project site is a 4-mile portion of SR-91 approximately 11 miles east of the project site. The nearest State highway that is eligible for official designation as a State Scenic Highway is a portion of PCH approximately 5 miles southwest of the project site. Due to distance and intervening land uses, no portion of the project site or surrounding area is viewable from the officially designated portion of SR-91 or the eligible portion of PCH. As such, the project would not result in impacts related to the substantial damage of scenic resources within a State Scenic Highway. Therefore, there would be no impact, 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?

Less than Significant Impact. As stated previously, the United States Census Bureau designated the project site as part of an urbanized area because the entire City is within the Los Angeles—Long Beach—Anaheim, CA Urbanized Area. The Cypress General Plan Land Use Policy Map designates the project site as "Specific Plan Area" in recognition that the project site is subject to the Cypress Corporate Center Amended Specific Plan. The project site has a zoning designation of PC-2, Cypress Corporate Center, which is intended to provide for the development of uses as allowed by the Specific Plan. Therefore, the Specific Plan largely governs development standards and design guidelines pertaining to aesthetics associated with the project site. The proposed project is 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.

In its existing setting, the project site is characterized by several buildings that were recently vacated by Mitsubishi Motors of America, a paved parking lot with existing light poles and landscaping. The existing buildings consist of a three-story office building located on the northern portion of the project site, three industrial buildings located on the west-central portion of the project site, and a

warehouse building located on the southwestern portion of the project site. A loading dock area is located along the northern building wall of the warehouse building. As part of the project, the three-story office building and the southernmost warehouse building would be protected in place; the other buildings on the project site would be demolished. The proposed project also includes upgraded lighting on the warehouse building and throughout the parking lot, landscaping improvements, and reconfiguration of the surface parking lot.

The proposed project's consistency with the applicable development standards and design guidelines included in the Specific Plan that regulate scenic quality is provided in Table 4.1.A, below.

Table 4.1.A: Specific Plan Consistency Analysis

Standards	Proposed Project Consistency
Section III of Specific Plan: Development Standards	
7. Signs. Signs shall be permitted in accordance with Section VI, herein.	**Consistent.** Although signage design is not finalized at this time, any signage included as part of the proposed project would comply with regulations in Section VI in the Specific Plan. Therefore, the proposed project is consistent with Development Standard 7 of the Specific Plan.
8. Lighting. Parking lots shall be lighted. All lighting, interior and exterior, shall be designed and located to minimize power consumption, to confine direct illumination to the premises and to protect residences adjacent to the south from light and glare impacts.	**Consistent.** As part of the project, lighting throughout the project site, including wall-mounted lighting on the existing warehouse building and pole-mounted lighting throughout the parking lot, would be upgraded. The proposed project would not introduce new sources of light to the project site. Although the proposed project includes upgraded lighting, these light sources would be comparable to lighting in the existing condition and would replace some of the lighting associated with the current uses on site. All new lighting would comply with applicable regulations of the 2019 State Building Energy Efficiency Standards (Title 24). The proposed lighting sources would be similar to other lighting sources in the project vicinity and would not generate artificial light levels that are out of character with the surrounding area, which is densely developed and characterized by a high degree of human activity and ambient light during the day and night. In addition, all project lighting is required to meet all applicable lighting standards in the City's Zoning Ordinance. For the reasons stated above, the proposed project is consistent with Development Standard 8 of the Specific Plan.
9. Trucking and loading requirements. Truck loading, rail loading, loading well deck facilities, or doors for such facilities shall not face a public street or residential area, or encroach into the required front and street side yard setbacks as follows: a. Trucking and loading facilities may face a local public street or adjacent residential neighborhood subject to the approval of a conditional use permit application by the city planning agency. Truck and loading facilities are specifically prohibited from being visible from an arterial roadway.	**Consistent.** In its existing condition, the existing warehouse building has eight truck loading docks on the northern building face. As part of the project, four new loading ramps and dock doors would be installed on the eastern side of the warehouse building. The new loading ramps and dock doors would not face a residential area, but they would face a public street (Holder Street). Since the new loading ramps and dock doors would face Holder Street, a Conditional Use Permit (CUP) would be required for project approval. Although the new loading ramps and dock doors would face Holder Street, they would be setback over 300 ft from the eastern property line. Overall, with adherence to conditions required by the CUP, the proposed project would comply with all trucking and loading requirements. Therefore, the proposed project is consistent with Development Standard 9 of the Specific Plan.

Table 4.1.A: Specific Plan Consistency Analysis

Standards	Proposed Project Consistency
b. In reviewing such application, the city planning agency shall be governed by the following: 1. Any loading facility shall be set back a minimum of forty-five feet (45') from the property line. 2. Any loading facility shall not exceed a maximum width of twenty feet (20'), excepting when facing a non-arterial street within the Planned Community Industrial/Commercial Zone No. 2. 3. Any loading facility shall be located within a fully enclosed structure (i.e., no exterior loading dock), with doors of a color compatible with the main building. 4. Installation of the loading facility will not create an overconcentration of such facilities on any one street, and the city planning agency shall endeavor to achieve variations in the street scene. 5. Adequate area shall be provided for the safe operation of trucks in loading areas. 6. Any landscaping which is displaced by construction of loading facilities shall be provided elsewhere, or waived by appropriate authority of the city. 7. Trucking areas shall be adequately paved for the type of operation intended.	
10. Trash areas. All trash areas shall be shielded from view within a building or area enclosed by a solid wall not less than six (6) feet in height. No such area shall be located within forty (40) feet of any residential area.	**Consistent.** No new trash areas are proposed as part of the project. All existing trash areas on the project site are enclosed by solid walls of at least 6 ft in height and are not within 40 ft of any residential areas. Therefore, the proposed project is consistent with Development Standard 10 of the Specific Plan.

Table 4.1.A: Specific Plan Consistency Analysis

Standards	Proposed Project Consistency
11. Screening. a. Abutting the Stanton Storm Channel. A landscaped berm shall be installed along the site boundary where the premises abuts the storm channel. Except as otherwise provided, the berm shall have a minimum total height of eight (8) feet not including trees and plants. Where there is a difference in elevation on opposite sides of the screen, the height shall be measured from the highest elevation. b. Streets and intersections. Landscaping along all streets and boundaries shall have a height of no less than 36 inches nor more than 42 inches within twenty (20) feet of the point of intersections of: 1. a vehicular accessway or driveway and a street 2. a vehicular accessway or driveway and a sidewalk 3. two or more vehicular accessways, driveways or streets c. Notwithstanding the requirements listed above, where the finished elevation of the property at the boundary line, or within five (5) feet inside the boundary, is lower than an abutting property elevation, such change in elevation may be used in lieu of, or in combination with, additional screening to satisfy the screening requirements for this section. d. A screen as referred to above shall consist of one or any combination of the following types: 1. walls including retaining walls: a wall shall consist of concrete, stone, brick, tile or similar type of solid masonry material in a minimum of six (6} inches thick 2. berms: a berm shall be constructed of earthen material and it shall be landscaped in accordance with an approved landscape plan.	**Consistent.** In its existing condition, the project site's southern boundary includes a landscaped berm with a minimum height of 8 ft. A variety of mature trees and shrubs are located on top of the berm, which provide further screening. Additionally, the proposed project would comply with landscaping requirements along streets and intersections. Landscaping would be maintained so that landscaping along all streets and boundaries would have a height of no less than 36 inches nor more than 42 inches within 20 ft of the point of intersections. Therefore, the proposed project is consistent with Development Standard 11 of the Specific Plan.

Table 4.1.A: Specific Plan Consistency Analysis

Standards	Proposed Project Consistency
Section VI of Specific Plan: Design Guidelines	
1. Streetscapes a. Landscape Edge Adjacent to Surrounding Arterials: To create a unifying element surrounding the project area, a landscaped edge will be maintained adjacent to Valley View Street and Katella Avenue. Abutting the roadway edge will be a 30-foot minimum project landscape edge containing a 6-foot sidewalk within an 8-foot parkway. Between the sidewalk and the property line, a 20-foot planted area with a mix of evergreens and accent flowering trees shall be developed (Exhibit 12). The landscape area shall be bermed on a 3:1 slope so that the view of the parking area is buffered from the surrounding roadways. *Note: Refer to Section 4.1.4.4, Local Regulations, above, for a list of recommended plant materials.*	**Consistent.** In its existing condition, the project site includes a landscaped edge along the site boundary adjacent to Katella Avenue that meets these requirements. Upon project implementation, this landscaped frontage would be protected-in-place. Therefore, the proposed project is consistent with Design Guideline 1 of the Specific Plan.
2. South Boundary: Paralleling the Stanton Storm Channel on the southerly perimeter of the Cypress Corporate Center is an area designed to buffer residences south of the channel from uses in the center. The buffer zone will comprise a five-foot high chain link fence on the south edge of a 10-foot service road maintained by the Orange County Flood Control District, and a minimum 8-foot-high, 35-foot-wide, densely planted landscaped berm (Exhibit 14). An additional five-foot-high decorative wrought iron, or equivalent, security fence will be placed on the north side of the berm, adjacent to the parking area. *Note: Refer to Section 4.1.4.4, Local Regulations, above, for a list of recommended plant materials.*	**Consistent.** In its existing condition, the project site includes a chain-link security fence (separating the project site from the landscaped berm) at the southern project boundary that meets these requirements. Upon project implementation, the landscaped berm and the security fence would be protected-in-place. Additionally, the project would include a new 5 ft high fence outside of the project site boundaries, north of the landscaped berm (separating the landscaped berm from the Stanton Storm Channel service road). Therefore, the proposed project is consistent with Design Guideline 2 of the Specific Plan.

Table 4.1.A: Specific Plan Consistency Analysis

Standards	Proposed Project Consistency
4. Landscape Materials: In addition to the tree selections already specified, the following shrubs, groundcovers and lawn shall be incorporated into the site where appropriate. Alternative choices are subject to site plan approval. Additionally, developers shall have the option to incorporate species of existing trees located nearby subject to the approval of the design review committee. a. Shrubs: Shrubs shall be used for screening of parking areas and for special effects at entries and around buildings. Shrubs of like species should be used in large masses to avoid a spotty, disconnected ground plane. b. Groundcovers: For use in planting beds and median strips, these groundcovers shall be easy to maintain and used to complement lawn areas. *Note: Refer to Section 4.1.4.4, Local Regulations, above, for a list of recommended plant materials.*	**Consistent.** In the existing condition, a variety of mature trees, shrubs, and groundcover are located on the project site. Existing trees along the project site boundaries would be protected-in-place: frontage landscaping along the northern boundary; a row of pine trees along the eastern boundary; the landscaped berm along the southern boundary; and a row of trees and a shrub hedge along the western boundary. Additionally, the proposed project would involve the installation of new trees, shrubs, and groundcover at the interior of the project site throughout the new surface parking lots. Therefore, the proposed project is consistent with Design Guideline 4 of the Specific Plan.
5. Parking Areas: Landscaped fingers shall be constructed in all project areas. These "fingers" will be located a minimum of about one per ten parking spaces and the dimensions will be approximately five feet wide by 20 feet long. These landscaped areas will increase the visual effect of the landscape edge along Valley View Street and Katella Avenue.	**Consistent.** The proposed project would include landscaped fingers (located a minimum of about one per ten parking spaces) within the surface parking lot along the western side of the project site. In addition, the proposed project includes landscaping throughout the main surface parking lot in the center of the project site, including shade trees (generally located every 5 parking spaces) and shrubs (generally located between/at the end of parking aisles). Therefore, although the proposed project does not include landscaped fingers in every parking lot, the project is consistent with the intent of Design Guideline 5 of the Specific Plan.
6. Hardscape Design Elements: Hardscape design elements, incorporated into the overall design theme for plaza/courtyard or transitional spaces within Cypress Corporate Center shall include, but not be limited to: light fixtures, bollards, benches, trash receptacles, and planters. These are depicted in Exhibit 16. Hardscape elements will function to allow a coordinated and consistent visual and physical connection between buildings and landscape materials within the project area. *Note: Refer to Section 4.1.4.4, Local Regulations, above, for a list of recommended hardscape design elements.*	**Consistent.** The proposed project includes several hardscape design elements, such as upgraded exterior building lighting, upgraded parking lot light poles, and enhanced paving at project driveways. Therefore, the proposed project is consistent with Design Guideline 6 of the Specific Plan.

Table 4.1.A: Specific Plan Consistency Analysis

Standards	Proposed Project Consistency
6. Signage: The intent of this subsection is to provide the guidelines and regulations necessary to achieve a visually coordinated, balanced and appealing signage system throughout the Cypress Corporate Center, particularly one that promotes compatibility with the architectural controls and landscape concepts contained within this specific plan. Sign Guidelines: An overall sign program shall be submitted as part of the preliminary plan submittal to the Director of Planning. All informational signs shall be constructed with a concrete base and a metal or fiberglass message area to dimensions shown in previous Exhibit 16. *Note: For complete Sign Guidelines, refer to pages 23 to 27 of the Specific Plan.*	**Consistent.** Although signage design is not finalized at this time, any signage included as part of the proposed project would comply with regulations in Section VI in the Specific Plan. Therefore, the proposed project would be consistent with Design Guideline 6 of the Specific Plan.

Source: City of Cypress. Cypress Corporate Center Amended Specific Plan (1989).
ft = foot/feet

As shown in Table 4.1.A, above, the proposed project would conform to all applicable development standards and design guidelines of the Specific Plan that regulate scenic quality. Therefore, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality. As such, impacts would be less than significant, 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?

4.1.6.1 Construction

Less Than Significant Impact. Construction activities would occur only during daylight hours. Any construction-related illumination during evening and nighttime hours would be used for safety and security purposes only and would occur only for the duration required for the temporary construction process. Light resulting from construction activities 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 glare. Therefore, construction of the proposed project would

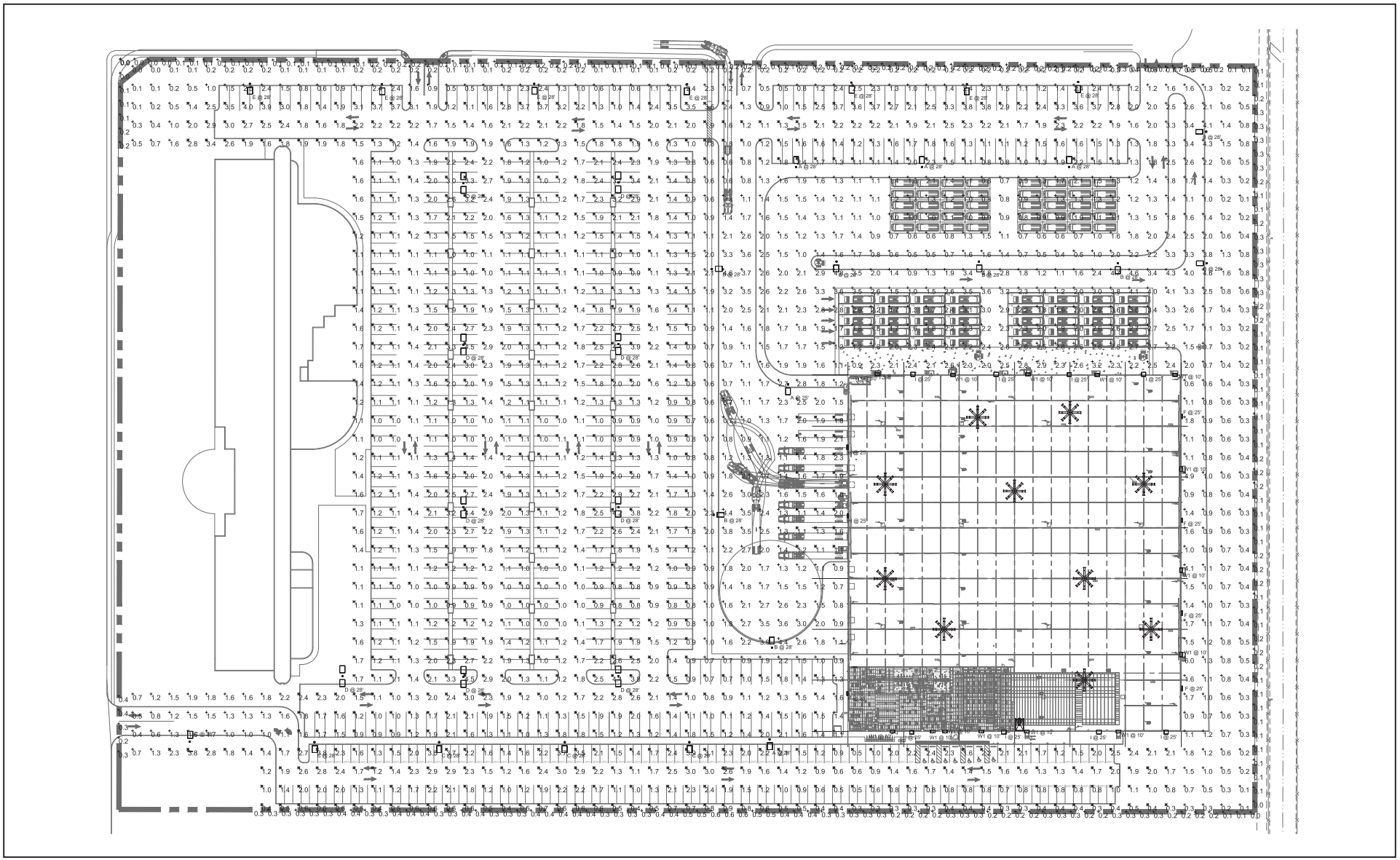
not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and light and glare impacts associated with construction would be less than significant. No mitigation is required.

4.1.6.2 Operation

Less Than Significant Impact. In the existing condition, the project site produces exterior light and glare from a lighted surface parking area and wall-mounted building lighting. Several light poles exist throughout the existing surface parking lot and are an existing source of light on the project site. Existing sources of light in the project vicinity are typical of industrial areas and include headlights on nearby roadways, building facade and interior lighting, and pole-mounted lighting in the parking areas of adjacent developments. Lighting from existing distant development within the City also contributes to the background lighting in the project vicinity.

As part of the project, lighting throughout the project site, including wall-mounted lighting on the existing warehouse building and pole-mounted lighting throughout the parking lot, would be upgraded. The proposed project would not introduce new sources of light to the project site. Although the proposed project includes upgraded lighting, these light sources would be comparable to lighting in the existing condition and would replace some of the lighting associated with the current uses on site. All new lighting would comply with applicable regulations of the 2019 State Building Energy Efficiency Standards (Title 24). The proposed lighting sources would be similar to other lighting sources in the project vicinity and would not generate artificial light levels that are out of character with the surrounding area, which is densely developed and characterized by a high degree of human activity and ambient light during the day and night. Additionally, the proposed project would comply with the development regulations outlined in Section III.C.8., Lighting, of the Specific Plan, which require that parking lots be lighted, and that lighting be designed to minimize power consumption, confine direct illumination to the premises of the development, and protect residences adjacent to the south from light and glare impacts. Landscaping and screening requirements set forth in the Specific Plan would also reduce impacts created by lighting.

In addition, all project lighting is required to meet all applicable lighting standards in the City's Zoning Ordinance. As required by Section 3.11.060.A (Exterior Features) of the Zoning Ordinance, lighting fixtures shall be architecturally compatible with the character of the surrounding structure(s) and shall be energy efficient. Fixtures shall be appropriate in height, intensity, and scale to the use they are serving, In accordance with Section 3.11.060.B (Intensity), the level of parking lot light projected onto any ground or wall surface shall not be more than 5 footcandles at the base of the light fixture and building-mounted decorative lights shall not exceed 5 footcandles measured 5 ft from the light source. In accordance with Section 3.11.060.C (Security Lighting), security lighting shall provide a maximum of 3 footcandles at the ground level of the project entrances. Pursuant to Section 3.11.060.D (Shielding of Light Source), where a project light source is visible from outside the project boundary (other than public street lighting), the light source shall be shielded to reduce glare so that neither the light source nor its image from a reflective surface shall be directly visible from any point beyond the property line. Finally, as required by Section 3.14.050.C.4 (Required Improvements for Off-Street Parking Areas), the level of parking lot light shall not exceed 1 footcandle at the boundaries of the project site. The Photometric Plan, included as Figure 4.1.1, shows project compliance with applicable lighting standards in the City's Zoning Ordinance.



LSA

FIGURE 4.1.1

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FEET

SOURCE: Architects Orange

Amazon Facility

Photometric Plan

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Due to the demolition of several on-site structures as part of the proposed project, project implementation would decrease the overall intensity of on-site land uses and associated lighting. However, the slight decrease in on-site lighting would not result in substantial decreases in light intensity at off-site locations. In addition, light intensity diminishes rapidly as an observer moves away from the light source. As such, the intensity of project-related lighting would be concentrated on site with little potential to create perceptible changes in ambient lighting intensity at off-site, light-sensitive locations.

Daytime glare can result from natural sunlight reflecting from a shiny surface that would interfere with the performance of an off-site activity, such as the operation of a motor vehicle. Reflective surfaces can be associated with window glass and polished surfaces. The existing warehouse on the project site that would be protected-in-place is predominantly comprised of white concrete walls and does not produce glare. Although there is a minimal amount of glass on the northern and western walls of the existing warehouse, the view from public vantage points is obstructed due to intervening land uses. As part of the project, the existing warehouse building would be repainted, but no new building materials would be added that could act as sources of glare. The existing three-story office building is comprised almost entirely of blue glass, which reduces glare from vantage points along Katella Avenue and Holder Street. Therefore, the existing materials would not have the potential to produce a substantial degree of glare.

Nighttime lighting and glare sources from the proposed project could also include lighting from interior and exterior building lighting, security lighting, signage, parking lot lighting, and vehicle headlights. The nighttime glare produced by these sources would be similar to the existing nighttime glare produced by the buildings and parking lots on the project site and the surrounding industrial uses and would not result in enough glare to be considered substantial or affect nighttime views because lighting would be designed to be consistent with the development regulations outlined in Section III.C.8., Lighting, of the Specific Plan and is required to meet all applicable lighting standards in the City's Zoning Ordinance as discussed above.

For these reasons, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the surrounding urban area, and project impacts would be less than significant. No mitigation is required.

4.1.7 Level of Significance Prior to Mitigation

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

4.1.8 Regulatory Compliance Measures and Mitigation Measures

No regulatory compliance measures are applicable to the proposed project, and no mitigation is required.

4.1.9 Level of Significance after Mitigation

The proposed project would not result in any significant impacts related to aesthetics.

4.1.10 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 aesthetics. The cumulative impact area for aesthetics related to the proposed project is the City of Cypress. As shown in Table 4.A, Summary of Related Projects, in Chapter 4.0, Existing Setting, Environmental Analysis, Impacts, and Mitigation Measures, a residential project, a sports park, and a mixed-use project (including residential, retail, and hotel uses) are approved or under construction within the City. Each of these projects, as well as all proposed projects in the City, would be subject to their own consistency analysis for policies and regulations governing scenic quality and would be reviewed for consistency with any applicable Specific Plan goals and policies and Zoning Code development standards. If there were any potential for significant impacts to aesthetics, appropriate mitigation measures would be identified to reduce and/or avoid impacts related to aesthetics.

As described above in Section 4.1.6, Project Impacts, implementation of the proposed project would not result in a significant impact related to aesthetics. The proposed project and all related projects are required to adhere to City and State regulations designed to reduce and/or avoid impacts related to aesthetics. With compliance with these regulations, cumulative impacts related to aesthetics would be less than significant. Therefore, implementation of the proposed project would not result in a significant cumulative impact related to aesthetics.

4.2 AIR QUALITY

This section describes the potential air quality impacts for the proposed Katella Avenue Amazon Facility project (proposed project). The purpose of this air quality analysis is to evaluate the potential impacts to air quality associated with construction and operation of the project based on thresholds established by the South Coast Air Quality Management District (SCAQMD), and recommend measures to mitigate potentially significant impacts. The complete air quality technical report, *Katella Avenue Amazon Facility Air Quality Impact Analysis* (Air Quality Impact Analysis) (Urban Crossroads, July 7, 2020) is provided in Appendix B.

4.2.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this Environmental Impact Report (EIR). Two comment letters included comments related to Air Quality.

The letter from SCAQMD received on July 1, 2020, suggested that air quality impacts from both construction (including demolition) and operations should be calculated. Because the operation of the proposed project would generate heavy-duty diesel-fueled vehicles, the comment letter also recommended that a mobile source health risk assessment should be performed. The letter from Allyssa J. Holcomb (on behalf of Warland Investments Company) received on July 6, 2020, expresses general concern related to sensitive receptor exposure to toxic air contaminants (TACs). The proposed project's potential to result in the exposure of sensitive receptors to substantial pollutant concentrations is discussed under Threshold 4.2.3, below.

4.2.2 Methodology

The proposed project would result in criteria pollutant emissions from construction and operational sources. Construction activities would generate emissions at the site from off-road construction equipment, and on roadways as a result of construction-related truck hauling, vendor deliveries, and worker commuting. Operational activities would also generate emissions at the project site from miscellaneous on-site sources, such as natural gas combustion for cooking, heating, and landscaping equipment, and from operational-related traffic. This analysis utilized the California Emissions Estimator Model (CalEEMod), Version 2016.3.2, to quantify the criteria pollutant emissions for both construction and operation of the proposed project. The maximum daily emissions are calculated for the criteria pollutants. The CalEEMod output is contained in Appendix B of this Draft EIR.

Guidance from the United States Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the South Coast Air Quality Management District (SCAQMD), the *Katella Avenue Amazon Facility Traffic Impact Analysis* (Traffic Impact Analysis) (Urban Crossroads, June 12, 2020), and emissions modeling software (specifically, CalEEMod) were used to calculate the criteria pollutant emissions from the proposed project. The letter from SCAQMD (December 17, 2019) recommended the use of the SCAQMD's *CEQA Air Quality Handbook* (1993, currently being revised), use of CalEEMod, SCAQMD's California Environmental Quality Act (CEQA) regional pollutants significance thresholds, a mobile source health risk assessment, and the use of CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005). Additionally, SCAQMD provided information about SCAQMD permits and data availability and suggested potential

mitigation measures and consideration of potential alternatives to lessen impacts to air quality. This analysis takes into account the recommendations provided by SCAQMD. A mobile source health risk assessment technical guidance was developed by SCAQMD to address potential diesel particulate matter (DPM) impacts from the following activities: truck idling and movement, ship hoteling, and train idling. SCAQMD's definition of the truck idling and movement activities would include development projects such as truck stops, warehouse/distribution centers, or transit centers, which are not a part of the proposed project. Therefore, a mobile source health risk assessment is not necessary for this project.

CalEEMod is a statewide program designed to calculate both criteria and greenhouse gas (GHG) emissions from development projects in California. This model was initially developed under the auspices of the SCAQMD and received input from other California air quality districts. It is currently supported statewide for use in quantifying the emissions associated with development projects undergoing environmental review. CalEEMod utilizes widely accepted models for emission estimates combined with appropriate default data that can be used if site-specific information is not available. These models and default estimates use sources such as the USEPA AP-42 emission factors; CARB's on-road and off-road equipment emission models, such as the EMission FACtor model (EMFAC) and the Off-Road Emissions Inventory Program model (OFFROAD); and studies commissioned by California agencies, such as the California Energy Commission (CEC) and the California Department of Resources Recycling and Recovery (CalRecycle).

CalEEMod is based on CARB-approved off-road and on-road mobile-source emission factor models (OFFROAD2014 and EMFAC2014, respectively). It is designed to calculate construction and operational emissions for land development projects and allows for the input of project-specific information. OFFROAD2014 is an emissions factor model used to calculate emission rates from off-road mobile sources (e.g., construction equipment, agricultural equipment). EMFAC2014 is a USEPA approved emissions factor model used to calculate emissions rates from on-road vehicles (e.g., passenger vehicles, haul trucks).

Although CalEEMod Version 2016.3.2 includes EMFAC2014 mobile source emission factors, the USEPA approved the 2017 version of the EMFAC web database on August 19, 2019, for use in State Implementation Plan and transportation conformity analyses. The air quality analysis utilizes summer, winter, and annual EMFAC2017 emission factors in order to derive vehicle emissions associated with project operational activities, which vary by season.

Because the EMFAC2017 emission rates are associated with vehicle fuel types while CalEEMod vehicle emission factors are aggregated to include all fuel types for each individual vehicle class, the EMFAC2017 emission rates for different fuel types of a vehicle class are averaged by activity or by population and activity to derive CalEEMod emission factors. Methodology for converting EMFAC2017 emission rates into CalEEMod vehicle emission factors for each emission type are detailed in CalEEMod User's Guide *Appendix A: Calculation Details for CalEEMod* (36). EMFAC2017 emission rates utilized in this analysis can be found in Appendix B of this report.

CalEEMod provides a platform to calculate both construction emissions and operational emissions from a development project. It calculates both the daily maximum and annual average for criteria

pollutants as well as total or annual 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, underground utility installation, grading, building, coating, 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 reactive organic gases (ROGs) from architectural coating and paving.

- Operational emissions associated with the fully built-out development project, such as on-road mobile vehicle traffic generated by the land uses, fugitive dust associated with roads, volatile emissions of ROGs from architectural coatings, off-road emissions from landscaping equipment, volatile emissions of ROGs from consumer products and cleaning supplies, wood stoves and hearth usage, 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 County of Orange (County) area, which is within the SCAQMD jurisdiction for the emission inventory, consistent with SCAQMD requirements.

For purposes of the health risk assessment, SCAQMD recommends using the USEPA's AERMOD model. The Lakes AERMOD View (Version 9.9.0) was used to calculate annual average particulate concentrations associated with site operations. Lakes AERMOD View was utilized to incorporate the USEPA's latest AERMOD Version 19191. The AERMOD model offers additional flexibility by allowing the user to assign an initial release height and vertical dispersion parameters for mobile sources representative of a roadway.

The CalEEMod, EMFAC2017, and AERMOD output files for the proposed project are provided for reference in Appendix B.

4.2.3 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 project site are provided below.

4.2.3.1 South Coast Air Basin

The project site is located in the South Coast Air Basin within the jurisdiction of SCAQMD. The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and State air quality standards. As previously stated, the project site is located within the Basin, a 6,745-square-mile subregion of the SCAQMD, which includes portions of Los Angeles, Riverside, and San

Bernardino Counties, and all of Orange County. The Basin is bounded by the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east and by the Pacific Ocean to the south and west.

Air Pollutants and Health Effects. Both State and federal governments have established health-based ambient air quality standards 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 quality 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 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 volatile organic compounds (VOCs).

Occupants of certain types 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 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 (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, elderly, and young children. Ozone levels peak during the summer and early fall months.

Particulate Matter. Particulate matter 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, or PM_{10}. Fine, suspended particulate matter with an aerodynamic diameter of 2.5 microns or less, or $PM_{2.5}$, is

[1] United States Environmental Protection Agency (USEPA). 2014. 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.

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, such as tire or brake lining wear; or through fugitive dust (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.

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.

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 national ambient air quality standard 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 reactive organic gases [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.

Vinyl Chloride. Vinyl chloride (VC) is a chemical building block, or monomer, used in the production of polyvinyl chloride (PVC). PVC is used to make materials, including pipes, used in the construction, packaging, electrical, and transportation industries. Major sources of VC include PVC production and fabrication facilities and, at the other end of the PVC lifecycle, as PVC deteriorates, landfills and

publicly owned treatment works. VC is carcinogenic. VC is primarily of concern as a carcinogenic TAC at hot spots. It is regulated as a TAC to allow implementation of health-protective control measures at levels below the ambient standard.

Hydrogen Sulfide. Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. In addition, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation. Breathing H_2S at levels above the State standard could result in exposure to a very disagreeable odor.

For the proposed project, six criteria pollutants were evaluated—NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and O_3—using VOCs[1] and NO_X as surrogates. These pollutants were analyzed because they are considered to be pollutants of concern based on the type of emission sources associated with construction and operation of the proposed project, and are thus included in this assessment. Because the ambient concentrations of lead, VC, H_2S, and visibility-reducing particles are very low and the proposed project would not include industrial production facilities or generate substantial amounts of exhaust, lead, VC, H_2S, and visibility-reducing particles are not considered to be pollutants of concern for the proposed project and are not analyzed below.

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.

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1 The emissions of VOCs and ROGs are essentially the same for the combustion emission sources that are considered in this EIR. This EIR will typically refer to organic emissions as VOCs.

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 one million) that is greater than all other measured TACs combined.[1] 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 anticipates 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,[2] meaning that the statewide health risk from diesel particulate matter is expected to decrease from 540 cancer cases in one million to 21.5 cancer cases in one million.

4.2.3.2 Regional Climate

The regional climate has a substantial influence on air quality in the Basin. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality.

The annual average temperatures throughout the Basin vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the Basin shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the Basin, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the Basin have recorded maximum temperatures above 100°F.

Although the climate of the Basin can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of Basin climate. Humidity restricts visibility in the Basin, and the conversion of sulfur dioxide (SO_2) to sulfates (SO_4) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90 percent of the Basin's rainfall occurs from November through April. The annual average rainfall varies from approximately 9 inches in Riverside to 14 inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the Basin with frequency being higher near the coast.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the Basin is subject to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong,

1 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.

2 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.

dry offshore winds, locally termed “Santa Ana” each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind.

In the Basin, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire Basin.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter when nights are longer and onshore flow is weakest. These inversions effectively trap pollutants, such as nitrogen oxides (NO_X) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

4.2.3.3 Wind Patterns

The distinctive climate of the project area and the Basin is determined by its terrain and geographical location. The Basin is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter.

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

4.2.3.4 Criteria Pollutants

Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Table 4.2.A summarizes the criteria pollutants, their typical sources, and health effects of air pollutants discussed in this section.

Table 4.2.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).

Table 4.2.B presents a summary of Federal and State ambient air quality standards (AAQS).

Table 4.2.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	12.0 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, 2016. (Website: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf).

[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 3 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/m^3 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 3 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/m^3 to 12.0 µg/m^3. The existing national 24- hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m^3 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/m^3 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
CARB = California Air Resources Board
mg/m^3 = milligrams per cubic meter
µg/m^3 = micrograms per cubic meter
ppb = parts per billion
ppm = parts per million
USEPA = United States Environmental Protection Agency

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. The most recent 3 years of data available are shown on Table 4.2.C and identify the number of days that ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the project site. Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ for 2016 through 2018 were obtained from the SCAQMD Air Quality Data Tables. Additionally, data for SO_2 have been omitted as attainment is regularly met in the Basin and few monitoring stations measure SO_2 concentrations.

Table 4.2.C: Project Area Air Quality Monitoring Summary 2016–2018

Pollutant	Standard	Year		
		2016	2017	2018
O_3				
Maximum State 1-Hour Concentration (ppm)[1]	> 0.09 ppm	0.103	0.090	0.112
Maximum Federal/State 8-Hour Concentration (ppm)	> 0.07 ppm	0.074	0.076	0.071
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	2	0	1
Number of Days Exceeding Federal/State 8-Hour Standard	> 0.07 ppm	4	4	1
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	2.6	2.5	2.3
Maximum Federal 8-Hour Concentration	> 20 ppm	2.1	2.1	1.9
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.064	0.081	0.066
Annual Average	N/A	0.015	0.014	0.014
PM_{10}				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 150 µg/m^3	74	128	129
Annual Federal Arithmetic Mean (µg/m^3)	N/A	24.4	26.3	27.2
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m^3	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m^3	3	17	13
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (µg/m^3)	> 35 µg/m^3	44.45	53.90	54.10
Annual Federal Arithmetic Mean (µg/m^3)	> 12 µg/m^3	9.47	11.39	11.02
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m^3	1	6	3

Source: Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ were obtained from SCAQMD Air Quality Data Tables.
µg/m^3 = microgram per cubic meter
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
ppm = Parts Per Million
SCAQMD = South Coast Air Quality Management District

4.2.3.5 Cancer Risk Trends

Based on information available from CARB, overall cancer risk throughout the Basin has had a declining trend since 1990. In 1998, following an exhaustive 10-year scientific assessment process, CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. The SCAQMD initiated a comprehensive urban toxic air pollution study called the Multiple Air Toxics Exposure Study (MATES). DPM accounts for more than 70 percent of the cancer risk.

In 2008, the SCAQMD prepared an update to the MATES II study, referred to as MATES III. MATES III estimated that the average excess cancer risk level from exposure to TACs is an approximately 17 percent decrease in comparison to the MATES II study.

In 2015, the SCAQMD published an in-depth analysis of the toxic air contaminants and the resulting health risks for all of Southern California, the *Multiple Air Toxics Exposure Study in the SCAB, MATES IV* (SCAQMD 2005), which showed that the cancer risk has decreased less than 50 percent since MATES III.

The MATES IV study represents the baseline health risk for a cumulative analysis. MATES IV calculated cancer risks based on monitoring data collected at ten fixed sites within the Basin. None of the fixed monitoring sites is within the local area of the project site. However, MATES IV extrapolated the excess cancer risk levels throughout the Basin by modeling the specific grids. Based on the MATES IV Estimated Risk model, the geographic grid containing the project site is predicted to have an excess cancer risk of 1,093.30 in one million. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68 percent of the total risk shown in MATES IV. Cumulative project-generated TACs are limited to DPM.

4.2.4 Regulatory Setting

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.

4.2.4.1 Federal Regulations

The USEPA is responsible for setting and enforcing the national ambient air quality standards (NAAQS) for O_3, CO, NOx, SO_2, PM_{10}, and Pb. The USEPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters. The USEPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years. The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement State Implementation Plans for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants: O_3, NO_2, SO_2, PM_{10}, CO,

$PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt an NAAQS for $PM_{2.5}$.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X. NO_x is a collective term that includes all forms of NO_x, which are emitted as byproducts of the combustion process.

4.2.4.2 State Regulations

California Air Resources Board. CARB, which became part of the California Environmental Protection Agency (CalEPA) in 1991, is responsible for ensuring implementation of the California Clean Air Act (Assembly Bill [AB] 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the State ambient air quality standards by the earliest practical date. CARB established the California ambient air quality standards (CAAQS) for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO_4, visibility, hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). However, at this time, H_2S and C_2H_3Cl are not measured at any monitoring stations in the Basin because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or nonattainment for each CAAQS.

Serious nonattainment areas are required to prepare Air Quality Management Plans (AQMPs) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5 percent or more annual reduction in emissions or 15 percent or more in a period of three years for ROGs, NO_X, CO and PM_{10}. However, air basins

may use alternative emission reduction strategy that achieves a reduction of less than 5 percent per year under certain circumstances.

Title 24 Energy Efficiency Standards and California Green Building Standards. California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went into effect on January 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2019 California Green Building Code Standards that became effective January 1, 2020. Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. CALGreen also provides exemptions for areas not served by construction waste and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas (GHG) emissions. The 2019 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on January 1, 2020.

The 2019 Title 24 standards will result in less energy use, thereby reducing air pollutant emissions associated with energy consumption in the Basin and across the State of California. For example, the 2019 Title 24 standards will require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage responsive technologies for residential buildings, and update indoor and outdoor lighting requirements for non-residential buildings.

The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7 percent less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar photovoltaic systems, homes built under the 2019 standards will use about 53 percent less energy than homes built under the 2016 standards. Nonresidential buildings (such as the project) will use approximately 30 percent less energy due to lighting upgrade requirements.

Because the project will be constructed after January 1, 2019, the 2019 CALGreen standards are applicable to the project and require, among other items:

- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. (5.106.4.1.2)

- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2. (5.106.5.2)

- Electric vehicle (EV) charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3. (5.106.5.3)

- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. (5.410.2)

4.2.4.3 Regional Regulations

South Coast Air Quality Management District. The SCAQMD has jurisdiction over most air quality matters in the 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. Los Angeles County is a subregion of the SCAQMD jurisdiction. 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 California Clean Air Act (CCAA). The SCAQMD prepares plans to attain NAAQS. 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 will be subject to the following SCAQMD rules and regulations, as applicable:

- **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. These prohibitions will apply to future development facilitated by approval of the proposed project.

    - **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 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 $\mu g/m^3$ 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

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 volatile organic compounds (VOCs) from architectural coatings and solvents, which lowers the emissions of odorous compounds. Future development facilitated by approval of the project will comply with Rule 1113.

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 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 AQMPs to meet the CAAQS and NAAQS. SCAQMD and SCAG are responsible for formulating and implementing the Air Quality Management Plan (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.[1]

SCAQMD approved the 2016 AQMP on March 3, 2017, and submitted the plan to CARB on March 10, 2017. Key elements of the 2016 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

[1] South Coast Air Quality Management District (SCAQMD). 2017. *Final 2016 Air Quality Management Plan*. March.

- Attainment of the 1-hour O_3 standard by 2022 with no reliance on "black box" future technology (FCAA Section 182(e)(5) measures)

Southern California Association of Governments. SCAG is the federally designated Metropolitan Planning Organization (MPO) for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for the discussion of regional issues related to transportation, the economy and community development, and the environment. SCAG is a council of governments and acts as a regional planning agency. 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.

On April 7, 2016, SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Using growth forecasts and economic trends, the RTP provides a vision for transportation throughout the region for the next 20 years. The inclusion of the SCS is required by Senate Bill (SB) 375, which was enacted to reduce greenhouse gas (GHG) emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. The RTP/SCS would successfully achieve and exceed the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction by 2020, an 18 percent reduction by 2035, and a 21 percent reduction by 2040 compared to the 2005 level on a per capita basis. This RTP/SCS also meets criteria pollutant emission budgets set by the USEPA.

The 2016–2040 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the NAAQS as set forth by the CAA. Even with ongoing aggressive control strategies, ever more stringent national O_3 standards require further NO_X emission reductions in the SCAG region. To accomplish the reduction required to meet O_3 standards, the 2016–2040 RTP/SCS contains a regional commitment for the broad deployment of zero- and near-zero emission transportation technologies in the 2023–2040 time frame and clear steps to move toward this objective.

SCAQMD incorporates the SCAG RTP/SCS emission budget for mobile sources into the AQMP emissions inventory analysis for all sources of emissions (including stationary, area, and mobile). Conformity analysis and the USEPA review and approval actions are not subject to CEQA review.

4.2.4.4 Local Regulations

City of Cypress General Plan. The Air Quality Element of the City's General Plan is intended to protect public health and welfare by implementing measures that allow the Basin to attain federal and State air quality standards. To achieve this goal, the Air Quality Element sets forth a number of programs to reduce current pollutant emissions and to require new development to include measures to comply with air quality standards. The Air Quality Element identifies goals and policies to reduce the generation of pollutants. It also recognizes that air quality is a regional issue affecting the entire Basin. Thus, most of the goals and policies in the Air Quality Element apply generally to the City but not necessarily to individual development projects.

4.2.5 Thresholds of Significance

The thresholds for air quality impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to air quality if it would:

Threshold 4.2.1: **Conflict with or obstruct implementation of the applicable air quality plan?**

Threshold 4.2.2: **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?**

Threshold 4.2.3: **Expose sensitive receptors to substantial pollutant concentrations?**

Threshold 4.2.4: **Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

As stated in Appendix G of the *State CEQA Guidelines*, where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make determinations about a project's impacts. This Draft EIR uses the adopted thresholds of the SCAQMD, the local air quality management district.

4.2.5.1 Regional Emissions Thresholds

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the 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 4.2.D, below, lists the CEQA significance thresholds for the construction and operational emissions established for the Basin.

Table 4.2.D: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOC	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 July 2020).

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
VOC = volatile organic compounds

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.

4.2.5.2 Localized Impacts Analysis

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.[1] Localized Significance Thresholds (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, including residences, schools, hospitals and similar uses that are sensitive to adverse air quality. For the proposed project, the appropriate SRA for the LST is the nearby Central Orange County area (SRA 17). The closest sensitive receptors include the multi-family and single-family residences approximately 350 feet (ft) south of the project site. The SCAQMD has produced look-up tables for projects that disturb less than or equal to 5 acres daily. The SCAQMD has also issued guidance on applying the CalEEMod emissions software to LSTs for projects greater than 5 acres. Based on the LST Methodology, the maximum daily disturbed acreage is assumed to be approximately 1.5 acres per day. In order to determine the applicability of the SCAQMD's LST look-up tables for the minor amount of construction grading activities and the small amount of equipment utilized, it was assumed that the look-up table for the 2-acre LST threshold would be sufficient for the proposed residential and commercial mixed uses. Because a maximum of 1.5 acres of the project site may be subject to soil disturbance on the peak day of construction activity, the 1.5-acre thresholds would apply to the proposed project. Table 4.2.E lists the emissions thresholds that apply during project construction and operation.

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

Table 4.2.E: SCAQMD LST Thresholds (lbs/day)

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Construction (5-acre, 26-meter distance)	182	1,291	15	7
Operations (5-acre, 26-meter distance)	182	1,291	4	2

Source: SCAQMD. *Final Localized Significance Threshold Methodology* (July 2008).
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
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

4.2.5.3 Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project 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:

1. California State 1-hour CO standard of 20 ppm
2. California State 8-hour CO standard of 9 ppm

4.2.6 Project Impacts

Threshold 4.2.1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. An AQMP describes air pollution control strategies to be undertaken by a city or county in a region classified as a nonattainment area to meet the requirements of the Federal CAA. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State ambient air quality standards (AAQS). The applicable air quality plan is the SCAQMD's adopted 2016 AQMP. The AQMP is based on regional growth projections developed by the SCAG.

Consistency with the 2016 AQMP for the Basin would be achieved if a project is consistent with the goals, objectives, and assumptions in the AQMP that were designed to achieve the federal and State air quality standards. Per the SCAQMD's *CEQA Air Quality Handbook* (April 1993, currently being revised), there are two main indicators of a project's consistency with the applicable AQMP: (1) whether the project would increase the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the 2016 AQMP; and (2) whether the project would exceed the 2016 AQMP's assumptions for the final year for the AQMP.

Consistency Criterion No. 1

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if LSTs or regional significance thresholds are exceeded. As evaluated below

in Thresholds 4.2 and 4.3, the proposed project's regional and localized construction-source emissions would not exceed the applicable regional significance or LST thresholds. As such, the project would result in a less than significant impact. Also, as evaluated in Thresholds 4.2.2 and 4.2.3, the proposed project would not exceed the applicable regional significance or LST thresholds for operational activities. Therefore, the project would not conflict with the AQMP according to this criterion. On the basis of the preceding discussion, the project is determined to be consistent with the first criterion.

Consistency Criterion No. 2

The project will not exceed the assumptions in the AQMP based on the years of project build-out phase.

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the time frames required under federal law. Growth projections from local general plans adopted by cities in the are provided to SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City's General Plan is considered to be consistent with the AQMP.

Per the City's General Plan, the proposed project site is located within Planning Area 2 of the Cypress Corporate Center Specific Plan (Specific Plan) and is designated for Business Park uses. The Business Park designation is intended to foster the development of large scale, planned commercial and industrial projects. To ensure compatibility of land uses allowed within the Business Park, classification with the character surrounding development, and within a development area, the location, land use type, and building intensity standards will be governed through the adoption of a specific plan, or by standard zoning mechanisms. As previously stated, the project will occupy the existing 145,004 sf warehouse building, which is consistent with the development allowed under the Specific Plan. On the basis of the preceding discussion, the project is determined to be consistent with the second criterion.

The proposed project would not result in or cause NAAQS or CAAQS violations. The proposed project is consistent with the land use and growth intensities reflected in the adopted General Plan. Furthermore, the project would not exceed any applicable regional or local thresholds. As such, the proposed project is therefore considered to be consistent with the AQMP and would result in a less than significant impact.

4.2.6.1 AQMP Consistency Conclusion

The proposed project would not result in or cause NAAQS or CAAQS violations. The proposed project is consistent with the land use and growth intensities reflected in the adopted General Plan. Furthermore, the proposed project would not exceed any applicable regional or local thresholds. As such, the proposed project is therefore considered to be consistent with the AQMP and would result in a less than significant impact.

Threshold 4.2.2: **Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?**

Less Than Significant Impact. The Basin is currently designated nonattainment for the federal and State standards for O_3 and $PM_{2.5}$. In addition, the Basin is in nonattainment for the PM_{10} standard. 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 AAQS. 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.

4.2.6.2 Construction Emissions

Construction activities associated with the project will result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Construction-related emissions are expected from the following construction activities:

- Demolition
- Site Preparation
- Grading
- Paving
- Architectural Coating

As previously discussed, the proposed project would consist of the demolition of existing buildings except the southerly warehouse building (145,004 sf) and the northern office building (180,000 sf). Approximately 70,000 sf of the existing research and development buildings will be demolished. The remaining portion of the site will provide parking for sprinter cargo vans/flex vehicles and employees of the facility as well as access to the truck docks on the north side of the building. The project does not include physical vertical building construction but would occupy the existing 145,004 sf warehouse building located on the southern end of the site.

Construction Emissions Summary. The estimated maximum daily construction emissions, for summer and winter periods are summarized in Table 4.2.F. As shown in the Table 4.2.F, project construction-source emissions would not exceed the numerical thresholds of significance established by the SCAQMD for any criteria pollutant, and project-related construction-source emissions are considered less than significant. No mitigation is required.

Table 4.2.F Overall Construction Emissions Summary – Without Mitigation

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2021	6.62	77.93	37.70	0.14	11.96	6.59
Winter						
2021	6.65	78.19	37.94	0.14	11.96	6.59
Maximum Daily Emissions	**6.65**	**78.19**	**37.94**	**0.14**	**11.96**	**6.59**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod construction-source (unmitigated) emissions are presented in Appendix B.
CalEEMod = California Emissions Estimator Model
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

4.2.6.3 Operational Emissions

Operational activities associated with the proposed project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from the following primary sources: area sources, energy sources, mobile sources and on-site cargo handling equipment. Each of these sources is described below.

Area Source Emissions.

Architectural Coatings. Over a period of time, the building that is part of the proposed project would be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings utilized as part of operation and maintenance of the proposed project. The emissions associated with architectural coatings were calculated using CalEEMod.

Consumer Products. Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products during operation of the proposed project were calculated based on defaults provided within CalEEMod.

Landscape Maintenance Equipment. Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping on the project site. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

Energy Source Emissions.

Combustion Emissions Associated with Natural Gas and Electricity. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electricity-generating facilities for the project area are located either outside the region (State) or offset through the use of pollution credits (RECLAIM) for generation within the Basin, criteria pollutant emissions from off-site generation of electricity are generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using CalEEMod. The CalEEMod includes defaults that capture the anticipated 30 percent reduction in energy consumption associated with the 2019 Title 24 standard (described in Section 4.2.4.2, above).

Mobile Source Emissions. The project-related operational air quality emissions are derived primarily from vehicle trips generated by operation of the proposed project. Trip characteristics available from the Traffic Impact Analysis (Urban Crossroads, June 2020) were utilized in this analysis. Per the Traffic Impact Analysis, the proposed project is expected to generate approximately 2,490 two-way vehicular trips per day (1,245 inbound and 1,245 outbound. The passenger car and truck fleet for the proposed industrial uses are broken down by passenger car and truck type (or axle type).

Passenger Cars. The first run analyzed passenger car emissions and incorporated the CalEEMod default trip length of 16.6 miles for passenger cars and an assumption of 100 percent primary trips. It is important to note that although the Traffic Impact Analysis does not break down passenger cars by type, this analysis assumes that passenger cars include Light-Duty-Auto (LDA), Light-Duty-Trucks (LDT1[1] & LDT2[2]), and Medium-Duty-Vehicle (MDV) types. In order to account for emissions generated by passenger cars, the fleet mix presented in Table 4.2.G was utilized in this analysis.

Table 4.2.G: Passenger Car Fleet Mix[1]

Land Use	Vehicle Type	%
High Cube Warehouse	LDA	60.35
	LDT1	4.70
	LDT2	22.65
	MDV	12.30

[1] The project-specific passenger car fleet mix used in this analysis is based on a proportional split utilizing the CalEEMod default percentage assigned to LDA, LDT1, LDT2, and MDV vehicle types.

CalEEMod = California Emissions Estimator Model
LDA = Light-Duty-Auto vehicles
LDT1 = Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs and equivalent test weight (ETW) of less than or equal to 3,750 lbs.
LDT2 = Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs and ETW between 3,751 lbs and 5,750 lbs.
MDV = Medium-Duty-Vehicles

1 Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

2 Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs and ETW between 3,751 lbs and 5,750 lbs.

Trucks. The second run analyzed truck emissions and incorporated the SCAQMD recommended truck trip length of 40 miles[1] and an assumption of 100 percent primary trips. Consistent with the Traffic Impact Analysis, all trucks are characterized as 4+-axle/Heavy-Heavy-Duty Trucks (HHDT) as presented in Table 4.2.H.

Table 4.2.H: Truck Fleet Mix

Land use	Vehicle Type	%
Amazon Building	HHDT	100

HHDT = Heavy-Heavy-Duty Trucks

Fugitive Dust Related to Vehicular Travel. Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of break and tire wear particulates. The emissions estimates for travel on paved roads were calculated using CalEEMod.

On-Site Cargo Handling Equipment Emissions. It is common for industrial uses to require cargo-handling equipment to move containers and chassis to and from the various pieces of cargo handling equipment. The most common type of cargo handling equipment is the yard truck, which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. The cargo handling equipment is assumed to have a horsepower (hp) range of approximately 175 hp to 200 hp. Based on the proposed square footage of the building, on-site modeled operational equipment includes up to one (1) 200 hp, compressed natural gas or gasoline-powered yard tractor operating at 4 hours per day for 365 days of the year.

4.2.6.4 Operational Emissions Summary

Proposed Project Emissions. As previously stated, CalEEMod utilizes summer and winter EMFAC2017 emission factors in order to derive vehicle emissions associated with operational activities, which vary by season. The estimated operational emissions by source for the proposed project are summarized on Tables 4.2.I. Detailed operation model outputs for the proposed project are presented in Appendix B.

Existing Emissions. As previously stated, the site is currently occupied by the former Mitsubishi Motors Corporation, which includes 145,004 sf of warehousing use, a 180,000 sf corporate headquarters office building, and 70,000 sf of research and development buildings.

Existing trip characteristics available from the Traffic Impact Analysis were utilized in this analysis. Emissions for the existing uses on site were estimated utilizing the same methodology as described above for the proposed project. The estimated operational emissions, by source, for the existing development are summarized on Table 4.2.J. Detailed operation model outputs are presented in Appendix B.

[1] The average trip length for heavy trucks were based on the SCAQMD documents for the implementation of the Facility Based Mobile Source Measures (FBMSMs) adopted in the 2016 AQMP. SCAQMD's "Preliminary Warehouse Emission Calculations" cites a 39.9-mile trip length for heavy-heavy trucks. As a conservative measure, a trip length of 40 miles has been utilized for all trucks for the purpose of this analysis.

Table 4.2.I: Summary of Peak Operational Emissions

Operational Activities – Summer Scenario	Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Source	3.53	1.18E-03	0.13	1.00E-05	4.60E-04	4.60E-04
Energy Source	0.01	0.11	0.09	6.50E-04	8.20E-03	8.20E-03
Mobile Source (Passenger Cars)	5.71	5.02	89.45	0.28	30.83	8.28
Mobile Source (Trucks)	0.65	22.22	4.95	0.07	2.28	0.80
On-Site Equipment Source	0.14	1.55	0.77	0.00	0.05	0.05
Total Maximum Daily Emissions	**10.03**	**28.90**	**95.39**	**0.35**	**33.17**	**9.14**
Operational Activities – Winter Scenario	**Emissions (lbs/day)**					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Source	3.53	1.18E-03	0.13	1.00E-05	4.60E-04	4.60E-04
Energy Source	0.01	0.11	0.09	6.50E-04	8.20E-03	8.20E-03
Mobile Source (Passenger Cars)	5.90	5.51	83.04	0.27	30.83	8.28
Mobile Source (Trucks)	0.60	22.55	3.05	0.07	2.26	0.79
On-Site Equipment Source	0.14	1.55	0.77	0.00	0.05	0.05
Total Maximum Daily Emissions	**10.18**	**29.71**	**87.08**	**0.34**	**33.16**	**9.13**
Existing Emissions	***11.96***	***12.76***	***39.59***	***0.16***	***15.11***	***4.20***

Source: CalEEMod operational-source emissions are presented in Appendix B.
CalEEMod = California Emissions Estimator Model
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SO_X = sulfur oxides
VOC = volatile organic compounds

Table 4.2.J: Emissions from Existing Development

Existing Development Operational Activities	Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Summer Scenario						
Total Maximum Daily Emissions	**11.89**	**12.37**	**43.10**	**0.16**	**15.12**	**4.20**
Winter Scenario						
Total Maximum Daily Emissions	**11.96**	**12.76**	**39.59**	**0.16**	**15.11**	**4.20**

Source: CalEEMod operational-source emissions for the existing development are presented in Appendix B.
CalEEMod = California Emissions Estimator Model
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SO_X = sulfur oxides
VOC = volatile organic compounds

4.2.6.5 Net Emissions

To determine the new emissions associated with the proposed project, the emissions for the existing development were subtracted from the total project operational emissions. As shown on Table 4.2.K, the project's daily regional emissions from ongoing operations would not exceed any of the thresholds of significance and are considered less than significant.

Table 4.2.K: Summary of Net Operational Emissions

Operational Activities – Summer Scenario	Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Proposed Project Emissions	10.03	28.90	95.39	0.35	33.17	9.14
Existing Emissions	11.89	12.37	43.10	0.16	15.12	4.20
Net Emissions (Project – Existing)	**-1.86**	**16.53**	**52.29**	**0.19**	**18.05**	**4.93**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Operational Activities – Winter Scenario	**Emissions (lbs/day)**					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Proposed Project Emissions	10.18	29.71	87.08	0.34	33.16	9.13
Existing Emissions	11.96	12.76	39.59	0.16	15.11	4.20
Net Emissions (Project – Existing)	**-1.79**	**16.96**	**47.50**	**0.18**	**18.04**	**4.93**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod operational-source emissions are presented in Appendix B.
CalEEMod = California Emissions Estimator Model
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SO_X = sulfur oxides
SCAQMD = South Coast Air Quality Management District
VOC = volatile organic compounds

Threshold 4.2.3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The potential impact of project-generated air pollutant emissions at sensitive receptors has also been considered. Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors.

Project-Related Sensitive Receptors. Sensitive receptors in the project study area are described below and shown on Figure 4.2.1. Localized air quality impacts were evaluated at five locations nearest the project site.

R1: Location R1 represents the existing residence at 10753 Maple Street, approximately 1,449 ft north of the project site.

R2: Location R2 represents the Hampton Inn at 10900 Yamaha Way, approximately 1,378 ft northeast of the project site.

R3: Location R3 represents the existing residence at 11250 Holder Street, approximately 122 ft southeast of the project site.

R4: Location R4 represents the existing residence at 6471 Cantiles Avenue, approximately 88 ft south of the project site.

R5: Location R5 represents the existing residence at 11250 Providencia Street, approximately 408 ft southwest of the project site.

Figure 4.2.1: Sensitive Receptor Locations



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The SCAQMD recommends that the nearest sensitive receptor be considered when determining the project's potential to cause an individual and cumulatively significant impact. The nearest land use to the project site where an individual could be present for 24 hours (in this case, the nearest residential land use) has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). The nearest receptor used for the evaluation of localized impacts of PM_{10} and $PM_{2.5}$ is represented by location R4, which is an existing residence at 6471 Cantiles Avenue, approximately 88 ft (26 meters) south of the project. As such, the 26-meter distance will be used for the evaluation of localized PM_{10} and $PM_{2.5}$ emission impacts.

Construction Emissions LST Analysis

Table 4.2.L identifies the localized impacts at the nearest receptor location in the vicinity of the proposed project. As shown in Table 4.2.L, localized construction emissions would not exceed the applicable SCAQMD LSTs for emissions of any criterial pollutant. Outputs from the model runs for unmitigated construction LSTs are provided in Appendix B.

Table 4.2.L: Localized Significance Summary of Construction – Without Mitigation

On-Site Emissions	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition				
Maximum Daily Emissions	**31.44**	**21.57**	**2.90**	**1.64**
SCAQMD Localized Threshold	182	1,291	15	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Site Preparation				
Maximum Daily Emissions	**60.79**	**21.85**	**11.76**	**6.53**
SCAQMD Localized Threshold	182	1,291	15	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Grading				
Maximum Daily Emissions	**56.54**	**31.23**	**6.73**	**3.62**
SCAQMD Localized Threshold	182	1,291	15	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod localized construction-source emissions are presented in Appendix B.

CalEEMod = California Emissions Estimator Model
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SCAQMD = South Coast Air Quality Management District

Operational Source Emissions LST Analysis

The project is located on a 22.3-acre parcel. As noted previously, the LST methodology provides look-up tables for sites with an area with daily disturbance of 5 acres or less. For projects that exceed 5 acres, the 5-acre LST look-up tables can be used as a screening tool to determine which pollutants require additional detailed analysis. This approach is conservative as it assumes that all

on-site emissions associated with the project would occur within a concentrated 5-acre area. This screening method would therefore over-predict potential localized impacts, because by assuming that on-site operational activities are occurring over a smaller area, the resulting concentrations of air pollutants are more highly concentrated once they reach the smaller site boundary than they would be for activities if they were spread out over a larger surface area. On a larger site, the same amount of air pollutants generated would disperse over a larger surface area and would result in a lower concentration once emissions reach the project-site boundary. As such, LSTs for a 5-acre site during operations are used as a screening tool to determine if further detailed analysis is required.

The LST analysis generally includes on-site sources (area, energy, mobile, and on-site cargo handling equipment. However, it should be noted that the CalEEMod outputs do not separate on-site and off-site emissions from mobile sources. In an effort to establish a maximum potential impact scenario for analytic purposes, the emissions shown on Table 4.2.M represent all on-site project-related stationary (area) sources and 5 percent of the project-related mobile sources. Considering that the trip length used in CalEEMod for the proposed project is approximately 16.60 miles for passenger cars and 40.00 miles for all trucks, 5 percent of this total would represent an on-site travel distance of approximately 0.83 mile/4,382.40 ft for passenger cars and 2.00 miles/10,560.00 ft for trucks.

Table 4.2.M: Localized Significance Summary of Operations – without Mitigation

Operational Activity	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**3.06**	**5.71**	**1.72**	**0.51**
SCAQMD Localized Threshold	182	1,291	4	2
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Source: CalEEMod localized operational-source emissions are presented in Appendix B.

CalEEMod = California Emissions Estimator Model
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SCAQMD = South Coast Air Quality Management District

As shown in Table 4.2.M, operational emissions will not exceed the LST thresholds for the nearest sensitive receptor. Therefore, the project would have a less than significant localized impact during operational activity.

CO "Hot Spot" Analysis

CO hot spots are caused by vehicular emissions, primarily when idling at congested intersections. Based on the analysis presented below, a CO "hot-spot" analysis is not needed to determine whether a change in the level of service (LOS) of an intersection in the vicinity of the project site would have the potential to result in an exceedance of either the CAAQS or the NAAQS.

Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older

vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the Basin is now designated as attainment. In addition, CO concentrations in the vicinity of the project site have steadily declined.

The analysis prepared for CO attainment in the Basin by SCAQMD can be used to assist in evaluating the potential for CO exceedances in the Basin. To establish a more accurate record of baseline CO concentrations affecting the Basin, a CO "hot-spot" analysis was conducted by SCAQMD in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The busiest intersection evaluated was the Wilshire Boulevard and Veteran Avenue intersection, which has a traffic volume of approximately 100,000 vehicles per day. This analysis did not predict any violation of CO standards. Even if the traffic volumes of the proposed project were double or triple that of the traffic volumes generated at the four busy intersections in Los Angeles, coupled with the ongoing improvements in ambient air quality, the project would not be capable of resulting in a CO "hot spot" at any of the project study area intersections.

As summarized in Table 4.2.N below, the intersection of Valley View Street and Katella Avenue would generate the highest AM/PM traffic volumes of 8,235 vehicles per hour (vph) and 8,718 vph respectively. As such, project-related traffic volumes are less than the traffic volumes identified in the SCAQMD study. Because the proposed project would not produce the volume of traffic required to generate a CO "hot spot," and due to the lack of traffic impacts and extremely low level of CO at surrounding intersections, CO emissions from operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Impacts related to CO hot spots would be less than significant, and no mitigation is required.

Table 4.2.N: Project Peak Hour Traffic Volumes

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Valley View Street/Katella Avenue	2,759/2,469	1,666/1,955	2,107/2,566	1,704/1,728	8,235/8,718
Holder Street/Katella Avenue	148/283	434/345	1,344/1,882	1,946/1,460	3,872/3,970
Knott Avenue/Katella Avenue	1,097/1,361	1,238/1,006	1,361/2,169	1,738/1,383	5,435/5,919
Western Way/Katella Avenue	558/1,208	1,208/846	1,395/1,578	1,761/1,249	4,923/4,882

Source: *Katella Avenue Amazon Facility Traffic Impact Analysis* (Urban Crossroads, June 2020).
vph = vehicles per hour

4.2.6.6 Mobile Source Air Toxics

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an EIR air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided. As noted in the Brief of Amicus Curiae by the SCAQMD in the Friant Ranch case (Brief) (April 6, 2015, Appendix 3.4), SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air quality districts in the

State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes.

The SCAQMD discusses that it may be infeasible to quantify health risks caused by projects similar to the proposed project, due to many factors. It is necessary to have data regarding the sources and types of toxic air contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). The Brief states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)).[1] Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk; it does not necessarily mean anyone will contract cancer as a result of the proposed project. The Brief also cites the author of CARB methodology, which reported that a $PM_{2.5}$ methodology is not suited for small projects and may yield unreliable results. Similarly, SCAQMD staff does not currently know of a way to accurately quantify O_3-related health impacts caused by NO_X or VOC emissions from relatively small projects, due to photochemistry and regional model limitations. The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful.

On the other hand, for extremely large regional projects (unlike the proposed project), the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources; as part of their rulemaking activity, specifically 6,620 pounds per day (lbs/day) of NO_X and 89,180 lbs/day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to O_3.

The proposed project emissions are substantially lower than the 6,620 lbs/day of NO_X or the 89,190 lbs/day of VOC emissions described by the SCAQMD. The proposed project would generate 78.19 lbs/day of NO_X during construction and 112.76 lbs/day of NO_X during operations. The proposed project would also generate 12.79 lbs/day of VOC emissions during construction and 11.96 lbs/day of VOC emissions during operations. 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, the Air Quality Impact Analysis evaluated the proposed project's localized impact to air quality for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ by comparing the proposed project's on-site emissions to the SCAQMD's applicable LST thresholds. As evaluated in the Air Quality Impact Analysis, the proposed project would not result in emissions that exceed the SCAQMD's LSTs. Therefore, the proposed project would not be expected to exceed the most stringent applicable federal or State ambient air quality standards for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$.

[1] It should also be noted that the actual occurrence of specific health conditions is based on numerous other factors that are infeasible to quantify, such as an individual's genetic predisposition, diet, exercise regimen, stress, and other behavioral characteristics.

Threshold 4.2.4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact.

Construction. Potential odor sources associated with the proposed project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and are thus considered less than significant. No other sources of objectionable odors would occur during construction of the proposed project, and no mitigation measures are required.

Operation. SCAQMD Rule 402 regarding nuisances 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 potential for the project to generate objectionable odors has also been considered. The proposed project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed project may result from the temporary storage of typical solid waste (refuse) associated with the proposed project's (long-term operational) uses. It is expected that project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed project operations would be less than significant, and no mitigation is required.

4.2.7 Level of Significance Prior to Mitigation

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

4.2.8 Regulatory Compliance Measures and Mitigation Measures

No regulatory compliance measures are applicable to the proposed project, and no mitigation is required.

4.2.9 Level of Significance after Mitigation

The proposed project would not result in any significant impacts related to air quality.

4.2.10 Cumulative Impacts

In the South Coast Air Basin, the CAAQS designate the project site as nonattainment for O_3, PM_{10}, and $PM_{2.5}$ while the NAAQS designate the project site as nonattainment for O_3 and $PM_{2.5}$.

The SCAQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (August 2003). In this report, the SCAQMD clearly states (Page D-3):

> "…the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or Environmental Impact Report (EIR). The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.
>
> Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

The project does not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts and would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a cumulatively significant, adverse air quality impact.

4.3 BIOLOGICAL RESOURCES

This section describes the existing biological resources on and in the vicinity of the Amazon Facility project (proposed project) site, the potential impacts of the proposed project on those resources, and measures to mitigate any potentially significant impacts. Information presented in this section is based on Geographic Information System (GIS) data, the California Natural Diversity Database (CNDDB), and on the City of Cypress' (City) *Inventory of Landmark Trees* (July 1996). The literature review and CNDDB records search results are provided in Appendix C of this Environmental Impact Report (EIR).

4.3.1 Scoping Process

The City of Cypress received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. None of the comment letters included comments related to biological resources.

4.3.2 Methodology

A literature review was conducted to determine the potential occurrence of special-status plant species and special-status animal species on or in the immediate vicinity of the project site. Database records from the California Department of Fish and Wildlife (CDFW), CNDDB – Rarefind 5 and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California were utilized to assist in determining the existence or potential occurrence of any special-interest plant and animal species in or immediately adjacent to the project site. Similarly, LSA reviewed records from the United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) Online System[1] and the USFWS Critical Habitat Mapper[2] to determine the likelihood that candidate, threatened, and endangered species; crucial habitat; national wildlife refuges; and/or migratory birds were present on the site. The USFWS National Wetlands Inventory[3] was reviewed to determine whether any wetlands or surface waters of the United States had been previously identified on the site. Database records for the *Los Alamitos* United States Geological Survey (USGS) 7.5-minute quadrangle were examined using the CNDDB and the CNPS electronic inventory. Sensitive species known by LSA biologists to occur in the general area were also considered.

4.3.3 Existing Environmental Setting

The approximately 23-acre project site is currently occupied by several buildings that were recently vacated by Mitsubishi Motors of America, a paved parking lot with existing light poles, and landscaping. Exposed soil and decomposed turf grass is present east of the existing warehouse, west of Holder Street, and north of the Stanton Storm Channel. Some vegetation is present just north of

1 United States Fish and Wildlife Service (USFWS). 2020a. IPaC Information for Planning and Consultation. Website: https://ecos.fws.gov/ipac/ (accessed June 23, 2020).

2 USFWS. 2020b. Critical Habitat for Threatened and Endangered Species. GIS Mapping Website: https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77 (accessed June 25, 2020).

3 USFWS. 2020c. Wetlands. The National Wetlands Inventory. Website: https://www.fws.gov/wetlands/ (accessed June 25, 2020).

the Stanton Storm Channel, south of the project site and contains ornamental landscaping. The edge condition along Holder Street consists of ornamental landscaping and a small landscaped grass area that extends to a larger landscaped grass area that makes up the edge condition along Katella Avenue. The project site is generally flat, and has been fully graded and disturbed. The urban landscape within Cypress provides habitat for smaller rodents and birds. However, the frequent disruptions caused by urban activities and the frequent cultivation of such plant life make these plant communities less than an ideal habitat for wild animals.

4.3.3.1 Plant Species

As described above, the majority of the project site is developed with buildings and parking lots, with the exception of ornamental landscaping along the perimeter of the project site and near the existing research and development buildings, and an area of exposed soil and decomposed turf grass in the southeastern portion of the project site. These landscaped areas contain trees; however, none of the trees are designated as Landmark Trees according to the City's *Inventory of Landmark Trees* (July 1996). The literature review and CNDDB search did not identify any special-status plant species on the project site or in the immediately surrounding area. No special-status natural communities are present at the project site. Appendix C contains the data that identifies the special-status plant species known to occur or that could potentially occur in the vicinity of the project site, and includes each species' probability of occurrence within the proposed construction footprint.

4.3.3.2 Animal Species

Native wildlife habitat is largely absent on the project site. Furthermore, the lack of ground cover and suitable foraging habitat make the site undesirable for many native wildlife species. Suitable habitat for such species is absent from the proposed project disturbance limits. The project site is also surrounded by developed areas, and does not function as a wildlife movement corridor or special linkage. As discussed above, the results of the literature review and CNDDB search did not identify any special-status plant species on the project site or in the immediately surrounding area. Appendix C contains the data that identifies the special-status animal species known to occur or that could potentially occur in the vicinity of the project site, and includes each species' probability of occurrence within the proposed construction footprint.

4.3.3.3 On-Site Aquatic Resources

The project site is currently developed with several buildings and paved surface parking lots and does not contain any natural lakes, streams, or riparian habitat, or hydric soils. No potential waters of the United States or CDFW jurisdictional areas are located on the project site. Therefore, it does not meet the minimum criteria for wetlands in accordance with the United States Army Corps of Engineers (USACE) Arid West Supplement Version 2.0[1] and is not a wetland pursuant to Section 404 of the Clean Water Act (CWA).

[1] United States Army Corps of Engineers (USACE). 2008. Wetlands Regulatory Assistance Program. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0).* ERCD/EL TR-08-28. September.

The California Fish and Game Code 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." The CDFW definition of a "lake" includes "natural lakes or man-made reservoirs." The project site does not contain any body of water that meets the definition of a stream or a lake in the California Fish and Game Code and, as such, would not be subject to regulation under Section 1602 of the Fish and Game Code.

4.3.4 Regulatory Setting

4.3.4.1 Federal Regulations

United States Endangered Species Act. The USFWS, pursuant to the Federal Endangered Species Act (FESA), protects endangered and threatened species. FESA defines an endangered species as a species in danger of extinction throughout all or a significant part of its range and a threatened species as one that is likely to become endangered in the foreseeable future. USFWS also identifies species proposed for listing as endangered or threatened. Other than for federal actions, there is no formal protection for candidate species under FESA. However, consultation with USFWS regarding species proposed for listing can prevent project delays that could occur if a species is listed prior to project completion.

Migratory Bird Treaty Act. The federal Migratory Bird Treaty Act (MBTA) governs the take, possession, import, export, transport, selling, purchasing, or bartering of migratory birds and their eggs, parts, and nests. 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.

4.3.4.2 State Regulations

California Fish and Game Code. 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 its regulations. This code also specifically protects raptors, including owls. 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.

California Endangered Species Act. The CDFW, through provisions of the California Administrative Code and policies formulated by the California Fish and Game Commission, regulates plant and animal species in danger of, or threatened with, extinction based on the list of endangered, threatened, and candidate species developed by the Fish and Game Commission. Endangered species are native species or subspecies of plants and animals that are in serious danger of becoming extinct throughout all or a significant part of their range. Threatened species are those species that, although not presently threatened with extinction, are likely to become endangered in the foreseeable future without special protection and management. Candidate species are species that the Fish and Game Commission has formally noticed as being under review for addition to the list of endangered or threatened species or as a species proposed for listing.

California Natural Diversity Database. The CDFW administers the CNDDB, which comprises lists of special-status plants, animals, and natural communities, including species listed under the California Endangered Species Act (CESA) and FESA, California Species of Special Concern, and USFWS Birds of Conservation Concern. Additional species, natural communities, and habitat types are designated as being of special interest because of their rarity (e.g., very localized distribution or few scattered occurrences) and/or threats to their existence, although there is no specific regulatory protection afforded to those species by listing in the CNDDB.

4.3.4.3 Regional Regulations

There are no regional regulations applicable to the proposed project.

4.3.4.4 Local Regulations

Landmark Tree Ordinance. The City has identified a number of Landmark Trees within its jurisdiction. The City's Landmark Tree Ordinance, as codified in Sections 17-17 through 17-27 of the City Municipal Code, requires a permit for the cutting, modification, destruction, or removal of Landmark Trees. Additionally, the Landmark Tree Ordinance maintains that no structures can be constructed within 30 feet of a Landmark Tree without a permit from the Cypress City Council.

4.3.5 Thresholds of Significance

The thresholds for impacts to biological resources used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to biological resources if it would:

Threshold 4.3.1: **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 the U.S. Fish and Wildlife Service?**

Threshold 4.3.2: **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 the U.S. Fish and Wildlife Service?**

Threshold 4.3.3: **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 4.3.4: **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 4.3.5: **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Threshold 4.3.6: **Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

4.3.6 Project Impacts

Threshold 4.3.1: **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 the U.S. Fish and Wildlife Service?**

No Impact. The project site is currently characterized by several buildings, a paved parking lot, and landscaping. In its existing condition, the project site contains only a small amount of ornamental vegetation near the center of the site, along Katella Avenue, Holder Street, and along the southern edge of the project site adjacent to the Stanton Storm Channel. The disturbed condition of the project site is generally not suitable to support special-status plant or animal species.

Special-Status Habitat/Vegetation. The USFWS Critical Habitat for Threatened & Endangered Species map does not identify any locations of critical habitat within the project site. The closest known critical habitat is the Bolsa Chica Ecological Reserve, approximately 6.5 miles south of the project site.[1] According to the CNDDB, no sensitive plant species have been documented on the project site or immediately surrounding area.

The Orange County Transportation Authority's (OCTA) 2016 Natural Community Conservation Plan/ Habitat Conservation Plan (NCCP/HCP), which was adopted for the purpose of permitting freeway capital improvement projects proposed by OCTA and OCTA's habitat preserve, restoration, and monitoring activities, includes a Plan Area that covers the entirety of Orange County, including Cypress. The City is not a party to the OCTA NCCP/HCP, and development activity within the City is not subject to the provisions of the OCTA NCCP/HCP. Therefore, the OCTA NCCP/HCP does not apply to the proposed project. No special-status species are anticipated to be directly affected by the project due to the lack of suitable habitat on the project site. Therefore, no impacts to sensitive or special-status species would result from implementation of the proposed project, and no mitigation is required.

Threshold 4.3.2: **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 the U.S. Fish and Wildlife Service?**

[1] USFWS. 2020b. Critical Habitat for Threatened and Endangered Species. GIS Mapping Website: https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77 (accessed June 25, 2020).

No Impact. The project site is highly disturbed and developed with several buildings, a paved parking lot, and landscaping, and does not support any special-status or sensitive riparian habitat as identified in regional plans, policies, or regulations, or by the CDFW or USFWS. Therefore, no impacts related to riparian habitat or other sensitive natural communities identified in a local or regional plan would result from project implementation, and no mitigation is required.

Threshold 4.3.3: 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 managed by the USFWS, the project site does not contain federally protected wetlands. The project site is located entirely outside of streambeds, banks, and riparian habitat. No potential waters of the United States or CDFW jurisdictional areas are located on the project site.

Although construction activities have the potential to result in temporary indirect effects to water quality including a potential increase in erosion and sediment transport into downstream aquatic areas and the contamination of waters from construction equipment, these potential indirect effects to hydrology and water quality would be avoided or substantially minimized through the implementation of Best Management Practices (BMPs) and a Water Quality Management Plan as discussed in Section 4.9, Hydrology and Water Quality. Specifically, adherence to Regulatory Compliance Measure 4.9-1, as provided in Section 4.9, Hydrology and Water Quality, during construction would address erosion-related impacts during construction through implementation of construction site BMPs to avoid erosion and sedimentation impacts to downstream aquatic areas and water quality. As such, there would be no impacts on State or federally protected wetlands.

Threshold 4.3.4: 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. Due to the lack of sensitive or special-status species or their habitats on the project site, the project would not result in impacts on candidate, sensitive, or special-status animal species. The proposed project would avoid impacts on nesting resident and/or migratory birds either by avoiding vegetation removal during the avian nesting season (February 1 through August 31) or by implementing Regulatory Compliance Measure 4.3-1, provided in Section 4.3.8 below. The proposed project has the potential to impact active migratory bird nests if and to the extent that those trees are removed during the avian nesting season and they contain nests. Regulatory Compliance Measure 4.3-1 would address any impacts to nesting resident and/or migratory birds should it be necessary to conduct vegetation removal during the nesting season and nests are present. With implementation of Regulatory Compliance Measure 4.3-1, the proposed project's potential impacts on nesting migratory birds would be less than significant.

The proposed project would avoid impacts on the nests of raptors (which are migratory birds) if the existing trees in the ornamental vegetation areas are removed outside the raptor nesting season

(February 1 through June 30) and they contain raptor nests. The proposed project has the potential to impact active raptor nests if and to the extent that (1) those ornamental trees are removed during the raptor nesting season, and (2) special-status or common species of raptors establish nests in the future in any of those ornamental trees prior to their removal. Regulatory Compliance Measure 4.4-1 would also address any impacts to nesting raptors should it be necessary to conduct vegetation removal during the nesting season and raptors are present. With implementation of Regulatory Compliance Measure 4.4-1, the proposed project exhibits no potential to disrupt a wildlife corridor or in any way disrupt movement of native wildlife.

Threshold 4.3.5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. The Landmark Tree Ordinance in the City's Municipal Code protects designated landmark trees, which are specifically identified in the City's *Inventory of Landmark Trees* (July 1996). As shown in this inventory, there are no landmark trees on the project site. The removal of any on-site trees or vegetation would not conflict with the City's Landmark Tree Ordinance.

Per Article IV of the Municipal Code, Street Trees, any tree within the public right-of-way belongs to the City of Cypress. Any work to street trees conducted as part of the proposed project would be done in accordance with the City Council's adopted Parkway Tree Policy.

Therefore, through compliance with the local policies and ordinances relating to tree protection, any impacts to local street trees would be considered less than significant.

Threshold 4.3.6: 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. There is no adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other habitat conservation plan in the City. As discussed above in the response to Threshold 4.3.1, the OCTA NCCP/HCP includes a Plan Area that covers the entirety of Orange County, including Cypress. The City is not a party to the OCTA NCCP/HCP, and development activity within the City is not subject to the provisions of the OCTA NCCP/HCP. Therefore, the OCTA NCCP/HCP does not apply to the proposed project, and the proposed project would not conflict with any local, regional, or State HCP or NCCP. The proposed project would not result in impacts related to conflict with any provisions of an HCP or NCCP, and no mitigation is required.

4.3.7 Level of Significance Prior to Mitigation

The proposed project would result in no impacts related to candidate, sensitive, or special-status wildlife species, riparian habitat and sensitive natural communities, wetlands, or policies or ordinances protecting biological resources, and no conflicts with an adopted HCP. Potential impacts to migratory birds and raptors and street trees would be considered less than significant. No mitigation is required.

4.3.8 Regulatory Compliance Measures and Mitigation Measures

4.3.8.1 Regulatory Compliance Measures

The following regulatory compliance measure is an existing regulation that is applicable to the proposed project and is considered in the analysis of potential impacts related to biological resources. The City of Cypress considers this requirement to be mandatory; therefore, it is not a mitigation measure.

Regulatory Compliance Measure 4.3-1 **Nesting Bird Survey and Avoidance.** If vegetation removal, construction, or grading activities are planned to occur within the active nesting bird season (February 1 through August 31), the City of Cypress, or designee, shall confirm that the Applicant/Developer has retained a qualified biologist who shall conduct a preconstruction nesting bird survey no more than 3 days prior to the start of such activities. The nesting bird survey shall include the work area and areas adjacent to the site (within 500 feet, as feasible) that could potentially be affected by project-related activities such as noise, vibration, increased human activity, and dust, etc. For any active nest(s) identified, the qualified biologist shall establish an appropriate buffer zone around the active nest(s). The appropriate buffer shall be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Project activities shall be avoided within the buffer zone until the nest is deemed no longer active, as determined by the qualified biologist.

4.3.8.2 Mitigation Measures

No mitigation measures are required for the proposed project.

4.3.9 Level of Significance after Mitigation

Potential impacts to biological resources from the proposed project would be addressed through compliance with Regulatory Compliance Measure 4.3-1 and would be considered less than significant. The proposed project would have no significant and unavoidable adverse impacts related to biological resources.

4.3.10 Cumulative Impacts

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 for biological resources. The project site is heavily disturbed, with existing paving and buildings. Because the project site is located within the City of Cypress, the cumulative area for biological resources impacts is the City. As described above, the proposed project would have no impacts to federal and State listed species and waters of the United

States or wetlands and would have less than significant effects on migratory birds and local tree policies. As the proposed project's impacts to biological resources would be limited, its contribution to cumulative biological resources impacts in consideration of the City of Cypress projects identified in Table 4.A, in Chapter 4.0, Existing Setting, Environmental Analysis, Impacts, and Mitigation Measures, would be considered less than significant.

As discussed earlier, the project site is located within the OCTA NCCP/HCP that covers the entirety of Orange County, including the City of Cypress. The City is not a party to the OCTA NCCP/HCP, and development activity within the City is not subject to the provisions of the OCTA NCCP/HCP. Therefore, the OCTA NCCP/HCP does not apply to the proposed project. Additionally, the project site is not located within a designated habitat reserve and, therefore, the proposed project would not contribute to the loss of natural habitat in the City. The development of the proposed project would not result in the removal of any sensitive habitat species identified in the OCTA NCCP/HCP. Therefore, the proposed project would not contribute to the cumulative loss of biological resources, and impacts on biological resources would be less than cumulatively significant.

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4.4 CULTURAL RESOURCES

This section evaluates the potential for the Amazon Facility project (proposed project) to impact cultural resources. Cultural resources are sites, buildings, structures, objects, and districts over 50 years old that may have traditional or cultural value for the historical significance they possess. The information and analysis presented in this section is based on the *Cultural Resources Study for the Amazon Distribution Center Project* (July 2020). The complete study is contained in Appendix D.

The term "site" is used in two contexts in this section:

- "Project site" refers to the approximately 22.3-acre site proposed for development.
- "Cultural resources site" refers to the specific locations of documented cultural materials or artifacts.

4.4.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. None of the comment letters included comments related to cultural resources.

4.4.2 Methodology

A cultural resources study was conducted for the proposed project, and was documented in the *Cultural Resources Study for the Amazon Distribution Center Project* (LSA 2020). The study describes a record search conducted for the project site and surrounding area. The cultural resources records search was conducted on May 21, 2020, by staff at the South Central Coastal Archaeological Information Center (SCCIC), located at California State University, Fullerton. The purpose of the records search was to determine the extent of previous cultural resources investigations within a 0.25-mile radius of the project site, and whether any previously recorded archaeological sites or other historic resources exist within or near the project site. Materials reviewed included reports of previous cultural resources investigations, archaeological site records, historical maps, and listings of resources on the National Register of Historic Places (National Register), California Register of Historical Resources (California Register), California Points of Historical Interest, California Landmarks, and National Historic Landmarks. In addition to the SCCIC archival search, historic maps and aerial photographs of the project site were analyzed to assess the potential for subsurface historic-period archaeological deposits at the project site.

Subsequent to the record search, a cultural resources field survey was conducted on June 1, 2020. The majority of the project site is a built environment which includes an office building, warehouse, research and development buildings, parking lots, and tennis courts. All landscaped areas and a field south of the tennis courts were surveyed for cultural resources. Overall ground visibility at the project site was less than 10 percent. Landscaped planters contained thick shrubs and low bushes, providing minimal ground visibility.

4.4.2.1 Results

The cultural resources study, which consisted of background research and a field survey, identified no cultural resources within the project site. Two previous cultural resources studies were identified during the background research; one study which included the project site and one located within the 0.25-mile radius of the project site. As a result of previous cultural resources studies, no cultural resources have been recorded within the project site or the 0.25-mile radius. While overall ground visibility was low during the field survey, no prehistoric or historic-period cultural resources were observed while conducting the survey.

4.4.3 Existing Environmental Setting

The area that is now Cypress (including the project site) was prehistorically occupied by the Gabrielino Native American people. The project site is an approximately 22.3-acre property located at the southwest corner of Katella Avenue and Holder Street and is currently occupied by several buildings that were recently vacated by Mitsubishi Motors of America, a paved parking lot with existing light poles, and landscaping. The majority of the project site is a built environment, which includes an office building, warehouse, research and development buildings, parking lots, and tennis courts.

4.4.4 Regulatory Setting

This section includes applicable federal, State, regional, and City regulations.

4.4.4.1 Federal Regulations

No federal regulations are applicable to the proposed project.

4.4.4.2 State Regulations

California Environmental Quality Act Requirements. CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register; (2) listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by a project's Lead Agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5(a)). A historical resource consists of:

> "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…. 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" *State CEQA Guidelines* Section 15064.5(a)(3).

In accordance with *State CEQA Guidelines* Section 15064.5(b), a substantial adverse change in the significance of a historical resource is a significant effect on the environment.

CEQA requires a Lead Agency to determine whether an archaeological cultural resource meets the definition of a historical resource, a unique archaeological resource, or neither (*State CEQA Guidelines* Section 15064.5(c)). Prior to considering potential impacts, the Lead Agency must determine whether an archaeological cultural resource meets the definition of a historical resource in *State CEQA Guidelines* Section 15064.5(c)(1). If the archaeological cultural resource meets the definition of a historical resource, it is treated like any other type of historical resource in accordance with *State CEQA Guidelines* Section 15126.4. Historical resources have the full advantage of mitigation measures, and treatment of historical resources can include documentation of the resource, avoidance measures, measures for preservation in place, and, as a last resort, data recovery for consequential information about the resource. If the archaeological cultural resource does not meet the definition of a historical resource, then the Lead Agency determines whether it meets the definition of a unique archaeological resource as defined in *State CEQA Guidelines* Section 21083.2(g). In practice, however, most archaeological sites that meet the definition of a unique archaeological resource will also meet the definition of a historical resource. Should the archaeological cultural resource meet the definition of a unique archaeological resource, it must be treated in accordance with *State CEQA Guidelines* Section 21083.2. If it can be demonstrated that a project will cause damage to a unique archaeological resource, the Lead Agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Treatments for archaeological resources can include, but are not limited to, avoidance measures, capping or covering sites adequately, or planning parks or open space to incorporate archaeological sites. If the archaeological cultural resource does not meet the definition of a historical resource or an archaeological resource, the effects to the resource are not considered significant effects on the environment (*State CEQA Guidelines* Section 15064.5(c)(4)).

California Health and Safety Code Section 7050.5. 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 Coroner must notify the Native American Heritage Commission (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.

Public Resources Code Section 5097.5. 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.

California Register of Historical Resources (PRC Section 5020 et seq.). State law also protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in *State CEQA Guidelines* Section 15064.5(a). These criteria are nearly identical to those for the National Register, which are listed above.

The State Historic Preservation Officer (SHPO) maintains the California Register. Properties listed, or formally designated eligible for listing, on the National Register are nominated to the California

Register and then selected to be listed on the California Register, as are State Landmarks and Points of Interest.

The California Register criteria are based on National Register criteria. For a property to be eligible for inclusion in the California Register, one or more of the following criteria must be met:

1. It is associated with the 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; and/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.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resource." Fifty years is used as a general estimate of time needed to develop the perspective to understand the resource's significance (California Code of Regulations [CCR] 4852[d][2]).

The California Register also requires that a resource possess integrity, which is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance" (CCR 4852[c]). To retain integrity, a resource should have its original location, design, setting, materials, workmanship, feeling, and association. Which of these factors is most important depends on the particular criterion under which the resource is considered eligible for listing.

4.4.4.3 Regional Regulations

There are no regional regulations that are applicable to cultural resources relevant to the proposed project.

4.4.4.4 Local Regulations

Cypress General Plan. The Conservation/Open Space/Recreation (COSR) Element (2000) of the Cypress General Plan identifies goals and policies related to cultural resources (and includes references to paleontological resources). Goal COSR-5 is to "preserve Cypress' archaeologic and paleontologic resources" through implementation of two policies: COSR-5.1 and COSR-5.2. Policy COSR-5.1 is "to update records of resource finds and locations when required" and COSR-5.2 states that "Prior to development in previously undeveloped areas, [the City will] require strict adherence to the CEQA guidelines for environmental documentation and mitigation measures where development will affect archaeological or paleontological resources."

4.4.5 Thresholds of Significance

The thresholds for impacts to cultural resources used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to cultural resources if it would:

Threshold 4.4.1: **Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?**

Threshold 4.4.2: **Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

Threshold 4.4.3: **Disturb any human remains, including those interred outside of dedicated cemeteries?**

4.4.6 Project Impacts

Threshold 4.4.1: **Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?**

No Impact. According to the City of Cypress General Plan, there are no known archaeological resources located in Cypress. Further, the SCCIC record search results and field survey identified no previously recorded cultural resources on or in soils on the project site. As such, there are no historical resources as defined in Section 15064.5 of the *State CEQA Guidelines* located within the project site. The proposed project will not cause a substantial adverse change in the significance of a historical resource, and no mitigation is required.

Threshold 4.4.2: **Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

Less Than Significant Impact with Mitigation Incorporated. The SCCIC record search included the project site and the areas within 0.25 mile of the project site. No archaeological resources have been previously recorded within the project site. Further, the field survey did not identify any cultural resources within the project site. However, a historic-period freshwater source has been identified near the project site; a creek that merges with Anaheim Creek, approximately 0.65 mile west-southwest of the project site was identified on historic maps (LSA 2020). Further, research indicates that surficial deposits of the project site will include Artificial Fill (as a result of previous construction for the existing buildings) underlain by Quaternary alluvium, lake, playa and terrace deposits that date to the Pleistocene and Holocene (ranging from 2.58 million years ago to the present). Because the project site is located in close proximity to the historic-period natural alignment of a freshwater source and native sediments at the project site date to a timeframe that includes precontact human occupation in the region, there is a potential to encounter subsurface archaeological resources from either the precontact or historic periods.

Mitigation Measure 4.4-1 requires monitoring by a qualified archaeologist. The measure includes procedures for recovering any significant or unique archaeological resource and for preparation of a report that documents any cultural resource recovery at the project site. With implementation of

Mitigation Measure 4.4-1, impacts to previously unrecorded cultural resources would be less than significant.

Threshold 4.4.3: Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. Although no human remains are known to be on the project site or are anticipated to be discovered during project construction, there is always a possibility of encountering unanticipated cultural resources, including human remains. Disturbing human remains could violate the State's Health and Safety Code as well as destroy the resource. Regulatory Compliance Measure 4.4-1 requires compliance with the State's Health and Safety Code for the treatment of human remains. Adherence to regulatory standards included in Regulatory Compliance Measure 4.4-1 would reduce the impact of the proposed project on human remains to less than significant. No mitigation is required.

4.4.7 Level of Significance Prior to Mitigation

No impacts to historical resources would occur. Prior to mitigation, the proposed project has the potential to result in significant impacts to unknown archaeological resources. With adherence to the regulatory standards in Regulatory Compliance Measure 4.4-1, the project would result in less than significant impacts to previously undiscovered buried human remains.

4.4.8 Regulatory Compliance Measures and Mitigation Measures

4.4.8.1 Regulatory Compliance Measures

The following regulatory compliance measure is an existing regulation that is applicable to the proposed project and is considered in the analysis of potential impacts related to cultural resources. The City of Cypress considers this requirement to be mandatory; therefore, it is not a mitigation measure.

Regulatory Compliance Measure 4.4-1: **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 of Orange (County) Coroner has made a determination of origin and disposition pursuant to State Public Resources Code (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 items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

4.4.8.2 Mitigation Measures

Mitigation Measure 4.4-1

Cultural Resources Monitoring and Accidental Discovery. Prior to the issuance of grading permits, and in adherence to the recommendations of the *Cultural Resources Study for the Amazon Distribution Center Project* (2020), the Applicant/Developer shall retain a qualified archaeological monitor, with approval of the City of Cypress (City) Community Development Director or designee. A monitoring plan shall be prepared by the archaeologist and implemented upon approval by the City. The monitor shall be present full-time during the first 10 working days when excavation activities will extend below Artificial Fill deposits into native soils. No archaeological monitoring is required during demolition of existing buildings or clearing/grubbing of existing landscape.

If cultural materials are discovered during grading or excavation, the construction contractor shall divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find. Project personnel shall not collect or move any archaeological materials or human remains and associated materials. To the extent feasible, project activities shall avoid these deposits. Where avoidance is not feasible, the archaeological deposits shall be evaluated for their eligibility for listing on the California Register of Historical Resources. If the deposits are not eligible, avoidance is not necessary. If the deposits are eligible, adverse effects on the deposits must be avoided, or such effects must be mitigated. Mitigation can include, but is not necessarily limited to: excavation of the deposit in accordance with a data recovery plan (see California Code of Regulations [CCR] Title 4(3) Section 5126.4(b)(3)(C)) and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; production of a report detailing the methods, findings,

and significance of the archaeological site and associated materials; curation of archaeological materials at an appropriate facility for future research and/or display; an interpretive display of recovered archaeological materials at a local school, museum, or library; and public lectures at local schools and/or historical societies on the findings and significance of the site and recovered archaeological materials. The City Community Development Director, or designee, shall be responsible for reviewing any reports produced by the archaeologist to determine the appropriateness and adequacy of the findings and recommendations.

4.4.9 Level of Significance after Mitigation

No impacts to historical resources would occur. With adherence to the regulatory standards in Regulatory Compliance Measure 4.4-1, the project would result in less than significant impacts to previously undiscovered buried human remains. Mitigation Measure 4.4-1 would reduce potential impacts to unknown archaeological resources to a less than significant level. No significant and unavoidable impacts to archaeological resources would occur with implementation of this mitigation measure. After mitigation has been implemented, all anticipated impacts to cultural resources would be considered less than significant.

4.4.10 Cumulative Impacts

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 Cypress, could contribute to a cumulatively significant impact due to the overall loss of historical and archaeological artifacts unique to the region.

Each development proposal received by the City is required to comply with the requirements of CEQA, including an environmental review, if applicable. If there were any potential for significant impacts to archaeological resources as a result of present or reasonably foreseeable projects in Cypress, an investigation would be required to determine the nature and extent of the resources and identify appropriate mitigation measures. When archaeological resources are assessed and/or protected as they are discovered, impacts to these resources are less than significant.

As such, implementation of Regulatory Compliance Measure 4.4-1 and Mitigation Measure 4.4-1 would ensure that the proposed project, together with cumulative projects, would not result in a significant cumulative impact to unique archaeological and historical resources.

4.5 ENERGY

This section discusses energy use resulting from implementation of the Amazon Facility project (proposed project) and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency. The energy use analysis in this section is based on the *Katella Avenue Amazon Facility Energy Analysis* (Energy Analysis) (Urban Crossroads, July 7, 2020 2020b), which is provided in Appendix B of this Environmental Impact Report (EIR). Annual natural gas and electricity usage for operation of the proposed project was obtained from the California Emissions Estimator Model (CalEEMod) version 2016.3.2 modeling results generated for the Air Quality Impact Analysis and the GHG Analysis prepared for the proposed project, which are also provided in Appendix B of this EIR. The Energy Analysis provides a detailed explanation of the specific assumptions and methodology used to estimate the fuel consumption related to construction and operation of the proposed project.

4.5.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. None of the comment letters included comments related to energy.

4.5.2 Methodology

Annual natural gas and electricity usage for operation of the existing buildings on the project site and the proposed project were obtained from CalEEMod in the GHG Analysis (Urban Crossroads 2020c).[1]

Estimates of fuel consumption (diesel fuel and gasoline) from construction trucks and construction worker vehicles were based on trip estimates from CalEEMod in the Air Quality Impact Analysis and fuel efficiencies from the CARB EMFAC2017. Fuel consumption (diesel fuel and gasoline) from vehicle trips during operation was estimated for the existing buildings and for the opening year (2021) of the proposed project based on trip estimates from CalEEMod in the Greenhouse Gas Analysis and fuel efficiencies from the CARB EMFAC2017.

4.5.3 Existing Environmental Setting

4.5.3.1 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,

[1] The Air Quality Impact Analysis (Urban Crossroads 2020a) only includes the CalEEMod results for the summer and winter scenarios. Therefore, the CalEEMod results for the annual scenario for operations were obtained from the GHG Analysis (Urban Crossroads 2020c).

and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).[1]

In 2017, California's electricity was generated primarily by natural gas (33.67 percent), coal (4.13 percent), large hydroelectric (14.72 percent), nuclear (9.08 percent), and renewable sources (29 percent). Total electricity generation in California in 2018 was 285,488 gigawatt-hours (GWh), down 0.5 percent from the 2017 total generation of 292,039 GWh. In 2017, California produced approximately 70.7 percent and imported 29.3 percent of the electricity it used.[2]

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.[3] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2018 was 84,000 GWh. (28,617 GWh for the residential sector and 54,783 GWh for the non-residential sector). Total electricity consumption in Orange County in 2018 was 19,858 GWh (6,814 GWh for the residential sector and 13,044 GWh for the non-residential sector).[4]

4.5.3.2 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).[5]

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 upon out-of-state imports for nearly 90 percent of its natural gas supply.[6]

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

1 United States Energy Information Administration (EIA). 2019b. Electricity Explained. Website: https:// www.eia.gov/energyexplained/electricity/ (accessed July 15, 2020).

2 California Energy Commission (CEC). 2019c. Notice of Request for Public Comments on the Draft Scoping Order for the 2019 Integrated Energy Policy Report. Docket No. 19-IEPR-01.

3 Southern California Edison (SCE). 2019. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed July 15, 2020).

4 CEC. 2019a. Electricity Consumption by County. Website: http://www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed July 15, 2020).

5 EIA. 2020b. Natural Gas Explained- Use of Natural Gas. Website: https://www.eia.gov/energyexplained/index.php?page=natural_gas_use (accessed July 15, 2020).

6 CEC. 2020b. Supply and Demand of Natural Gas in California. Website: https:// ww2.energy.ca.gov/almanac/naturalgas_data/overview.html (accessed July 15, 2020).

area throughout Central and Southern California, from Visalia to the Mexican border.[1] According to the CEC, total natural gas consumption in the SoCalGas service area in 2018 was 5,156.1 million therms (2,147.4 million therms for the residential sector and 987.5 million therms for the commercial sector). Total natural gas consumption in Orange County in 2018 was 575.1 million therms (339.0 million therms for the residential sector and 236.1 therms for the non-residential sector).[2]

4.5.3.3 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.

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. In 2017, total gasoline consumption in California was 366,820 thousand barrels (15.4 billion gallons) or 1,853.5 trillion British Thermal Units (BTU).[3] Of the total gasoline consumption, 350,604 thousand barrels (14.7 billion gallons) or 1,771.6 trillion BTU were consumed for transportation.[4] Based on fuel consumption obtained from EMFAC2017, 160.5 million gallons of diesel and 1.3 billion gallons of gasoline were consumed from vehicle trips in Orange County in 2018.

4.5.4 Regulatory Setting

4.5.4.1 Federal Regulations

Corporate Average Fuel Economy (CAFE). Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light-duty trucks. CAFE standards are federal regulations that are set to reduce energy consumed by on-road motor vehicles. The National Highway Traffic Safety Administration (NHTSA) regulates the standards and the United States Environmental Protection Agency (USEPA) measures vehicle fuel efficiency. The standards specify minimum fuel consumption efficiency standards for new automobiles sold in the United States. The law has become more stringent over time. The current standard is 27.5 miles per gallon (mpg) for passenger cars and 20.7 mpg for light-duty trucks.

On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the USEPA and the United States Department of Transportation's (USDOT) NHTSA announced a joint final rule establishing a

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1 Southern California Gas Company (SoCalGas). 2020. About SoCalGas. Website: https://www3.socalgas.com/about-us/company-profile (accessed July 15, 2020).

2 CEC. 2020a. Gas Consumption by County. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx (accessed July 15, 2020).

3 A British Thermal Unit (BTU) is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

4 EIA. 2020a. California State Profile and Energy Estimates. Table F3: Motor gasoline consumption, price, and expenditure estimates, 2017. Website: https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed July 15, 2020).

national program that would reduce greenhouse gas (GHG) emissions and improve fuel economy for new cars and trucks sold in the United States. The first phase of the national program applied to passenger cars, light-duty trucks, and medium-duty passenger vehicles for model years 2012 through 2016. This phase required these vehicles to meet a fuel economy standard of 35.5 mpg. The second phase applied to passenger cars, light-duty trucks, and medium-duty passenger vehicles for model years 2017 through 2025. This phase required these vehicles to meet an estimated fuel economy standard of 54.5 mpg.[1]

On September 15, 2011, the USEPA and USDOT issued a final rule for the first national standards to improve fuel efficiency of medium- and heavy-duty trucks and buses, model years 2014 through 2018. For combination tractors, the agencies proposed engine and vehicle standards that would achieve up to a 20 percent reduction in fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies proposed separate gasoline and diesel truck standards, which would achieve up to a 10 percent reduction for gasoline vehicles and a 15 percent reduction for diesel vehicles (12 and 17 percent, respectively, if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption (USEPA 2019a). On October 25, 2016, the USEPA and USDOT issued Phase 2 of the national standards to improve fuel efficiency standards for medium- and heavy-duty trucks and buses for model years 2021 through 2027 to achieve vehicle fuel savings as high as 25 percent, depending on the vehicle category (USEPA 2019a).

Safer Affordable Fuel-Efficient Vehicles Rule. On August 2, 2018, the current Administration released a notice of proposed rulemaking, *The Safer Affordable Fuel-Efficient* (SAFE) *Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule) to amend the CAFE and GHG emission standards established in 2012 for model years 2021 through 2026. The SAFE Vehicles Rule would decrease fuel economy and would withdraw the California Waiver for the California Advanced Clean Car program, Zero Emissions Vehicle mandate, and GHG emission standards for model years 2021 through 2026. Final rulemaking on the SAFE Vehicles Rule is pending.[2]

4.5.4.2 State Regulations

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 EIRs to include, where relevant,

1 National Highway Traffic Safety Administration (NHTSA). 2019a. Corporate Average Fuel Economy. Website: https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy (accessed July 15, 2020).

2 NHTSA. 2019b. The Safer Affordable Fuel-Efficient 'SAFE' Vehicles Rule. Website: https://www.nhtsa.gov/corporate-average-fuel-economy/safe (accessed July 15, 2020).

mitigation measures 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 (IEPR) every 2 years and an update every other year. The 2019 IEPR was adopted January 31, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2019 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast. The 2020 IEPR Update is currently in progress but is not anticipated to be adopted until February 2021.

Renewable Portfolio Standards. 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 State's electricity to come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.

Title 24, California Building Code. Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CEC first adopted the Building Energy Efficiency Standards for Residential and Nonresidential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The CBC is updated every 3 years, and the current 2019 CBC went into effect on January 1, 2020. The efficiency standards apply to both new

construction and rehabilitation of both residential and non-residential 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 CCR Title 24.

California Green Building Standards Code (CALGreen Code). In 2010, the California Building Standards Commission (CBSC) 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 2019 CALGreen Code standards that became effective January 1, 2020. The CALGreen Code established mandatory measures for residential and non-residential 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 non-residential buildings subject to the standard.

California Energy Efficiency Strategic Plan. On September 18, 2008, the California Public Utilities Commission (CPUC) adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California (CPUC 2008). 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.

4.5.4.3 Regional Regulations

There are no regional energy regulations that apply to the proposed project.

4.5.4.4 Local Regulations

Cypress Municipal Code. The City of Cypress has adopted the 2019 California Green Building Standards Code (CALGreen Code) and incorporated the CALGreen Code by reference into the City Municipal Code (Chapter 5, Buildings, Article 1, Building Code, Section 5-1 California Building Codes – Adopted).

Cypress General Plan Conservation/Open Space/Recreation Element. The following goals and policies are applicable to the proposed project:

COSR-3 Conserve energy resources through the use of available technology and conservation practices.

COSR-3.1 Encourage innovative site planning and building designs that minimize energy consumption by taking advantage of sun/shade patterns, prevailing winds, landscaping, and building materials.

COSR-3.2 Encourage new development and existing structures to install energy saving features.

4.5.5 Thresholds of Significance

The thresholds for energy impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to energy if it would:

Threshold 4.5.1: **Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Threshold 4.5.2: **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

4.5.6 Project Impacts

Threshold 4.5.1: **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.

Construction Impact Analysis. Construction of the proposed project is anticipated to last 9 months, and would require energy for activities such as the manufacture and transportation of building materials, demolition and 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 because none of the construction-related equipment would be powered by natural gas.

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. 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 types and number of trips, VMT, vehicle fuel efficiency, and travel modes. Diesel fuel usage from construction off-road equipment was calculated

using the same CalEEMod assumptions used in the Air Quality Impact Analysis and the GHG Analysis, which are both included in Appendix B.

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. In 2018, total gasoline consumption in California was 366,820 thousand barrels (15.4 billion gallons) or 1,853.5 trillion British thermal units (BTUs). Of the total gasoline consumption, 350,604 thousand barrels (14.7 billion gallons) or 1,771.6 trillion BTUs were consumed for transportation (EIA 2019).

Table 4.5.A, below, provides a summary of the annual fuel consumption associated with the operation of the construction equipment, worker trips, vendor trips, and haul trips required to construct the proposed project. As shown in Table 4.5.A, project construction activities would consume an estimated 284,422 gallons of diesel fuel and 2,343 gallons of gasoline fuel. Project construction would represent a "single-event" fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose. Therefore, the proposed project's construction-related fuel consumption would represent a small fraction of the State's overall fuel consumption.

Table 4.5.A: Construction-Related Fuel Consumption

Category	Estimated Annual Fuel Consumption (gallons)
Diesel Fuel	
Construction Equipment	20,347
Construction Vendor and Haul Trips[1]	264,075
Total Diesel Consumption	**284,422**
Construction Worker Trips	2,343
Total Gasoline Consumption	**2,343**

Source: Energy Analysis (Urban Crossroads, July 2020).
[1] Heavy-heavy duty trucks.

According to the Energy Analysis, the total electricity usage from the proposed project's on-site construction-related activities is estimated to be approximately 150,215 kWh. Therefore, the proposed project's construction-related electricity consumption would represent less than 0.001 percent of Orange County's total electricity consumption in 2018.

The equipment used for project construction would conform to California Air Resources Board (CARB) regulations and California emissions standards. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the proposed project would therefore not result in inefficient, wasteful, or unnecessary fuel consumption.

The proposed project would utilize construction contractors who practice compliance with applicable CARB regulations regarding retrofitting, repowering, and replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (TACs). Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations and best available control measures (BACM). More specifically, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. To ensure adherence to these regulations, the Applicant/Developer would be required to comply with Regulatory Compliance Measure 4.5-1, provided below, which requires the placement of signage on the project site informing the construction workers that engines must be shut off at or before five minutes of idling.

Indirectly, construction energy efficiencies and energy conservation would be achieved for the proposed development through energy efficiencies realized from bulk purchase, transport, and use of construction materials.

A full analysis related to the energy needed to form construction materials has not been prepared due to a lack of detailed project-specific information on construction materials. At this time, an analysis of the energy needed to create project-related construction materials would be extremely speculative and thus has not been prepared.

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with the preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. With adherence to Regulatory Compliance Measure 4.5-1, the proposed project would result in less than significant impacts related to energy during construction.

Operational Energy Demands. Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and delivery vehicles accessing the project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

Transportation Energy Demands. Energy that would be consumed by project-generated traffic is a function of total VMT and estimated vehicle fuel economies of the various types of vehicles accessing the project site. According to the Energy Analysis, the proposed project would result in an estimated annual VMT of 15,539,663 and would result in the consumption of an estimated 668,330 gallons of petroleum fuel (diesel or gasoline) each year.

Facility Energy Demands. Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting (State of California 2019). Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.).

Project building operations and project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the project by SoCalGas; electricity would be supplied to the project by SCE. Table 4.5.B provides a summary of the proposed project's annual natural gas and electricity demands, as well as the estimated annual fuel consumption resulting from project-related vehicle trips.

Table 4.5.B: Estimated Annual Energy Use of the Proposed Project

Land Use	Electricity Use (kWh per year)	Natural Gas Use (kBTU per year)	Fuel Consumption (gallons per year)
Parking Lot	109,060	0	0
Amazon Facility	491,564	401,661	0
Total	**600,624**	**401,661**	**0**

Source: Energy Analysis (Urban Crossroads, July 2020).
kBTU = kilo-British Thermal Unit(s)
kWh = kilowatt-hour(s)

Threshold 4.5.2: 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 two 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 ZEVs and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC recently adopted the *2019 Integrated Energy Policy Report.*[1] The 2019 IEPR provides the results of the CEC's assessments of a variety of energy issues facing California. The City of Cypress relies on the State integrated energy plan and does not have its own local plan to address renewable energy or energy efficiency.

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

[1] CEC. 2019b. *2019 Integrated Energy Policy Report*. Publication Number: CEC-100-2019-001-CMF.

comparison to the overall use in Orange County, and the State's available energy sources. 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 under Threshold 4.5.1, 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.

4.5.7 Level of Significance Prior to Mitigation

Energy impacts related to the inefficient, wasteful, and unnecessary consumption of energy are considered less than significant, and no mitigation is required.

4.5.8 Regulatory Compliance Measures and Mitigation Measures

4.5.8.1 Regulatory Compliance Measures

The following regulatory compliance measures are existing regulations that are applicable to the proposed project and are considered in the analysis of potential impacts related to energy. The City of Cypress considers these requirements to be mandatory; therefore, they are not mitigation measures.

Regulatory Compliance Measure 4.5-1 **Idling Restriction Signage.** Prior to the issuance of grading permits, the City of Cypress (City) Community Development Director shall confirm that the grading plans for the project include a requirement that a sign shall be posted on site stating that construction workers shall shut off engines at or before five minutes of idling.

Regulatory Compliance Measure 4.5-2 **California Code of Regulations (CCR), Title 24.** Prior to the issuance of building permits, the City Chief Building Official, or designee, shall confirm that the project design complies with the 2019 Building Energy Efficiency Standards (CCR Title 24) energy conservation and green building standards, as well as those listed in Part 11 (California Green Building Standards [CALGreen Code]). The City's Chief Building Official shall confirm that the project complies with the mandatory measures listed in the CALGreen Code for residential and non-residential building construction.

4.5.8.2 Mitigation Measures

No mitigation is required for the proposed project.

4.5.9 Level of Significance after Mitigation

Construction and operational impacts related to energy use would be less than significant. No mitigation is required.

4.5.10 Cumulative Impacts

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. The proposed project would result in an increased demand for electricity and natural gas service. Although the proposed project would result in a net 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, the total annual electricity consumption in the SCE service area in 2017 was 84,291.6 GWh. By 2030, consumption is anticipated to increase by approximately 12,000 GWh for the low-demand scenario and by 22,000 GWh for the high-demand scenario.[1] 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 2018 was 5,156.1 million therms. Between 2018 and 2035, 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.[2] The proposed project's share of cumulative consumption of natural gas in the SoCalGas service area would be negligible. It is anticipated that SoCalGas would be able to meet the natural gas demand of the related projects without additional facilities. In addition, both SCE and SoCalGas demand forecasts include the growth contemplated by the proposed project and the related projects. Increased energy efficiency to comply with building energy efficiency standards will 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, this transportation energy use would not represent a major amount of energy use when 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 related projects are required to comply with various federal and State government legislation to improve energy efficiency in buildings, equipment, and appliances, and reduce VMT.

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1 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 July 15, 2019).

2 Ibid.

Compliance with Regulatory Compliance Measure 4.5-1 would ensure that the proposed project does not result in an inefficient, wasteful, and unnecessary consumption of energy. Therefore, the proposed project's contribution to impacts related to the inefficient, wasteful, and unnecessary consumption of energy would not be cumulatively considerable, and no mitigation is required.

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4.6 GEOLOGY AND SOILS

This section provides a discussion of the existing geology and soils setting and an analysis of the Amazon Facility's project (proposed project) potential geology and soils impacts. This section also addresses potential impacts due to the local geology underlying the project site, as well as slope stability, ground settlement, soil conditions, grading, and regional and local seismic conditions. This section also evaluates potential impacts to paleontological resources. This section summarizes information provided in the *Geotechnical Investigation, Amazon Distribution Center, SWC Katella Avenue and Holder Street, Cypress, California* (Geotechnical Assessment) (Southern California Geotechnical, Inc. [SCG], December 4, 2019) and the *Paleontological Resources Assessment for the Amazon Distribution Center Project, Cypress, Orange County, California* (Paleontological Assessment) (LSA, July 6, 2020). These reports are included as Appendices E and F to this Draft Environmental Impact Report (EIR). This section also incorporates data from the City of Cypress (City) General Plan (City of Cypress 2000), numerous State and federal studies of geologic and seismic hazards in the vicinity of the City, site-specific investigations in the project site, and field observations.

4.6.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. None of the comment letters included comments related to Geology and Soils.

4.6.2 Methodology

To assess the impacts of the proposed project with respect to geologic and soil conditions, SCG conducted a Geotechnical Assessment and field explorations, and prepared a previous geotechnical report in October 2019. The discussion below describes the scope of the exploration, including methods used during site reconnaissance and the results of pertinent prior explorations, laboratory tests, and engineering analyses.

4.6.2.1 Background Research and Data Review

Existing geologic literature (i.e., geologic maps, boring logs, and other applicable data) was reviewed by SCG.

4.6.2.2 Site Reconnaissance

A site reconnaissance and a subsurface exploration of the project site were conducted by SCG. This included marking exploration and test locations for geology and soils that were analyzed in the Geotechnical Assessment.

4.6.2.3 Field Investigations

Two field investigations were conducted by SCG to identify subsurface conditions on the project site related to soil types, groundwater, liquefaction, corrosive soils, settlement, and the potential need for remedial grading. As part of these field investigations, a total of 14 borings (eight as part of the geotechnical report prepared in October 2019 [identified as Boring Nos. B-1 through B-8] and 6 as part of the Geotechnical Assessment [identified as Boring Nos. B-9 through B-14]) were completed.

As part of the geotechnical report completed in October 2019, eight borings (identified as Boring Nos. B-1 through B-8) were advanced to depths of 15 to 51.5 feet (ft) below existing site grades. In addition to the borings, four Cone Penetration Test (CPT) soundings were advanced to depths of 60 to 70 ft at the site as part of the liquefaction evaluation.

As part of the Geotechnical Assessment, two of the borings were drilled within the existing building in the southwestern portion of the project site to a depth of 5 ft and the remaining four borings were drilled within the proposed parking lot area to a depth of 5 ft. The thickness of the concrete and underlying base was determined at all of the core locations. Representative bulk and relatively undisturbed soil samples were taken during drilling.

All boring sites and CPT locations are shown in Figure 4.6.1.

4.6.2.4 Geotechnical Laboratory Testing/Analysis

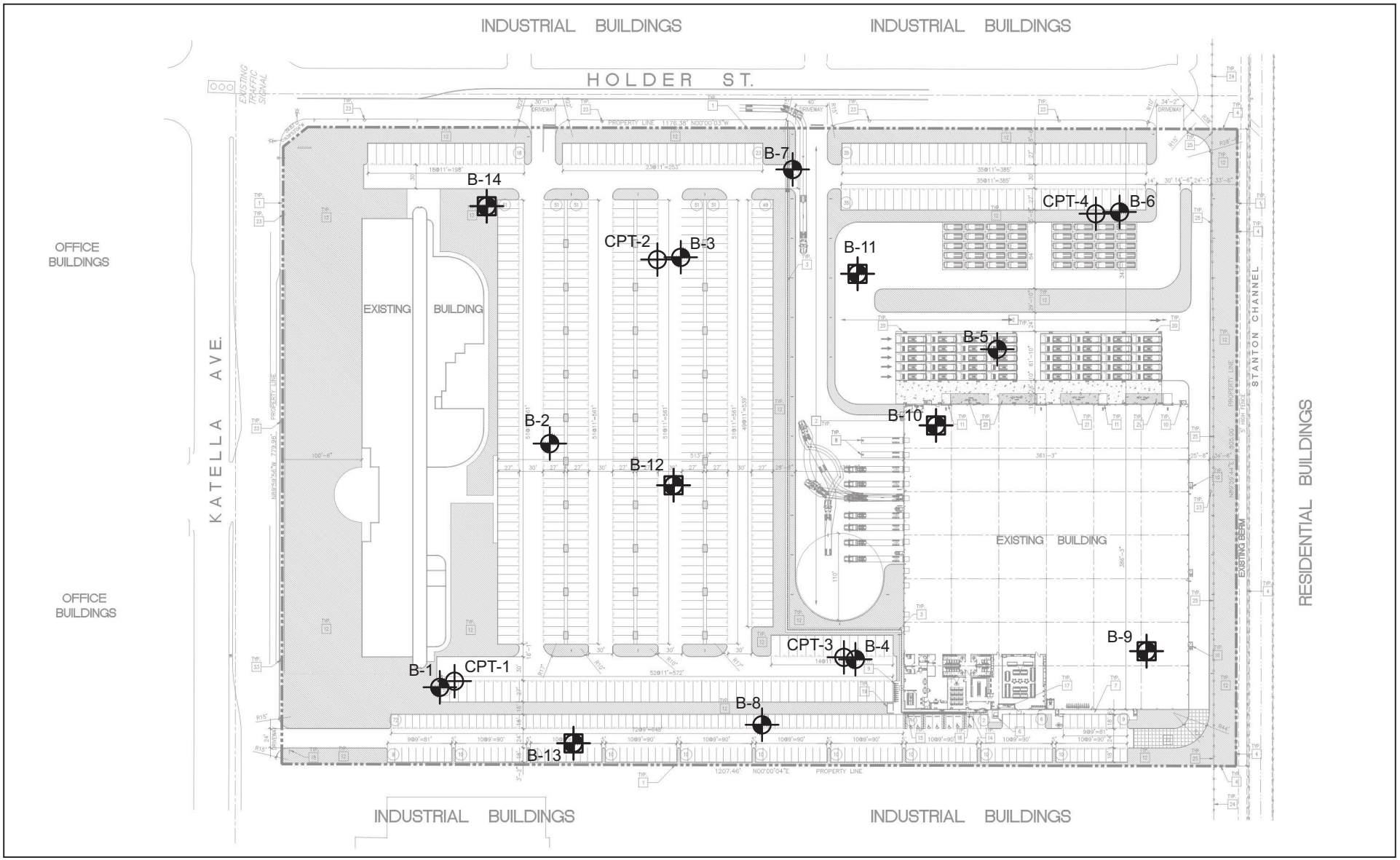
Laboratory testing was conducted on soil samples collected during the field investigation. Tests were performed to analyze the soil's classification, dry density and moisture content, consolidation potential, soluble sulfate content, corrosivity (electrical resistivity), expansion index, and maximum dry density and optimum moisture content.

To assess the impacts of the project with respect to paleontological resources, a *Paleontological Resources Assessment* was prepared for the proposed project. As part of this technical letter report, plans, geologic maps of the project site, and relevant geological and paleontological literature were reviewed to determine which geologic units are present within the project site and whether fossils have been recovered within the project site or from those or similar geologic units elsewhere in the region. In addition, a search for known fossil localities was conducted at the Natural History Museum of Los Angeles County (LACM) to determine the status and extent of previously recorded paleontological resources within and surrounding the project site. A field survey was also conducted to identify any paleontological resources and to note the sediments at the surface.

4.6.3 Existing Environmental Setting

4.6.3.1 Project Site

The topography of the project site is generally flat, with an elevation range on the project site of between 35 to 42 ft above mean sea level. The paved areas of the site gently slope downward to the west, from approximately 1 percent in the southwestern and east-central areas to approximately 3 percent in the northwestern corner of the site. The decomposed turf plot east of the existing warehouse slopes at less than 1 percent to the southeast.



LSA

FIGURE 4.6.1

GEOTECHNICAL LEGEND

- APPROXIMATE BORING LOCATION
- PREVIOUS BORING LOCATION (SCG PROJECT NO. 19G186-1)
- PREVIOUS INFILTRATION LOCATION (SCG PROJECT NO. 19G186-1)

N

0 90 180
FEET

SOURCE: Architects Orange, Southern California Geotechnical

Amazon Facility
Boring and CPT Locations

I:\CCP1603.05A\G\Boring Locations.cdr (7/15/2020)

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4.6.3.2 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 subdivided into four primary structural blocks that are distinguished from one another by contrasting basement rock types and stratigraphy. More specifically, the project site is located within the east-central portion of the Downey Plain, a broad lowland area that comprises a large portion of the Central Block of the Los Angeles Basin. This plain is bounded by the Santa Monica Mountains to the north, the Puente Hills and Santa Ana Mountains to the northeast and east, and a northwest-trending alignment of hills and mesas to the west and southwest.

In the area of the project site, the soils that form this extensive alluvial plain are composed primarily of geologically young materials deposited as a result of sedimentation along the Santa Ana and San Gabriel Rivers, with additional materials contributed from smaller canyons that drain the adjoining upland areas to the northeast.

4.6.3.3 Local Geology and Subsurface Conditions

The area occupied by the southern portion of the City of Cypress is underlain by unconsolidated, generally fine-grained, Holocene-age alluvial floodplain deposits composed primarily of various combinations of silt, sand, and clay. Underlying these Holocene alluvial deposits are older, semi-consolidated to consolidated Quaternary-age sediments that extend to depths of 2,700 ft to greater than 4,200 ft below the surface.

The project site is situated within the lower Santa Ana River Basin of the Coastal Plain of Orange County. The Coastal Plain is underlain by a sequence of Quaternary and Tertiary sedimentary rock units at least 20,000 ft thick. According to the Geotechnical Report completed in October 2019 for the project site, soils at the site include artificial fill soils to a depth of approximately 2.5 to 4 ft below ground surface, below which is native alluvium consisting of interbedded layers of sands, silts, and clays. The subsurface investigation revealed that asphaltic concrete pavements were present at the ground surface at all of the boring locations, with the exception of Boring Nos. B-5 and B-6. At the boring locations, the pavement section consists of approximately 3 to 4 inches of asphaltic concrete, underlain by approximately 4 to 5 inches of aggregate base. Artificial fill soils generally consist of silty fine sand with occasional trace to little clay content. However, some of the fill soils encountered at Boring No. B-7 consisted of medium dense to very stiff fine sandy clay to clayey fine sand. Native alluvial soils were encountered at the ground surface or beneath the pavements and/or fill materials at all of the boring locations. The native alluvial soils encountered at the boring and CPT locations generally consist of interbedded layers of sands, silts, and clays. In general, loose to medium dense fine sand and silty sand layers were encountered within the upper 4 to 6.5 ft at most of the boring and CPT locations. These sand and silty sand layers are generally underlain by interbedded strata of very loose to medium dense silty sands, clayey sands, sandy silts, and very soft to very stiff silty clays, sandy clays, and clayey silts, extending to depths. At depths greater than 33 ft, occasional dense sand layers were encountered at the boring locations.

4.6.3.4 Local Groundwater Conditions

Information pertaining to the occurrence of groundwater within inland portions of Orange County has primarily been obtained from borehole logs prepared during installation of the numerous water wells throughout the area. In the City and surrounding areas, groundwater may occur within the upper 40 to 50 ft of Holocene-age sediments. This water typically occurs within thin layers of silty sand and sand at depths of between 5 and 50 ft below the surface.

Free water was encountered during drilling at all of the boring locations between 5 to 8.5 ft below ground surface. Based on the conditions encountered in the borings, the static groundwater table is considered to be present at a depth of 5 to 6.5 ft. Based on the California Geological Survey (CGS) Open File Report 98-10, the historic high groundwater level for the project site was approximately 11 ft below the ground surface.

4.6.3.5 Fault Systems and Seismic Conditions

A potentially active fault is defined by the State as a fault with a history of movement within Pleistocene time (between 11,000 and 1.6 million years ago [Ma]). The active and potentially active faults are capable of producing potentially strong seismic shaking at the project site. It is anticipated that the project site will periodically experience ground acceleration as a result of earthquakes. The closest mapped active fault to the project site is the Newport-Inglewood Fault, located approximately 5.5 miles southwest of the project site. In addition, several other active faults are located in the vicinity of the project site, including the Unnamed Coyote Hills Fault (approximately 7.3 miles to the north) and the El Modeno Fault (approximately 9.2 miles to the east).

No portion of the project site or larger study area in the Geotechnical Assessment is located within the boundaries of an “Earthquake Fault Zone,” as defined by the State of California in the Alquist-Priolo Earthquake Fault Zoning Act. Furthermore, the Cypress General Plan Safety Element (2001) indicates that no active faults have been identified within City boundaries.

Seismic shaking is characterized by the physical movement of the land surface during and subsequent to an earthquake. Seismic shaking has the potential to cause destruction and damage to buildings and property, including damage resulting from damaged or destroyed gas or electrical utility lines, disruption of surface drainage, blockage of surface seepage and groundwater flow, changes in groundwater flow, dislocation of street alignments, displacement of drainage channels and drains and possible loss of life. In addition, ground shaking can induce several kinds of secondary seismic effects, including liquefaction, differential settlement, and landslides.

The intensity of seismic shaking during an earthquake depends largely on the geologic foundation conditions of the materials composing the upper several hundred feet of the Earth’s surface. The greatest amplitudes and longest durations of ground shaking occur on thick, water-saturated, unconsolidated alluvial sediments, which may lead to liquefaction (as further described below). Ground shaking can also cause ground failure or deformation due to lurching and liquefaction.

Surface fault rupture refers to the displacement of the ground surface along a fault, which can occur during strong earthquakes. The potential for seismic hazards at the project site is a consequence of ground shaking caused by events on nearby active faults. However, as previously discussed, the

project site is not located within a designated Alquist-Priolo Earthquake Fault Zone, so the possibility for surface fault rupture is low. The project site is, however, located approximately 5.5 miles to the northeast of an earthquake fault zone that has been established around the active traces of the Newport-Inglewood Fault.

4.6.3.6 Liquefaction and Lateral Spreading

Liquefaction occurs when saturated, cohesionless soils temporarily lose shear strength (liquefy) due to increased pore water pressures induced by strong ground motion during an earthquake. Intervals of loose sand may, therefore, be subject to liquefaction if these materials are or were to become submerged and also exposed to strong seismic ground shaking. Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause the soils to liquefy and temporarily behave as a dense fluid. This loss of support can produce local ground failure such as settlement or lateral spreading that may damage overlying improvements.

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.

As discussed in the Geotechnical Assessment, the project site is underlain by potentially liquefiable soils. The Safety Element of the City's General Plan also identifies the project site as an area at a potentially high risk of liquefaction.

4.6.3.7 Subsidence

The phenomenon of widespread land sinking, or subsidence, is generally related to substantial overpumping of groundwater or petroleum reserves from deep underground reservoirs. Like most of northern Orange County, the City lies atop the Orange County Groundwater Basin (Orange County Basin). Although slight subsidence has been observed elsewhere in the Orange County Basin in Santa Ana (likely due to groundwater withdrawal) and in the Huntington Beach area (likely due to oil withdrawal), there is no recent history of subsidence in the project vicinity.[1] Groundwater levels and storage in the Orange County Basin are managed by the Orange County Water District (OCWD) in a manner that reduces the potential for land subsidence to occur.

4.6.3.8 Compressible/Collapsible Soils

Compressible soils are soils that consolidate when exposed to new loading, such as Artificial Fill or foundation loads. Soil collapse occurs when soils substantially decrease in volume following an increase in moisture content. The results of the subsurface investigation within the project site, as well as investigations conducted for previous reports, indicate that the majority of the project site is underlain by artificial fill that extends to depths of 2.5 to 4 ft below the surface. Areas of possible fill were also encountered extending to depths of 2.5 to 5.5 ft below the surface.

[1] Metropolitan Water District of Southern California. 2007. Groundwater Assessment Study, Chapter IV – Groundwater Basin Reports, Orange County Basins – Orange County Basin, September.

During the subsurface investigation, native alluvial soils were encountered at the ground surface or beneath the pavements and/or fill materials all of the boring locations and generally consisted of interbedded layers of sands, silts, and clays. In general, loose to medium dense fine sand and silty sand layers were encountered within the upper 4 to 6.5 ft at most of the boring and CPT locations. These sand and silty sand layers are generally underlain by interbedded strata of very loose to medium dense silty sands, clayey sands, sandy silts, and very soft to very stiff silty clays, sandy clays, and clayey silts. At depths greater than approximately 33 ft, occasional dense sand layers were encountered at the boring locations.

4.6.3.9 Paleontological Resources

Results of the literature review indicate that the project site is located within the Peninsular Ranges Geomorphic Province, a 900-mile long northwest-southeast trending structural block that extends from the Transverse Ranges in the north to the tip of Baja California in the south and includes the Los Angeles Basin (CGS 2002; Norris and Webb 1976). The total width of this province is 225 miles, extending from the Colorado Desert in the east, across the continental shelf, to the Southern Channel Islands (Santa Barbara, San Nicolas, Santa Catalina, and San Clemente) in the west (Sharp, 1976). This province is characterized by a series of mountain ranges and valleys that trend in a northwest-southeast direction roughly parallel to the San Andreas Fault Zone (Norris and Webb 1976; Sharp 1976). It contains extensive pre-Cenozoic (more than 66 million years ago [Ma]) igneous and metamorphic rocks covered by a veneer of Cenozoic (66 Ma to Present) sedimentary deposits (Norris and Webb 1976). Within this larger region, the project is located in the Los Angeles Basin, a broad alluvial lowland bounded to the north and east by the San Gabriel and Santa Ana Mountains, respectively, and by the Pacific Ocean to the southwest (Yerkes et al. 1965). The basin is underlain by a structural depression that has discontinuously accumulated thousands of feet of marine and terrestrial deposits since the late Cretaceous (approximately 100.5 Ma) (Yerkes et al. 1965). Over millions of years, the basin has experienced episodes of subsidence, deposition, uplift, erosion, and faulting, all of which have resulted in very complex geology (Yerkes et al. 1965). The surface of the basin slopes gently southwestward toward the ocean, interrupted in various places by low hills and traversed by several large rivers (Sharp 1976; Yerkes et al. 1965), including the Los Angeles River, the Rio Hondo, the San Gabriel River, and the Santa Ana River. Geologic mapping by Saucedo et al. (2016) shows that the entire project area is underlain by Young Alluvium, Unit 2, which is Holocene to late Pleistocene in age (less than 126,000 years ago). This geologic unit and its paleontological sensitivity is described in more detail below. Although not mapped by Saucedo et al. (2016) Artificial Fill is likely present throughout the project site due to previous development. Dates for the geologic intervals referenced in this report are derived from the *International Chronostratigraphic Chart* published by the International Commission on Stratigraphy (Cohen et al. 2019).

Artificial Fill consists of sediments that have been removed from one location and transported to another location by human activity, rather than by natural means. The transportation distance can vary from a few feet to many miles, and composition is dependent on the source and purpose. Artificial Fill will sometimes contain modern debris such as asphalt, wood, bricks, concrete, metal, glass, plastic, and even plant material. While Artificial Fill may contain fossils, these fossils have been removed from their original location and are thus out of stratigraphic context. Therefore, they are not considered important for scientific study, and Artificial Fill has no paleontological sensitivity.

The Young Alluvial Fan Deposits, Unit 2 are Holocene to late Pleistocene in age (less than 126,000 years ago) and consist predominantly of poorly consolidated, poorly sorted, permeable deposits of sand, silt, and clay (Saucedo et al. 2016). These sediments accumulated adjacent to stream and river channels and represent deposition by streams and rivers during flood events (Saucedo et al. 2016). Although Holocene (less than 11,700 years ago) deposits can contain remains of plants and animals, only those from the middle to early Holocene (4,200 to 11,700 years ago; Cohen et al. 2019) are considered scientifically important (Society of Vertebrate Paleontology [SVP] 2010), and fossils from this time interval are not very common. These Holocene deposits overlie older, Pleistocene deposits, which have produced scientifically important fossils elsewhere in the region (Jefferson 1991a, 1991b; Miller 1971; Reynolds and Reynolds 1991; Springer et al., 2009). These older, Pleistocene deposits span the end of the Rancholabrean North American Land Mammal Age (NALMA), which dates from 11,000 to 240,000 years ago (Sanders et al. 2009) and was named for the Rancho La Brea fossil site in central Los Angeles. The presence of *Bison* defines the beginning of the Rancholabrean NALMA (Bell et al. 2004), but fossils from this time also include other large and small mammals, reptiles, fish, invertebrates, and plants (Jefferson 1991a, 1991b; Miller 1971; Reynolds and Reynolds 1991; Springer et al. 2009). There is a potential to find these types of fossils in the older sediments below this geologic unit, which may be encountered below a depth of approximately 10 ft. Therefore, these deposits are assigned a low paleontological sensitivity above a depth of 10 ft and a high sensitivity below that mark.

According to the locality search conducted by the LACM, there are no known fossil localities on the project site. The LACM reports that the project area is underlain by deposits of younger Quaternary alluvium (i.e., Young Alluvium, Unit 2, as mapped by Saucedo et al. [2016]) with older Quaternary deposits at depth. The closest vertebrate locality from the older Quaternary deposits, LACM 3757, is southwest of the project site south of 7th Street and east of Pacific Coast Highway. This locality produced specimens of eagle ray (*Myliobatis*), guitar fish (Rhinobatoidea), white shark (*Carcharodon*), blue shark (*Prionace*), surfperches (*Damalichthys* and *Rhacochilus*), croaker (*Genyonemus*), pond turtle (*Clemmys*), sea duck (*Chendytes*), loon (*Gavia*), dog (*Canis*), sea otter (*Enhydra*), horse (*Equus*), camel (*Hemiauchenia*), and pocket gopher (*Thomomys*). Located southwest of the project site, further west along 7th Street and west of Pacific Coast Highway, a mammoth (*Mammuthus*) was recovered from the locality LACM 6746. To the west-southwest of the project site, locality LACM 7493, near the intersection of Pacific Crest Highway and Grand Avenue, produced a specimen of camel (Camelidae). A copy of the letter describing the locality search results from the LACM is provided in Appendix F.

4.6.4 Regulatory Setting

4.6.4.1 Federal Regulations

There are no federal policies or regulations related to geology and soils that are applicable to the proposed project.

4.6.4.2 State Regulations

Alquist-Priolo Earthquake Fault Zoning Act (1972). The Alquist-Priolo Earthquake Fault Zoning Act of 1972 and updates (California PRC, Section 2621, et seq.) is the principal California State guidance to prevent the construction of habitable structures on the surface trace of active earthquake faults.

If an active fault is found, a structure for human occupancy must be set back from the fault (generally 50 ft). The Alquist-Priolo Earthquake Fault Zoning Act only addresses the hazard of surface fault rupture; it does not consider other earthquake hazards. There are no known earthquake fault zones on or in the near vicinity of the project site; therefore, regulations recommended by the CGS for investigations conducted in such zones do not specifically apply.

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.

Public Resources Code. Section 5097.5 of the 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.

4.6.4.3 Regional Regulations

There are no regional policies or regulations related to geology and soils that are applicable to the proposed project.

4.6.4.4 Local Regulations

City of Cypress Municipal Code. Building and construction in the City are subject to the regulations of the City of Cypress Municipal Code. California Code of Regulations (CCR), Title 24, Part 2, the California Building Code (CBC) (2019), provides minimum standards for building design in the State. Local codes are permitted to be more restrictive than Title 24, but not less restrictive. The procedures and limitations for the design of structures are based on site characteristics, occupancy type, configuration, structural system height, and seismic design category. The seismic ratings used in the CBC are derived from the International Building Code specifications. Most of coastal Southern California, including the project site, is located in Seismic Design Category D. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in the California Occupational Safety and Health Administration (Cal/OSHA) regulations (CCR, Title 8). In addition, the proposed project would adhere to the regulatory standards described in Regulatory Compliance Measure 4.6-1, which includes the seismic and building standards in the City's Building Code, that adopt the CBC with amendments and modifications.

City of Cypress General Plan Conservation/Open Space/Recreation Element. The existing City of Cypress General Plan identifies goals and policies related to paleontological resources. Goal COSR-5 in the Conservation/Open Space/Recreation Element (2000) of the City's General Plan addresses paleontological resources (and potential resources) and indicates that conservation of the resources

and investigation of potential resource areas is an important undertaking for connecting with the community's past.

The following goal and policies apply to the proposed project:

COSR-5 Preserve Cypress' archaeologic and paleontological resources.

COSR-5.1 Update records of resource finds and locations when required.

COSR-5.2 Prior to development in previously undeveloped areas, require strict adherence to the CEQA guidelines for environmental documentation and mitigation measures where development will affect archaeological or paleontological resources.

4.6.5 Thresholds of Significance

The thresholds for geology and soils impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to geology and soils if it would:

Threshold 4.6.1: **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

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

(ii): Strong seismic ground shaking?

(iii): Seismic-related ground failure, including liquefaction?

(iv): Landslides?

Threshold 4.6.2: **Result in substantial soil erosion or the loss of topsoil?**

Threshold 4.6.3: **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-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?**

Threshold 4.6.4: **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property?**

Threshold 4.6.5: **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

Threshold 4.6.6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

4.6.6 Project Impacts

Threshold 4.6.1(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 evidences of known fault? (Refer to Division of Mines and Geology Special Publication 42)

No Impact. According to the California Department of Conservation (DOC) 2010 Fault Activity Map, there are no known earthquake faults that run through the project site, nor is there any other evidence of a known fault that runs through the project site. Therefore, although the proposed project is in a seismically active region, it would not result in any impact related to the rupture of a known earthquake fault, and there would be no impact.

Threshold 4.6.1(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. As with all of Southern California, the project site is subject to strong ground motion resulting from earthquakes on nearby faults. There are several faults in the vicinity of the project site that are capable of producing strong ground motion, including the Newport-Inglewood Fault, the Puente Hills Blind Thrust Fault, the San Joaquin Hills Thrust Fault, the Palos Verdes Fault, and the Whittier Fault. During an earthquake along any of these faults or other faults in the region, seismically induced ground shaking would be expected to occur. The severity of the shaking would be influenced by the magnitude of the earthquake, the distance of the project site to the seismic source, the soil conditions, the depth to groundwater, and the duration of the seismic event.

Peak ground acceleration (PGA) is a measure of earthquake acceleration on the ground and an important input parameter for earthquake engineering. Based on the Geotechnical Assessment, a design-level PGA of 0.54 acceleration of gravity (g) has been calculated for the project site. This acceleration is consistent with other areas in this region of California that are underlain by similar geologic materials and indicates that strong seismic ground shaking generated by seismic activity is considered a potentially significant impact that may affect people or structures associated with the proposed project.

Mitigation Measure 4.6-1 requires the Applicant/Developer to comply with the recommendations of the Geotechnical Assessment, which stipulates appropriate seismic design provisions that shall be implemented with project design and construction. The proposed project would adhere to the adopted City's Building Code, including the seismic standards therein, consistent with Regulatory Compliance Measure 4.6-1. With the implementation of Mitigation Measure 4.6-1 and adherence to

the regulatory standards described in Regulatory Compliance Measure 4.6-1, potential project impacts related to seismic ground shaking would be reduced to a less than significant level.

Threshold 4.6.1(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?

Less Than Significant with Mitigation Incorporated. The secondary effects of seismic activity that are typically considered as potential hazards to a particular site include several types of ground failure. The general types of ground failure that can occur as a consequence of severe ground shaking include landsliding, ground subsidence, ground lurching, and shallow ground rupture, as well as liquefaction-induced vertical settlement, lateral spreading, and surface manifestation of liquefaction. The probability of the occurrence of each type of ground failure depends on the severity of the earthquake, distance from the causative fault, topography, soil and groundwater conditions, and other factors. Of these seismically induced ground failure modes, liquefaction-induced settlement and surface manifestation appear to be the only potential concerns with respect to the proposed project.

Liquefaction can cause settlement of the ground surface, settlement and tilting of engineered structures, flotation of buoyant buried structures, and fissuring of the ground surface. Assessment of liquefaction potential for a particular site requires knowledge of a number of regional and site-specific parameters, including the estimated design earthquake magnitude, the distance to the assumed causative fault, and the associated probable peak horizontal ground acceleration at the site, subsurface stratigraphy, and soil characteristics. Parameters such as distance to causative faults and estimated probable peak horizontal ground acceleration were determined using published references and online computer programs by the United States Geological Survey (USGS). Stratigraphy and soil characteristics were determined by means of a site-specific subsurface investigation combined with appropriate laboratory analysis of representative samples of on-site soils.

The liquefaction potential for the on-site soils was evaluated using data obtained at the four CPT locations. As previously discussed, groundwater was observed at depths of between 4 and 6.5 ft below the ground surface. For purposes of the liquefaction analysis, the groundwater level was assumed to be 5 ft. Therefore, there is potential for liquefaction on the project site.

Many jurisdictions, including the Counties of Orange and Los Angeles, allow structural fortification of slabs and footings to mitigate the adverse effect of up to 4 inches of liquefaction-induced total settlement. Guidelines published by the CGS also suggest that structural mitigation is acceptable where vertical displacements of less than 4 inches are predicted (CGS Special Publication 117A, page 54). If liquefaction-induced settlement would exceed 4 inches, some form of ground improvement is required to reduce the potential total settlement to 4 inches or less. Typical ground improvement techniques include compaction grouting, installation of stone columns, and construction of reinforced earth zones beneath proposed structural areas.

Based on the results of the Geotechnical Assessment, the maximum estimated vertical settlement was calculated to be approximately 3.6 inches for the CPT locations within the project site. This is

within the commonly accepted limitations of structural mitigation described above (i.e., 4 inches). The proposed project does not include the construction of any new building foundations or structures. For the new pavement areas, the guidelines included in the Geotechnical Assessment (Mitigation Measure 4.6-1) will be implemented to ensure a stable subgrade. With the implementation of Mitigation Measure 4.6-1, the potential adverse effects of seismic-related ground failure including liquefaction would be less than significant.

Threshold 4.6.1(iv): Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

No Impact. The project site and vicinity are relatively flat, and the site is not located within a zone of earthquake-induced landslide as mapped by the CGS (1998). Historically, there have been no recorded landslides within the City's boundaries (City of Cypress, 2001, page 4.6-7). No landslides are anticipated as the result of the proposed project, and there would be no impact.

Threshold 4.6.2: Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The ground surface cover surrounding the existing buildings on the project site generally consists of paved parking lots, drive lanes, and loading dock areas, and landscape planters throughout the site. However, the ground surface cover on the north side of the existing office building along Katella Avenue consists of turf grass and in the southeastern portion of the site, east of the existing warehouse building, the ground surface cover consists of exposed soil with sparse to moderate grass and weed growth. The total surface area of these existing unpaved areas is approximately 2 acres. As discussed in Section 4.9, Hydrology and Water Quality, during project construction activities, soil would be exposed and disturbed, drainage patterns would be 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. The Construction General Permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) (Regulatory Compliance Measure 4.9-1, in Section 4.9, Hydrology and Water Quality). The SWPPP would detail Erosion Control and Sediment Control BMPs to be implemented during project construction to minimize erosion and retain sediment on site. With compliance with the requirements of the Construction General Permit and with implementation of the construction BMPs, construction impacts related to on-site erosion would be less than significant, and no mitigation is required.

As discussed in Section 4.9, Hydrology and Water Quality, the project would increase the impervious area of the project site by approximately 0.77 acre, which would increase on-site stormwater flows. Although the project would increase impervious surface area, impervious surface areas associated with development of the project site are not prone to erosion or siltation, because no loose soil would be included in these areas. The remaining acreage on the approximately 22.3-acre project site would consist of pervious surface area, which would contain landscaping that would minimize on-site erosion and siltation by stabilizing the soil. Therefore, on-site erosion impacts would be minimal. For these reasons, operational impacts related to substantial on-site erosion would be less than significant, and no mitigation is required.

Threshold 4.6.3: 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-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?

Landslides and Unstable Slopes

Less Than Significant Impact. Landslides and other forms of mass wasting, including mud flows, 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. Because the project site is located in a relatively flat area, landslides or other forms of natural slope instability do not represent a significant hazard to the project. In addition, as stated above, the site is not within a State-designated hazard zone for an earthquake-induced landslide. Therefore, potential impacts related to landslides would be less than significant, and no mitigation is required.

Lateral Spreading

Less Than Significant Impact. Lateral spreading often occurs on very gentle slopes or flat terrain. The dominant mode of movement is lateral extension accompanied by shear or tensile fracture. This failure is caused by liquefaction and is usually triggered by rapid ground motion, such as that experienced during an earthquake, but can also be artificially induced. When coherent material, either bedrock or soil, rests on materials that liquefy, the upper units may undergo fracturing and extension and may then subside, translate, rotate, disintegrate, or liquefy and flow. The Geotechnical Assessment indicates that lateral spreading is not a potential concern with respect to the proposed project. Therefore, potential impacts related to lateral spreading would be less than significant, and no mitigation is required.

Subsidence

Less Than Significant Impact. Subsidence refers to broad-scale changes in the elevation of land. Common causes of land subsidence are pumping water, oil, and gas from underground reservoirs; dissolution of limestone aquifers (sinkholes); collapse of underground mines; drainage of organic soils; and initial wetting of dry soils (hydrocompaction). Subsidence is also caused by heavy loads generated by large earthmoving equipment. As stated in the Geotechnical Assessment, minor ground subsidence (estimated to be approximately 0.1 ft) is expected to occur in the soils below the zone of removal, due to settlement and the weight of construction equipment. However, this amount of settlement is considered negligible and the project site is not located within an area of known subsidence that may be associated with groundwater, peat loss, or oil extraction. Therefore, the proposed project would not be subject to potential geotechnical hazards related to subsidence, and no mitigation is required.

Liquefaction and Compressible/Collapsible Soils

Less Than Significant with Mitigation Incorporated. As discussed in detail under Threshold 4.6.1(iii) above, implementation of Mitigation Measure 4.6-1 and adherence to the regulatory standards described in Regulatory Compliance Measure 4.6-1 would be required to address the proposed project's impacts with respect to liquefaction and compressible soils. Provided that design and remedial grading and ground improvement (as necessary) are performed in accordance with the

applicable requirements in the CBC (adopted by the City as its Building Code with certain amendments), and current standards of practice in the area, excessive settlement resulting from liquefaction and compression of existing undocumented fill and native alluvial soils on the project site would be reduced to a less than significant level.

Wet Soils

Less Than Significant with Mitigation Incorporated. Due the presence of shallow groundwater, excavations deeper than 5 to 6 ft are likely to encounter groundwater and/or soft, wet soil. Implementation of Mitigation Measure 4.6-1, which requires that the ground stabilization recommendations in the Geotechnical Assessment be implemented during grading and construction, would address soft ground conditions due to shallow groundwater. With implementation of Mitigation Measure 4.6-1, the proposed project's impacts related to wet soils would be less than significant.

Threshold 4.6.4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect substantial risks to life or property?

Less Than Significant Impact. Expansive soils are soils that experience volumetric changes in response to increases or decreases in moisture content. The project site stratigraphy consists of Artificial Fill and Alluvium (SCG 2019). These soil types have low shrink-swell potential and, therefore, are not susceptible to expansion. As stated in the Geotechnical Assessment, based on its very low expansive classification, no design considerations related to expansive soils are considered warranted for the project site. Since the potential for expansive soils is low, the proposed project would not create substantial potential risks to life or property, and there would be less than significant impacts.

Threshold 4.6.5: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The proposed project would not include the use of septic tanks or alternative wastewater disposal systems because sanitary sewer and wastewater facilities are available in the vicinity of the project site. Therefore, the project would have no impact with respect to septic tanks or alternative wastewater disposal systems.

Threshold 4.6.6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant with Mitigation Incorporated. The project site contains Artificial Fill, which has no paleontological sensitivity, and Young Alluvium, Unit 2, which has low paleontological sensitivity from the surface to a depth of 10 ft and high paleontological sensitivity below 10 ft. With a maximum depth of 10 ft, excavation, the proposed project is expected to remain in deposits with no or low paleontological sensitivity. However, in the event that paleontological resources are encountered during construction, Mitigation Measure 4.6-2 would require work in the immediate

area of the discovery to be halted and a qualified paleontologist to assess the discovery. These procedures would mitigate potential impacts to scientifically significant nonrenewable paleontological resources.

4.6.7 Level of Significance Prior to Mitigation

The potential for surface fault rupture, erosion, subsidence, landslides, lateral spreading, and expansive soil is less than significant, and no mitigation is required. The potential impacts related to seismic shaking, liquefaction, and settlement due to compressible and wet soils would be potentially significant prior to mitigation. The proposed project would also have potentially significant impacts on paleontological resources prior to the implementation of mitigation.

4.6.8 Regulatory Compliance Measures and Mitigation Measures

4.6.8.1 Regulatory Compliance Measures

The following regulatory compliance measure is a requirement of the CBC that is applicable to the proposed project and is considered in the analysis of potential impacts related to geology and soils. The City of Cypress considers this requirement to be mandatory; therefore, it is not a mitigation measure.

Regulatory Compliance Measure 4.6-1

California Building Code Compliance Seismic Standards. All structures shall be designed in accordance with the seismic parameters presented in the Geotechnical Assessment prepared for this project (SCG Geotechnical, Inc., 2019) and applicable sections of the most current California Building Code (CBC). Prior to the issuance of building permits for planned structures, the Project Soils Engineer and the City of Cypress Chief Building Official, or designee, shall review building plans to verify that the structural design conforms to the requirements of the Geotechnical Assessment and the City of Cypress Municipal Code.

4.6.8.2 Mitigation Measures

In addition to the regulatory requirements described above, the following mitigation measures would reduce potential impacts related to seismic ground shaking, liquefaction, compressible/ collapsible soils, and paleontological resources to a less than significant level.

Mitigation Measure 4.6-1

Compliance with the Recommendations in the Project Geotechnical Assessment. The Applicant/Developer's construction contractor shall implement the recommendations of the *Geotechnical Investigation, Amazon Distribution Center, SWC Katella Avenue and Holder Street, Cypress, California* (Geotechnical Assessment) (Southern California Geotechnical, Inc. [SCG], December 4, 2019; Geotechnical Assessment)

prepared for the proposed project, as applicable to the satisfaction of the City of Cypress' (City) Chief Building Official or designee.

Additional site testing and final design evaluation shall be conducted by the Project Geotechnical Consultant to refine and enhance these requirements. The Applicant/ Developer shall require the Project Geotechnical Consultant to assess whether the requirements in that report need to be modified or refined to address any changes in the project features that occur prior to the start of grading. If the Project Geotechnical Consultant identifies modifications or refinements to the requirements, the Applicant/Developer shall require appropriate changes to the final project design and specifications. Design, grading, and construction shall be performed in accordance with the requirements of the Cypress Municipal Code and the California Building Code (CBC) applicable at the time of grading, appropriate local grading regulations, and the requirements of the Project Geotechnical Consultant as summarized in a final written report, subject to review by the Cypress Director of Public Works, or designee, prior to commencement of grading activities.

Grading plan review shall also be conducted by the Director of Public Works, or designee, prior to the start of grading to verify that the requirements developed during the geotechnical design evaluation have been appropriately incorporated into the project plans. Design, grading, and construction shall be conducted in accordance with the specifications of the Project Geotechnical Consultant as summarized in a final report based on the CBC applicable at the time of grading and building, and the City's Building Code. On-site inspection during grading shall be conducted by the Project Geotechnical Consultant and the Cypress Director of Public Works/City Engineer, or designee, to ensure compliance with geotechnical specifications as incorporated into project plans. Prior to the final grading permits, the Project Geotechnical Consultant shall submit a Final Testing and Observation Geotechnical Report for Rough Grading to the Cypress Director of Public Works/City Engineer, or designee.

Mitigation Measure 4.6-2

Procedures for Unexpected Paleontological Resources Discoveries. In the event that paleontological resources are encountered, work in the immediate area of the discovery shall be halted and the Applicant/Developer shall retain a professional Paleontologist who meets the qualifications established by the Society of Vertebrate Paleontology to assess the discovery. The qualified, professional Paleontologist shall make recommendations regarding the treatment and disposition of the discovered resources, as well as the need for subsequent paleontological mitigation, which may include, but not be limited to, paleontological monitoring, collection of observed resources, preservation, stabilization and identification of collected resources, curation of resources into a museum repository, and preparation of a monitoring report of findings. The City of Cypress shall ensure that the recommendations from the qualified, professional Paleontologist shall be followed by the Applicant/ Developer.

4.6.9 Level of Significance after Mitigation

With implementation of Regulatory Compliance Measure 4.6-1 and Mitigation Measures 4.6-1 and 4.6-2, all identified potentially significant impacts related to geotechnical hazards and paleontological resources would be reduced below a level of significance.

4.6.10 Cumulative Impacts

Typically, geology and soils impacts are specific to a particular project site and there is little, if any, cumulative relationship between the development of a proposed project and development within a larger cumulative area. Moreover, while seismic conditions are regional in nature, seismic impacts on a given project site are site-specific. For example, development within the project site would not alter geologic events or soil features/characteristics (such as ground shaking, seismic intensity, or soil expansion or compression). Therefore, the proposed project would not affect the level of intensity at which a seismic event on an adjacent site is experienced.

Even if it were appropriate to evaluate cumulative geology and soils impacts, the three related projects closest to the project site are approximately one mile away and are not relevant with respect to cumulative geotechnical impacts. Therefore, it is not anticipated that development of these related projects would have any geotechnical impact on the project, nor would the project have geotechnical impacts on any nearby projects. Therefore, the proposed project and the applicable related projects would not have the potential to cause cumulatively significant adverse 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 Cypress, could contribute to a cumulatively significant impact due to the overall loss of paleontological remains unique to the region. However, each development proposal received by the City is required to undergo environmental review pursuant to the California Environmental Quality Act (CEQA). If there were any potential for significant impacts to paleontological resources or unique geologic features, an investigation would be required to determine the nature and extent of the resources and identify appropriate mitigation measures.

When resources are assessed and/or protected as they are discovered, impacts to these resources are less than significant. As such, implementation of Regulatory Compliance Measure 4.6-1 and Mitigation Measures 4.6-1 and 4.6-2 would ensure that the proposed project, together with cumulative projects, would not result in significant cumulative impacts to unique paleontological resources or unique geologic features.

4.7 GREENHOUSE GAS EMISSIONS

This section provides a discussion of global climate change (GCC), existing regulations pertaining to GCC, and an analysis of greenhouse gas (GHG) emissions associated with the Amazon Facility project (proposed project). This section is based on the *Katella Avenue Amazon Facility Greenhouse Gas Analysis* (GHG Analysis) (Urban Crossroads, July 7, 2020), which is provided in Appendix B of this Environmental Impact Report (EIR).

4.7.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. One comment letter included comments related to GHG emissions.

The letter from Allyssa J. Holcomb (on behalf of Warland Investments Company) received on July 6, 2020, expresses general concern about significant GHG emissions from mobile source emissions. The proposed project's potential to result in significant GHG emissions, including mobile source emissions is discussed under Thresholds 4.7.1 and 4.7.2 below.

4.7.2 Methodology

The proposed project would result in GHG emissions from construction and operational sources. Construction activities would generate emissions at the site from off-road construction equipment, and on roadways as a result of construction-related truck hauling, vendor deliveries, and worker commuting. Operational activities would also generate emissions at the project site from miscellaneous on-site sources, such as heating, and landscaping equipment, and from operational-related traffic. This analysis used the California Emissions Estimator Model Version 2016.3.2 (CalEEMod) to quantify the potential GHG emissions associated with both construction and operation of the proposed project. The CalEEMod output is contained in Appendix B of this EIR.

Guidance from the United States Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), the Southern California Association of Governments (SCAG), and the South Coast Air Quality Management District (SCAQMD), the *Katella Avenue Amazon Facility Traffic Impact Analysis* (Traffic Impact Analysis) (Urban Crossroads, June 12, 2020), and emissions modeling software (specifically, CalEEMod) was used to calculate the GHG emissions from the proposed project.

CalEEMod is a statewide program designed to calculate both criteria and GHG emissions from development projects in California. A description of this model is provided in Section 4.2.2, Methodology, in Section 2.2, Air Quality, of this EIR.

4.7.3 Existing Environmental Setting

Global climate change (GCC) is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other significant changes in climate (e.g., precipitation or wind) that last for an extended period of time. The term "global climate change" is often used interchangeably with the term "global warming," but "global climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures.

Climate change refers to any change in measures of weather (e.g., temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change may result from natural factors (e.g., changes in the sun's intensity), natural processes within the climate system (e.g., changes in ocean circulation), or human activities (e.g., the burning of fossil fuels, land clearing, or agriculture). The primary observed effect of GCC has been a rise in the average global tropospheric[1] temperature of 0.36 degrees Fahrenheit (°F) per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling shows that further warming may occur, which may induce additional changes in the global climate system during the current century. Changes to the global climate system, ecosystems, and the environment of the State could include higher sea levels, drier or wetter weather, changes in ocean salinity, changes in wind patterns, or more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and increased intensity of tropical cyclones. Specific effects in the State might include a decline in the Sierra Nevada snowpack, erosion of the State's coastline, and seawater intrusion in the San Joaquin Delta.

Global surface temperatures have risen by 1.33°F ±0.32°F over the last 100 years. The rate of warming over the last 50 years is almost double that over the last 100 years.[2] The latest projections, based on state-of-the-art climate models, indicate that temperatures in the State are expected to rise 3°F to 10.5°F by the end of the century.[3] The prevailing scientific opinion on climate change is that "most of the warming observed over the last 60 years is attributable to human activities."[4] Increased amounts of carbon dioxide (CO_2) and other GHGs are the primary causes of the human-induced component of warming. The observed warming effect associated with the presence of GHGs in the atmosphere (from either natural or human sources) is often referred to as "the greenhouse effect."[5]

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 GCC are:[6]

- Carbon dioxide (CO_2)
- Methane (CH_4)

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1 The troposphere is the zone of the atmosphere characterized by water vapor, weather, winds, and decreasing temperature with increasing altitude.

2 Intergovernmental Panel on Climate Change (IPCC). 2013. The Physical Science Basis - Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. AR5 Climate Change 2013: The Physical Science Basis. September 2013. Website: https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_all_final.pdf (accessed July 23, 2020).

3 California Energy Commission (CEC). 2006. SB 1368 Emission Performance Standards. September 29, 2006. Website: http://www.energy.ca.gov/emission_standards/ (accessed July 23, 2020).

4 IPCC 2013. op cit.

5 The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse allows heat from sunlight in and reduces the amount of heat that escapes, GHGs like CO_2, CH_4, and N_2O in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, the naturally occurring greenhouse effect is necessary to keep our planet at a comfortable temperature.

6 The GHGs listed are consistent with the definition in AB 32 (Government Code 38505).

- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF_6)

Over the last 200 years, human activities 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 some scientists believe can cause global warming. While GHGs produced by human activities include naturally occurring GHGs (e.g., CO_2, CH_4, and N_2O), some gases (e.g., HFCs, PFCs, and SF_6) are completely new to the atmosphere. Certain other gases (e.g., water vapor) are short-lived in the atmosphere compared to these GHGs, which remain in the atmosphere for significant periods of time and contribute to climate change in the long term. Water vapor is generally excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes (e.g., oceanic evaporation). For the purposes of this analysis, the term "GHGs" will refer collectively to the six gases identified in the bulleted list provided above; however, the GHG Analysis only evaluated GHG emissions of CO_2, CH_4, and N_2O because these gases are the primary contributors to GCC from development projects.

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. GWP is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, 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 metric tons[1] of "CO_2 equivalents" (metric tons [MT] of CO_2e). For example, N_2O is 265 times more potent at contributing to global warming than CO_2. Table 4.7.A identifies the GWP for each GHG analyzed in this EIR.

Table 4.7.A: Global Warming Potential for Selected Greenhouse Gases

Pollutant	Lifetime (Years)	Global Warming Potential (100-year)[1]
Carbon Dioxide (CO_2)	N/A[2]	1
Methane (CH_4)	12.4	28
Nitrous Oxide (N_2O)	121	265

Source: GHG Analysis (Urban Crossroads, July 2020).

[1] The 100-year global warming potential estimates are from the IPCC Fifth Assessment Report. Website: https://www.ipcc.ch/pdf/assessmentreport/ar5/wg1/WG1AR5_Chapter08_FINAL.pdf (accessed July 23, 2020).

[2] CO_2 has a variable atmospheric lifetime and cannot be readily approximated as a single number.

CARB = California Air Resources Board
GHG = greenhouse gas
IPCC = Intergovernmental Panel on Climate Change
N/A = not applicable

[1] A metric ton is equivalent to approximately 1.1 tons.

The following discussion summarizes the characteristics of the six primary GHGs.

4.7.3.1 Carbon Dioxide

In the atmosphere, carbon generally exists in its oxidized form as CO_2. Natural sources of CO_2 include the respiration (breathing) of humans, animals, and plants; volcanic outgassing; 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. The Earth maintains a natural carbon balance, and when concentrations of CO_2 are upset, the system gradually returns to its natural state through natural processes. Natural changes to the carbon cycle work slowly, especially compared to the rapid rate at which humans are adding CO_2 to the atmosphere. Natural removal processes (e.g., photosynthesis by land- and ocean-dwelling plant species) cannot keep pace with this extra input of human-made CO_2, and consequently the gas is building up in the atmosphere. The concentration of CO_2 in the atmosphere has risen approximately 30 percent since the late 1800s.[1]

The transportation sector remained the largest source of GHG emissions in 2016, representing 39 percent of the State's GHG emissions inventory.[2] The largest emissions category within the transportation sector is on-road, which consists of passenger vehicles (cars, motorcycles, and light-duty trucks) and heavy-duty trucks and buses. Emissions from on-road sources constitute more than 92 percent of the transportation sector total. Industry and electricity generation were the State's second- and third-largest categories of GHG emissions, respectively.

4.7.3.2 Methane

CH_4 is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources of CH_4 include fires, geologic processes, and bacteria that produce CH_4 in a variety of settings (most notably, wetlands).[3] Anthropogenic sources include rice cultivation, livestock, landfills and waste treatment, biomass burning, and fossil fuel combustion (e.g., the burning of coal, oil, and natural gas). As with CO_2, the major removal process of atmospheric CH_4—a chemical breakdown in the atmosphere—cannot keep pace with source emissions, and CH_4 concentrations in the atmosphere are increasing.

4.7.3.3 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. N_2O is also a product of the reaction that occurs between nitrogen and oxygen during fuel combustion. Both mobile and stationary combustion sources emit N_2O. The quantity of N_2O emitted varies

1 California Environmental Protection Agency (CalEPA). Climate Action Team Report to Governor Schwarzenegger and the Legislature. Website: http://www.climatestrategies.us/library/library/download/267 (accessed July 23, 2020).

2 CalEPA, Air Resources Board. California GHG Emissions Inventory. Website: https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf (accessed July 23, 2020).

3 United States Environmental Protection Agency (USEPA). 2010. Methane and Nitrous Oxide Emissions from Natural Sources. Website: https://nepis.epa.gov/Exe/ZyPDF.cgi/P100717T.PDF?Dockey=P100717T.PDF (accessed July 23, 2020).

according to the types of fuel, technology, and pollution control devices 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 the State.

4.7.3.4 Hydrofluorocarbons, Perfluorocarbons, Sulfur Hexafluoride, and Nitrogen Triflouride

The fluorinated gases are also referred to as "high global warming potential gases" in the 2017 California Scoping Plan. HFCs are primarily used as substitutes for O_3-depleting substances regulated under the Montreal Protocol.[1] PFCs, NF_3, 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 the State; however, the rapid growth in the semiconductor industry, which is active in the State, has led to greater use of PFCs. However, there are no known project-related emissions of these three GHGs; therefore, these substances are not discussed further in this analysis.

4.7.4 Emissions Sources and 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, national, State, and local GHG emissions inventories. However, because GHGs persist for a long time in the atmosphere, accumulate over time, and are generally well mixed, their impact on the atmosphere and climate cannot be tied to a specific point of emission.

4.7.4.1 Global Emissions

Worldwide emissions of GHGs in 2017 totaled 25.6 billion MT CO_2e.[2] Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change (UNFCCC).

4.7.4.2 United States Emissions

In 2017, the United States emitted approximately 6.456 billion MT CO_2e, down from 7.4 billion MT CO_2e in 2007. United States emissions decreased by 0.5 percent from 2016 to 2017. This decrease was largely driven by a decrease in emissions from fossil fuel combustion, which was a result of multiple factors including a continued shift from coal to natural gas and increased use of renewables in the electric power sector, and milder weather that contributed to less overall electricity use. In 2017, the total United States GHG emissions were approximately 13 percent less than 2005 levels.[3]

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1 The Montreal Protocol is an international treaty that was approved on January 1, 1989, and was designated to protect the O_3 layer by phasing out the production of several groups of halogenated hydrocarbons that are believed to be responsible for O_3 depletion and are also potent GHGs.

2 United Nations Framework Convention on Climate Change (UNFCCC). 2019. GHG Data from UNFCCC. Website: https://unfccc.int/process/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc (accessed July 23, 2020).

3 Ibid.

4.7.4.3 State of California Emissions

According to CARB emission inventory estimates, the State emitted approximately 424 million metric tons of CO_2e (MMT CO_2e) emissions in 2017. This is a decrease of 5 MMT CO_2e from 2016 and below the 2020 target of 431 MMT CO_2e.[1]

The CARB estimates that transportation was the source of approximately 37 percent of the State's GHG emissions in 2017. The transportation sector remains the largest source of GHG emissions, accounting for 40 percent.[2] Followed by electricity generation (both in-state and out-of-state) at 15 percent and industrial sources at 21 percent. The remaining sources of GHG emissions were residential and commercial activities at 9 percent, agriculture at 8 percent, high-GWP gases at 4.3 percent, and recycling and waste at 2 percent.[3]

4.7.5 Regulatory Setting

4.7.5.1 Federal Regulations

The U.S. Environmental Protection Agency (USEPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The USEPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings did not themselves impose any emission reduction requirements, but allowed the USEPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation.[4]

To regulate GHGs from passenger vehicles, USEPA was required to issue an endangerment finding. The finding identifies emissions of seven key GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, NF_3, and SF_6— that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the proposed project's GHG emissions inventory because they constitute the majority of GHG emissions; per SCAQMD guidance, they are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

U.S. Mandatory Reporting Rule for GHGs (2009). In response to the endangerment finding, the USEPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT CO_2e or more per year are required to submit an annual report.

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1 California Air Resources Board (CARB) 2019. GHG Inventory. California Greenhouse Gas Emission Inventory, 2000-2017 Edition. Website: http://www.arb.ca.gov/cc/inventory/data/data.htm (accessed July 23, 2020).

2 Ibid.

3 Ibid.

4 United States Environmental Protection Agency (USEPA). 2009. EPA: Greenhouse Gases Threaten Public Health and the Environment: Science overwhelmingly shows greenhouse gas concentrations at unprecedented levels due to human activity. December 2009. Website: http://yosemite.epa.gov/opa/admpress.nsf/0/08D11A451131BCA585257685005BF252.240 (accessed July 23, 2020).

Update to Corporate Average Fuel Economy Standards (2010/2012). The current Corporate Average Fuel Economy (CAFE) standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers were required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017 to 2025 that will require a fleet average of 54.5 miles per gallon in 2025. However, the USEPA is reexamining the 2017–2025 emissions standards.

USEPA Regulation of Stationary Sources under the Clean Air Act (Ongoing). Pursuant to its authority under the Clean Air Act, the USEPA has been developing regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the USEPA was directed to develop regulations for existing stationary sources as well. However, on June 2019, the USEPA has repealed the Clean Power Plan and implemented the Affordable Clean Energy rule under President Trump's Energy Independence Executive Order.

4.7.5.2 State Regulations

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Orders S-03-05 and B-30-15, Assembly Bill (AB) 32, Senate Bill (SB) 32, and SB 375.

Executive Order S-03-05. Executive Order S-03-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006). Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32, the Global Warming Solutions Act. AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-03-05.

California Air Resources Board 2008 Scoping Plan. The final Scoping Plan was adopted by the CARB on December 11, 2008. The 2008 Scoping Plan identified that GHG emissions in California are anticipated to be 596 MMT CO_2e in 2020. In December 2007, CARB approved a 2020 emissions limit of 427 MMT CO_2e (471 million tons) for the State.[1] In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG

[1] California Air Resources Board (CARB). 2008. *Climate Change Proposed Scoping Plan: A Framework for Change*. October.

emissions levels for large stationary sources that generate more than 25,000 MT CO_2e per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

First Update to the Scoping Plan. CARB completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The First Update to the Scoping Plan, adopted May 22, 2014, highlights California's progress toward meeting the near-term 2020 GHG emissions reduction goals defined in the 2008 Scoping Plan. As part of the update, CARB recalculated the 1990 GHG emissions levels with the updated IPCC 2007 Fourth Assessment Report (AR4) GWP, and the 427 MMT CO_2e 1990 emissions levels and 2020 GHG emissions limits, established in response to AB 32, are slightly higher at 431 MMT CO_2e.[1]

As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the update also addresses the state's longer-term GHG goals in a post-2020 element. The post-2020 element provides a high-level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the state to adopt a midterm target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with or exceeds the trajectory created by statewide goals.[2] CARB identified that reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit.[3]

Executive Order B-30-15. Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions in the state to 40 percent below 1990 levels by year 2030. Executive Order B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in Executive Order S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, Safeguarding California, in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197. In September 2016, Governor Brown signed SB 32 and AB 197, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direct emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

2017 Climate Change Scoping Plan. Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, CARB approved the 2017 Climate Change Scoping Plan Update, which outlines potential regulations

1 CARB. 2014. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006. May 15. Website: http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm (accessed July 23, 2020).

2 Ibid.

3 Ibid.

and programs, including strategies consistent with AB 197 requirements, to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 MMT CO_2e for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.[1]

California's climate strategy will require contributions from all sectors of the economy, including enhanced focus on zero- and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, such as solar roofs, wind, and other types of distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning, to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for GHG reductions at stationary sources complement local air pollution control efforts by the local air districts to tighten criteria air pollutants and toxic air contaminants emissions limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZE buses and trucks.
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZE trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- Continued implementation of SB 375.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to these statewide strategies, the 2017 Climate Change Scoping Plan also identified local governments as essential partners in achieving the state's long-term GHG reduction goals and identified local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends statewide targets of no more than 6 MT CO_2e or less per capita by 2030 and 2 MT CO_2e or less per capita by 2050. CARB recommends that local governments evaluate and adopt robust

[1] CARB. 2017. November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf (accessed July 23, 2020).

and quantitative locally appropriate goals that align with the statewide per capita targets and the state's sustainable development objectives and develop plans to achieve the local goals. The statewide per capita goals were developed by applying the percent reductions necessary to reach the 2030 and 2050 climate goals (i.e., 40 percent and 80 percent, respectively) to the State's 1990 emissions limit established under AB 32. For California Environmental Quality Act (CEQA) projects, CARB states that lead agencies have discretion to develop evidenced-based numeric thresholds (mass emissions, per capita, or per service population)—consistent with the Scoping Plan and the state's long-term GHG goals. To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from vehicle miles traveled (VMT), and direct investments in GHG reductions within the project's region that contribute potential air quality, health, and economic co-benefits. Where further project design or regional investments are infeasible or not proven to be effective, CARB recommends mitigating potential GHG impacts through purchasing and retiring carbon credits.

Senate Bill 375. In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emissions levels by 2020 and a 13 percent per capita reduction from 2005 GHG emissions levels by 2035.[1] The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 MMT CO_2e of reductions by 2020 and 15 MMT CO_2e of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met.[2]

2017 Update to the SB 375 Targets. CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology and recently released another update in February 2018. The updated targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update (for SB 32), while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward

1 CARB. 2010. Staff Report Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375. August.

2 Ibid.

sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks relative to 2005; this excludes reductions anticipated from implementation of state technology and fuels strategies, and any potential future state strategies, such as statewide road user pricing. The proposed targets call for greater per capita GHG emissions reductions from SB 375 than are currently in place, which for 2035 translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted Sustainable Community Strategies (SCSs, discussed below) to achieve the SB 375 targets. As proposed, CARB staff's proposed targets would result in an additional reduction of over 8 MMT CO_2e in 2035 compared to the current targets. For the next round of SCS updates, CARB's updated targets for the SCAG region are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent). CARB anticipates adoption of the updated targets and methodology in 2018 and subsequent SCSs adopted afterwards would be subject to these new targets.[1]

Southern California Association of Governments' (SCAG) 2016–2040 RTP/SCS. SB 375 requires the MPOs to prepare a sustainable communities strategy in their regional transportation plan. For the SCAG region, the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted on April 7, 2016, and is an update to the 2012 RTP/SCS.[2] 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 VMT from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources.

The 2016–2040 RTP/SCS projects that the SCAG region will meet or exceed the passenger per capita targets set in 2010 by CARB. It is projected that VMT per capita in the region for year 2040 would be reduced by 7.4 percent with implementation of the 2016–2040 RTP/SCS compared to a no-plan year 2040 scenario. Under the 2016–2040 RTP/SCS, SCAG anticipates lowering GHG emissions 8 percent below 2005 levels by 2020, 18 percent by 2035, and 21 percent by 2040. The 18 percent reduction by 2035 over 2005 levels represents a 2 percent increase in reduction compared to the 2012 RTP/SCS projection. 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 lifestyles.[3] However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

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1 CARB. 2018. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets. February. Website: https://www.arb.ca.gov/cc/sb375/sb375_target_update_final_staff_report_feb 2018.pdf (accessed July 23, 2020).

2 Southern California Association of Governments (SCAG). 2016, April 7. *Final 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life.* Website: http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx (accessed July 23, 2020).

3 Ibid.

California Building Code: Building Energy Efficiency Standards. Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Building Energy Efficiency Standards, which were recently adopted on May 9, 2018, became effective starting January 1, 2020.

The 2019 standards move towards cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of three stories and less. Four key areas the 2019 standards will focus on include (1) smart residential photovoltaic systems; (2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); (3) residential and nonresidential ventilation requirements; and (4) and nonresidential lighting requirements.[1] Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards while single-family homes will be 7 percent more energy efficient.[2] When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards.[3]

California Building Code: CALGreen. On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "the CALGreen Code") was adopted as part of the California Building Standards Code. The CALGreen Code established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air contaminants. The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011, and were last updated in 2019. The 2019 Standards became effective on January 1, 2020.

4.7.5.3 Regional Regulations

The City is part of the South Coast Air Basin (Basin) and is under the jurisdiction of SCAG and SCAQMD. The City of Cypress is a member city of the SCAG. SCAG's 2016–2040 Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS), adopted April 7, 2016, is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. A GHG consistency analysis was conducted to determine whether or not the proposed project would be consistent with the RTP/SCS.

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1 California Energy Commission (CEC) 2018a. *News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation*. Website: http://www.energy.ca.gov/releases/ 2018_releases/ 2018-05- 09_building_standards_adopted_nr.html (accessed July 23, 2020).

2 CEC. 2018b. *Building Energy and Efficiency Standards Frequently Asked Questions*. Website: http://www. energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf (accessed July 23, 2020).

3 Ibid.

4.7.5.4 Local Regulations

The City of Cypress does not currently have an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

4.7.6 Thresholds of Significance

The thresholds for greenhouse gas emissions impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to GHG emissions if it would:

Threshold 4.7.1: **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Threshold 4.7.2: **Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

4.7.6.1 Regional Emissions Thresholds

The SCAQMD has adopted a significance threshold of 10,000 MT CO_2e per year (MT CO_2e/yr) for permitted (stationary) sources of GHG emissions for which SCAQMD is the designated lead agency. To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting held in September 2010 (Meeting No. 15), SCAQMD proposed to adopt a tiered approach for evaluating GHG emissions for 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 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. SCAQMD, under Option 1, has proposed a "bright-line" screening-level threshold of 3,000 MT CO_2e/yr for all land use types or, under Option 2, the following land-use-specific thresholds: 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 Governor's Office of Planning and Research 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. SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold. The current recommended approach is per capita efficiency targets. SCAQMD is not recommending use of a percent emissions reduction target. Instead, SCAQMD proposes a 2020 efficiency target of 4.8 MT CO_2e per year per service population (MT CO_2e/yr/SP) for project-level analyses and 6.6 MT CO_2e/yr/SP for plan-level projects (e.g., program-level projects such as general plans). The GHG efficiency metric divides annualized GHG emissions by the service population, which is the sum of residents and employees, per the following equation:

  Rate of Emission: GHG Emissions (MT CO_2e/yr) ÷ Service Population

  The efficiency evaluation consists of comparing the project's efficiency metric to efficiency targets. Efficiency targets represent the maximum quantity of emissions each resident and employee in the State of California could emit in various years based on emissions levels necessary to achieve the statewide GHG emissions reduction goals. A project that results in a lower rate of emissions would be more efficient than a project with a higher rate of emissions, based on the same service population. The metric considers GHG reduction measures integrated into a project's design and operation (or through mitigation). The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for the CARB's 2008 Scoping Plan.

For the purpose of this analysis, the proposed project will first be compared to the SCAQMD interim screening level Tier 3 Numerical Screening Threshold of 3,000 MT CO_2e/yr for commercial development rather than the 10,000 MT CO_2e/yr threshold for industrial stationary source emissions. This is because the 3,000 MT CO_2e/yr threshold is more conservative and appropriate for industrial and warehouse land use development projects. If it is determined that the proposed project is estimated to exceed this screening threshold, it will then be compared to the SCAQMD-recommended efficiency-based threshold of 4.8 MT CO_2e/yr/SP in 2020, and 4.3 MT CO_2e/yr/SP in 2021.

4.7.7 Project Impacts

Threshold 4.7.1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. During construction of the proposed project, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses 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.

Construction related emissions are expected from the following construction activities:

- Demolition
- Site Preparation
- Grading
- Paving
- Architectural Coating

As described in the Project Description, construction of the proposed project is expected to commence in January 2021 and would last through September 2021. This construction schedule represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[1]

For construction phase project emissions, GHGs are quantified and amortized over the life of the project. To amortize the emissions over the life of the project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 4.7.B.

Table 4.7.B: Amortized Annual Construction Emissions

Year	Emissions (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2e[1]
2021	304.11	0.07	0.00	305.78
Total	**411.11**	**0.10**	**0.00**	**413.59**
Amortized Construction Emissions (MT CO_2e)	**13.70**	**0.00**	**0.00**	**13.79**

Source: GHG Analysis (Urban Crossroads, July 2020).

[1] CalEEMod reports the most common GHGs emitted during the construction process for development projects, which include CO_2, CH_4, and N_2O. These GHGs are then converted into the CO_2e by multiplying the individual GHG by the GWP.

CalEEMod = California Emissions Estimator Model
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHGs = greenhouse gases
GWP = global warming potential
MT CO_2e = metric tons of carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide

[1] As shown in the CalEEMod User's Guide Version 2016.3.2, Section 4.3 "OFFROAD Equipment", as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

Operational activities associated with the proposed project would result in emissions of CO_2, CH_4, and N_2O from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- On-Site Cargo Handling Equipment Emissions
- Water Supply, Treatment, and Distribution
- Solid Waste

4.7.8 Operational GHG Emissions

4.7.8.1 Area Source Emissions

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/ grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

4.7.8.2 Energy Source Emissions

Combustion Emissions Associated with Natural Gas and Electricity. GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting.[1] GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. It should be noted that for the proposed project, CalEEMod default parameters were used.

Title 24 Energy Efficiency Standards. California's Energy Efficiency Standards for Residential and Nonresidential Buildings was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity. The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020. The CEC anticipates that nonresidential buildings will use approximately 30 percent less energy. The CalEEMod defaults for Title 24 – Electricity and Lighting Energy were reduced by 30 percent in order to reflect consistency with the 2019 Title 24 standard.

[1] The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

4.7.8.3 Mobile Source Emissions

The project-related GHG emissions derive primarily from vehicle trips generated by the project. Trip characteristics available from the Traffic Impact Analysis (Urban Crossroads, June 2020) were used in the GHG Analysis. Per the Traffic Impact Analysis, the proposed project is expected to generate a total of approximately 2,490 vehicular trips per day (1,245 inbound and 1,245 outbound). Some of these trips would be taken using passenger cars while others would be truck trips. It is assumed that each vehicle type would have a different trip length. Two separate model runs were utilized for cars and trucks in order to more accurately model emissions resulting from passenger car and truck operations. Refer to the GHG Analysis for additional information regarding the specific vehicle type mix and the trip length assumptions for the vehicle types that were used in the CalEEMod model runs.

4.7.8.4 On-Site Cargo Handling Equipment Emissions

It is common for industrial warehouse buildings to require cargo-handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck, which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. The cargo handling equipment is assumed to have a horsepower (hp) range of approximately 175 hp to 200 hp. Based on the square footage of warehouse building space included in the proposed project, the GHG Analysis modeled one 200 hp compressed natural gas or gasoline-powered yard tractor operating 4 hours per day for 365 days a year as part of the on-site operational equipment.

4.7.8.5 Water Supply, Treatment and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of water. Unless otherwise noted, CalEEMod default parameters were used.

Solid Waste. Industrial land uses result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste from the proposed project were calculated by CalEEMod using default parameters.

4.7.8.6 Existing GHG Emissions

As previously stated, the site is currently occupied by the former Mitsubishi Motors Corporation, which includes a 150,000 sf warehouse, a 180,000 sf corporate headquarters office building, and 70,000 sf of research and development buildings. The estimated GHG emissions from the existing development on the project site are summarized in Table 4.7.C.

Table 4.7.C: Existing GHG Emissions

Emission Source	Emissions (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2e
Area Source	0.01	3.00E-05	0.00	0.01
Energy Source	1,466.59	0.06	1.40E-02	1,472.02
Mobile Source (Passenger Car)	2,024.26	0.05	0.00	2,025.44
Mobile Source (Truck)	701.38	0.05	0.00	702.62
Waste	75.82	4.48	0.00	187.83
Water Usage	449.76	2.60	0.06	533.87
Total CO_2e (All Sources)	**4,921.79**			

Source: GHG Analysis (Urban Crossroads, July 2020).
CalEEMod = California Emissions Estimator Model
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
MT/yr = metric tons per year
N_2O = nitrous oxide

4.7.8.7 Project GHG Emissions

The annual GHG emissions associated with the operation of the proposed project are summarized in Table 4.7.D. Table 4.7.D also provides a comparison of the existing GHG emissions on the project site against those under the proposed project. As shown in Table 4.7.D, the proposed project would generate 6,356.94 MT CO_2e/yr. By subtracting out the existing GHG emissions of 4,921.79 MT CO_2e/yr, the project's net GHG emissions would be 1,435.15 MT CO_2e/yr. As such, the proposed project would not exceed the SCAQMD's recommended numeric threshold of 3,000 MT CO_2e if it were applied. Thus, the proposed project does not have the potential to result in a cumulatively considerable impact with respect to GHG emissions.

Table 4.7.D: Project GHG Emissions

Emission Source	Emissions (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2e
Annual construction-related emissions amortized over 30 years	13.70	0.00	0.00	13.79
Area Source	0.03	8.00E-05	0.00	0.03
Energy Source	212.81	0.01	2.03E-03	213.62
Mobile Source (Passenger Car)	4,516.53	0.10	0.00	4,519.15
Mobile Source (Truck)	1,302.27	0.12	0.00	1,305.31
On-Site Equipment	50.84	0.02	0.00	51.25
Waste	27.67	1.64	0.00	68.55
Water Usage	149.75	1.10	0.03	185.25
Total CO_2e (All Sources)	**6,356.94**			
Existing Emissions	***4,921.79***			
Net Emissions (Project – Existing)	**1,435.15**			

Source: GHG Analysis (Urban Crossroads, July 2020).
CalEEMod = California Emissions Estimator Model
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
MT/yr = metric tons per year
N_2O = nitrous oxide

Threshold 4.7.2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The City, as a Lead Agency, may assess the significance of GHG emissions by determining a project's consistency with a local GHG reduction plan that qualifies under Section 15183.5 of the *State CEQA Guidelines*. The City of Cypress has not adopted a GHG reduction plan. In addition, the City has not completed the GHG inventory, benchmarking, and goal-setting process required to identify a reduction target and to take advantage of the streamlining provisions contained in the *State CEQA Guidelines* amendments adopted for SB 97. Since no other local or regional climate action plan is in place, the project is assessed for its consistency with CARB's Scoping Plan below.

Senate Bill 32/2017 Scoping Plan Consistency. The 2017 Scoping Plan Update reflects the 2030 target of a 40 percent reduction in GHG emissions below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The project would not conflict with any of the provisions of the 2017 Scoping Plan as any regulations adopted would apply directly or indirectly to the project. In addition, the project supports five of the action categories in the 2017 Scoping Plan, including: supporting the implementation of SB 350 by 2030, implementing mobile source emission reduction strategies (cleaner technology and fuels), implementing the California Sustainable Freight Action Plan, implementing the Short-Lived Climate Pollution Strategy by 2030, and developing an Integrated Natural and Working Land Implementation Plan by 2018.

Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions levels to 40 percent below 1990 levels by 2030. Therefore, the proposed project would be consistent with the CARB Scoping Plan, and impacts are considered less than significant.

4.7.9 Level of Significance Prior to Mitigation

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

4.7.10 Regulatory Compliance Measures and Mitigation Measures

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

4.7.11 Level of Significance after Mitigation

The proposed project would not result in any significant impacts related to GHG emissions.

4.7.12 Cumulative Impacts

Cumulative impacts are the collective impacts of one or more past, present, or future projects, that when combined, result in adverse changes to the environment. Climate change is a global environmental problem in which: (a) any given development project contributes only a small portion of any net increase in GHGs, and (b) global growth is continuing to contribute large amounts of GHGs across the world. Land use projects may contribute to the phenomenon of global climate change in

ways that would be experienced worldwide, and with some specific effects felt in California. However, no scientific study has established a direct causal link between individual land use project impacts and global warming.

The analysis of impacts related to GHG emissions is inherently cumulative. The proposed project would have no conflict with applicable statewide and regional climate action measures. Therefore, GHG emissions impacts associated with the proposed project would be less than significant.

4.8 HAZARDS AND HAZARDOUS MATERIALS

This section describes known and potential hazards and hazardous materials conditions at the Amazon Facility project (proposed project) site and in the surrounding area, related potentially significant adverse public health impacts anticipated as a result of the proposed project, and addresses the proposed impacts with consideration of local, State, and federal regulations and policies and provides recommended measures pursuant to California Environmental Quality Act (CEQA).

The hazards and hazardous materials analysis in this section is based on the following project-specific technical report: the *Phase I Environmental Site Assessment Report* (ESA) (2019), prepared by Partner Engineering and Science, Inc. (Partner) in August 2019. The findings of this report are summarized, and the complete report is contained in Appendix G.

4.8.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. None of the comment letters included comments related to hazards and hazardous materials.

4.8.2 Methodology

To assess the impacts of the proposed project with respect to hazardous materials and wastes, Partner performed a Phase I ESA of the project site in accordance with the scope of work and limitations of ASTM Standard Practice E1527-13 and the U.S. Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312). The Phase I ESA used the following methodology:

4.8.2.1 Background Research and Data Review

Partner performed a records review for the project site and surrounding properties in an effort to identify potential Recognized Environmental Conditions (RECs) in connection with the project site and assess potential concerns associated with the migration of hazardous substances to the project site from off-site sources. An REC refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The records review included reasonably ascertainable historical data, which can be helpful in identifying the past uses of the project site and surrounding areas, as they may relate to the environmental condition of the project site.

4.8.2.2 Site Reconnaissance

On July 12, 2019, Partner visually assessed the project site for potential RECs, including, but not limited to, hazardous substances and petroleum products used or stored at the site; potential underground storage tanks; aboveground storage tanks; evidence of releases; polychlorinated biphenyls (PCBs); strong, pungent, or noxious odors; pools of liquid; drains, sumps, and clarifiers; pits, ponds, and lagoons; and stressed vegetation. Partner was accompanied during the site

reconnaissance by a representative of the prospective property purchaser's team and provided information pertaining to the current operations and maintenance of the project site.[1]

4.8.3 Existing Environmental Setting

The project site was recently occupied by Mitsubishi Motors of America, which used the property for commercial offices, vehicle design and testing, service training, and auto parts warehousing and distribution. On-site operations consist of typical office, administrative, classroom instruction, vehicle display, hands-on vehicle service training, warehouse storage and distribution, and recreational activities. Small quantities of motor oil and lubricants, fuel, and maintenance and retail products were used and stored on site at the time that the Phase I ESA was prepared. In addition to the existing structures, the project site is also improved with asphalt-paved parking, loading, and storage, associated landscaping, drainage features, tennis courts, two clarifiers, and at least one diesel-fueled emergency electrical generator. The project site is surrounded by office buildings, commercial buildings, and residential uses.

According to aerial photographs, topographic maps, and a City of Cypress (City) directory obtained from Environmental Data Resources, Inc. (EDR), the project site was undeveloped from at least 1928 through 1947. The project site appears to have been used for agricultural purposes in 1947 and the site was vacant from at least 1947 through 1963. The northeastern corner of the project site was improved with a pen or structure sometime between 1963 and 1989 and the site was developed with the existing buildings, parking, tennis courts, and landscaped areas by 1989.

4.8.4 Regulatory Setting

Hazards and hazardous materials are subject to numerous federal, State, and local laws and regulations intended to protect health, safety, and the environment. The USEPA, California EPA (Cal/EPA), the California Department of Toxic Substance Control (DTSC), the Santa Ana Regional Water Quality Control Board (RWQCB), and the County of Orange are the primary agencies responsible for enforcing these regulations. Local regulatory agencies enforce many federal and State regulations through the Certified Unified Program Agency (CUPA) program.

4.8.4.1 Federal Regulations

Major federal laws and issue areas include the following statutes and regulations:

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.

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 (PCB), asbestos-containing materials (ACM), and lead-based paint.

[1] The Phase I ESA was completed as part of the due diligence process for a potential real estate transaction involving the project site.

United States Department of Transportation (USDOT) Regulations, Title 49 CFR. U.S. DOT, in conjunction with the U.S. EPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to safe storage and transportation of hazardous materials. The Code of Federal Regulations (CFR) 49, 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials.

Federal Air Regulations, Part 77. The Federal Aviation Administration (FAA) is responsible for the review of construction activities that occur in the vicinity of airports. Its role in reviewing these activities is to ensure that new structures do not result in a hazard to navigation. The regulations in the Federal Air Regulations (14 CFR, Part 77) are designed to ensure that no obstructions in navigable air space are allowed to exist that would endanger the public. Federal Air Regulations Part 77 identifies the maximum height at which a structure would be considered an obstacle at any given point around an airport. The extent of the off-airport coverage that needs to be evaluated for tall structure impacts can extend miles from an airport facility. In addition, Federal Air Regulations Part 77 establishes standards for determining whether objects constructed near airports will be considered obstructions in navigable airspace, sets forth notice requirements of certain types of proposed construction or alterations, and provides for aeronautical studies to determine the potential impacts of a structure on the flight of aircraft through navigable airspace.

4.8.4.2 State Regulations

State Assembly Bill 2948. In response to the growing statewide concern of hazardous waste management, State Assembly Bill 2948 (Tanner 1986) enacted legislation authorizing local governments to develop comprehensive hazardous waste management plans. The intent of each plan is to assure that adequate treatment and disposal capacity is available to manage the hazardous wastes generated within its jurisdiction.

California Occupational Safety and Health Administration (Cal/OSHA) Regulations. Cal/OSHA is responsible for developing and enforcing workplace safety standards and assuring 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.

Cortese List Statute (California Government Code, §65962.5). This regulation requires the California Department of Toxic Substances Control to compile and maintain lists of potentially contaminated sites throughout the State, and includes the Hazardous Waste and Substances Sites List. The overall list is called the "Cortese" List.

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.

4.8.4.3 Regional Regulations

There are no regional regulations applicable to the proposed project.

4.8.4.4 Local Regulations

Certified Unified Program Agency. Senate Bill 1082 provides for the designation of a CUPA that would be responsible for the permitting process and collection of fees. 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
- Hazardous Waste Generator and On-Site Hazardous Waste Treatment (tiered permitting) Programs

In Orange County, the Environmental Health Division of the Orange County Health Care Agency is designated as the CUPA responsible for implementing the above-listed program elements. The laws and regulations that established these programs require that businesses that use or store certain quantities of hazardous materials submit a Hazardous Materials Business Emergency Plan (HMBEP) that describes the hazardous materials usage, storage, and disposal required by the CUPA.

As the CUPA, the Environmental Health Division of the Orange County Health Care Agency coordinates five programs regulating hazardous materials and hazardous wastes in Orange County, which include the following:

- **Orange County Health Agency – Environmental Health Division Hazardous Waste**
  - Underground Storage Tanks (UST)
  - Aboveground Storage Tanks (AST)
- **Orange County Fire Authority**
  - Hazardous Materials Disclosure (HMD)
  - Business Plan
  - California Accidental Release Program (CalARP)

4.8.5 Thresholds of Significance

The thresholds for hazards and hazardous materials impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist.* The proposed project may be deemed to have a significant impact with respect to hazards and hazardous materials if it would:

Threshold 4.8.1: **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Threshold 4.8.2: **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 4.8.3: **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Threshold 4.8.4: **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, would it create a significant hazard to the public or the environment?**

Threshold 4.8.5: **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 for people residing or working in the project area?**

Threshold 4.8.6: **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Threshold 4.8.7: **Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

4.8.6 Project Impacts

Threshold 4.8.1: **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.

Construction. Construction of the proposed project would temporarily increase the regional transport, use, and disposal of construction-related hazardous materials and petroleum products (e.g., diesel fuel, lubricants, paints and solvents, and cement products containing strong basic or acidic chemicals). These materials are commonly used at construction sites, and the construction activities would be required to comply with applicable State and federal regulations for proper transport, use, storage, and disposal of excess hazardous materials and hazardous construction waste. In addition, Regulatory Compliance Measures 4.9-1 and 4.9-2 (refer to Section 4.9, Hydrology and Water Quality, of this EIR) require compliance with the waste discharge permit requirements to avoid potential impacts to water quality due to spills or runoff from hazardous materials used during construction. Therefore, with adherence to the regulatory standards included in Regulatory Compliance Measures 4.9-1 and 4.9-2, impacts related to the routine transport, use, or disposal of hazardous materials during construction would be less than significant.

Operation. Operation of the proposed distribution center would involve the use of materials common to all urban developments that are labeled hazardous, such as solvents and commercial cleansers and petroleum products and would include the limited use of pesticide and herbicides for landscape maintenance. Trucks accessing the businesses on site would contain oil and gasoline, to power their engines, which could have the potential to result in minor releases of such substances through drips or leaks from truck loading areas. The proposed project's uses are not anticipated to be associated with major hazardous materials and would not create unusually high quantities of hazardous waste.

The Orange County Fire Authority (OCFA) Hazardous Material Division and the Orange County Environmental Health Department both identify types and amounts of waste generated in Orange County and establish programs for managing waste. The OCFA maintains a Hazardous Material Management Plan, which assures that adequate treatment and disposal capacity is available to manage the hazardous waste generated within the County and address issues related to the disposal, handling, processing, storage, and treatment of local hazardous materials and waste products.

The proposed project would be reviewed by the OCFA for hazardous material use, safe handling, and storage of materials. Prior to the issuance of grading permits, conditions of approval would be applied to the proposed project by the OCFA to reduce hazardous material impacts and insure that any hazardous waste that is generated on site would be transported to an appropriate disposal facility by a licensed hauler in accordance with State and federal law. Therefore, implementation of the proposed project would result in less than significant impacts related to the routine transport, use, or disposal of hazardous materials; no mitigation is required.

Threshold 4.8.2: 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. Operation of the proposed project would include the brief storage and transport of traditional consumer products that could contain minimal amounts of hazardous substances such as petroleum products, pesticides, fertilizer, paints, solvents, and cleaning products. The proposed project may also potentially store and transport car batteries and lithium batteries. These products and substances could create a potential for explosion or accidental release of hazardous materials into the environment. However, the proposed project is a last-mile logistics facility and would accept and sort packages and then send them out for delivery resulting in short storage times for these products at the facility. Therefore, the potential for release of hazardous materials is considered to be negligible given that all materials are prepackaged in limited quantities for retail consumption and use, and a release is likely to be easily contained.

As described previously in Section 4.8.4, Regulatory Setting, transportation, storage, and disposal/ recycling of hazardous products are extensively regulated at the local, State, and federal levels. As with any commercial operation, hazardous wastes produced on site are subject to requirements associated with accumulation time limits, proper storage locations and containers, and proper labeling. Additionally, for removal of hazardous waste from the site, hazardous waste generators are

required to use a certified hazardous waste transportation company, which must ship hazardous waste to a permitted facility for treatment, storage, recycling, or disposal.

Any hazardous materials on site would be handled in accordance with all applicable regulations, including containment, reporting, and remediation requirements, in the event of a spill or accidental release. Compliance with applicable regulations would ensure that potential hazardous material impacts associated with the operation of the proposed project would be less than significant; no mitigation is required.

Threshold 4.8.3: 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. There are no schools located within 0.25 mile of the project site. Trident University is located approximately 0.5 mile northwest of the project site, Look Who's Learning Preschool is located approximately 0.8 mile southwest of the project site, and Patton Elementary School is located approximately 0.7 mile southeast of the project site. In addition, the proposed project's uses would not pose a significant threat of hazardous emissions or significant handling of hazardous materials or substances. Therefore, impacts on schools would be less than significant; no mitigation is required.

Threshold 4.8.4: 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?

Less Than Significant with Mitigation Incorporated. Database searches of the project site, including a GeoTracker search and a search of Superfund sites, determined that the project site is not included on a list of hazardous materials sites that could create a significant hazard to the public or the environment and is not a recorded Superfund site. On June 26, 2019, as part of the Phase I ESA, a government records database search was conducted to identify any properties of potential environmental concern within a 1-mile radius of the project site. The project site was identified as a Leaking Underground Storage Tank (LUST), UST, California Hazardous Material Incident Report System (CHMIRS), Historical UST, Historical CORTESE, CERS, RCRA-SQG, FINDS and ECHO site in the regulatory database reports. The Phase I ESA also identified several listings for off-site adjacent or nearby properties on databases potentially indicative of a contamination concern. However, the listings do not include any RECs or Controlled Recognized Environmental Conditions (CRECs), and only include Historical Recognized Environmental Conditions (HRECs), which refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the project site and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

Additionally, the Phase I ESA identified two environmental issues, which are not considered RECs. These environmental issues include:

- The past operation of spray booths, emergency generators, and at least one in-ground hydraulic lift in the training center and research and design buildings, and hydraulic elevators and vehicle display turntables at the office building and warehouse. A groundwater monitoring well was reported installed adjacent to the former in-ground lift and no evidence of releases was reported. No records of maintenance or removal of these features were provided or found in agency files. The hydraulic lift and hydraulic elevators are not suspected to contain PCBs based on the date of construction. In addition, hydraulic fluid is known to have a low mobility and is typically contained within a few feet of the surface. Based on the date of construction, the operation of the vehicle lift and turntable and elevator do not appear to represent a significant environmental concern at this time considering the existing land use. However, it should be noted that upon redevelopment, the proper decommissioning of the hydraulic lift(s), if remaining intact, which may include collection of soil samples, may be required by local regulatory agencies.

- Two in-ground clarifiers located adjacent to the training and design buildings. Records indicating the 2014 removal of one clarifier from 6430 Katella Avenue were found; however, the use and status of the two clarifiers observed during the site reconnaissance are not known. One of these clarifiers was evaluated during previous soil and groundwater investigations and no evidence of a release was found from the unit. It is likely that these features were used to treat mop water and/or storm water prior to entering the municipal sewer system. Significant environmental concerns with the current operations in the vicinity of these features were not observed during the site visit. The clarifiers have the potential to impact the subsurface of the project site should the systems become compromised. The clarifiers do not appear to represent a significant environmental concern at this time; however, it should be noted as these systems age, the potential for a release increases. The clarifiers should be periodically inspected for integrity during routine servicing to ensure that they remain in good condition. In addition, it should be noted that upon redevelopment and/or a change in use of the project site, the proper decommissioning of the clarifiers, which may include the collection of soil samples, may be required by local regulatory agencies.

The Phase I ESA concluded that there is no evidence of RECs in connection with the project site; however, HRECs and environmental issues were identified. Although HRECs and environmental issues were identified, the Phase I ESA did not recommend any further investigation of the project site. However, as stated above, upon redevelopment of the project site, the proper decommissioning of the hydraulic lift(s) and clarifiers, if remaining intact, which may include collection of soil samples, may be required by local regulatory agencies. A lack of maintenance and proper decommissioning procedures could result in potentially significant impacts related to hazardous conditions on the project site. Therefore, the proposed project is required to implement Mitigation Measure 4.8-1, which requires periodic inspection of hydraulic lift(s) and clarifiers during routine service and adherence to all local regulatory agency requirements related to the proper decommissioning of those facilities, which may include soil sampling. With implementation of Mitigation Measure 4.8-1, impacts related to hazardous materials sites would be reduced to less than significant.

Threshold 4.8.5: 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 for people residing or working in the project area?

Less Than Significant Impact. The project site is located approximately 0.6 mile east of the Joint Forces Training Base (JFTB) Los Alamitos. The facilities at JFTB Los Alamitos include two runways and associated taxiways, ramp space, and hangars. According to the Orange County Airport Land Use Commission's 2016 *Airport Environs Land Use Plan* (AELUP) *for Joint Forces Training Base Los Alamitos*, the project site is located in the Federal Aviation Administration's (FAA) Part 77 Notification Area (Exhibit D1) and the AELUP height restriction zone for JFTB Los Alamitos (Exhibit D2).[1] Height limitations are imposed on projects within a height restriction zone so that structures or trees (1) do not obstruct the airspace required for take off, flight, or landing of aircraft at an airport, or (2) are not otherwise hazardous to the landing or taking off of aircraft.

Implementation of the proposed project would not result in a safety hazard for people working in the project area because the project would reuse the existing warehouse, retain the existing office building along Katella Avenue, and demolish the remaining buildings on the project site. The proposed project does not include the construction of any new structures and, therefore, would not need to comply with FAA standards and requirements that require the FAA be notified of any proposed structure(s) that would penetrate the 100 to 1 imaginary surface that surrounds the runway at JFTB Los Alamitos. Therefore, implementation of the proposed project would result in less than significant impacts related to safety hazards for people working in the project area; no mitigation is required.

Threshold 4.8.6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The project site is not located along an emergency evacuation route.[2] Therefore, implementation of the proposed project would not interfere with the adopted emergency response plan and/or the emergency evacuation plan. No impact would occur; no mitigation is required.

Threshold 4.8.7: 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. The project site is located within a fully urbanized area. There are no wildlands adjacent or in the vicinity of the project site, and the project site is not designated as a Fire Hazard Severity

1 Orange County Airport Land Use Commission. 2016. *Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos*. Website: http://www.ocair.com/commissions/aluc/docs/JFTB-AELUP2016ProposedFINAL.pdf (accessed June 26, 2020).

2 City of Cypress. 2001. General Plan, Safety Element, Emergency Evacuation Routes map (Exhibit SAF-5), October 2, 2001.

Zone on the Statewide CAL FIRE Map.[1] Therefore, there would be no risk of loss, injury, or death involving wildland fires. No impact would occur, and no mitigation is required.

4.8.7 Level of Significance Prior to Mitigation

Impacts resulting from implementation of the proposed project would be significant prior to mitigation.

4.8.8 Regulatory Compliance Measures and Mitigation Measures

4.8.8.1 Regulatory Compliance Measures:

No regulatory compliance measures related to hazards and hazardous materials are applicable to the proposed project.

4.8.8.2 Mitigation Measure:

Mitigation Measure 4.8-1 If the clarifiers are left intact and functional, the Applicant/ Developer shall periodically inspect them during routine service to ensure that they remain in good condition. If the hydraulic lift(s) and/or clarifiers on the project site are left remaining intact, the Applicant/Developer shall adhere to all local regulatory agency requirements related to the proper decommissioning of those facilities, which may include soil sampling.

4.8.9 Level of Significance after Mitigation

Mitigation Measure 4.8-1 would reduce potential impacts related to hazards materials sites to a less than significant level. No significant and unavoidable impacts related to hazards and hazardous materials would occur with implementation of this mitigation measure. After mitigation has been implemented, all anticipated impacts related to hazards and hazardous materials would be considered less than significant.

4.8.10 Cumulative Impacts

The project vicinity is largely urbanized with residential, commercial, and industrial uses. As the area continues to develop, the addition of more development could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; therefore, cumulative development could result in potentially significant impacts regarding hazardous materials.

Projects considered part of the cumulative condition include Related Project Nos. 5, 16, 17, and 26 listed in Table 4.A, Summary of Related Projects, in Chapter 4.0, Existing Setting, Environmental Analysis, Impacts, and Mitigation Measures. Related Project No. 5 is the approved Cypress City Center project located west of the project site and includes 251 units of apartments, 20,800 square feet (sf) of retail, a 120-room hotel, and a 10-screen multiplex movie theater. Related Project No. 16

[1] California Department of Forestry and Fire Protection (CAL FIRE). 2011. Fire Hazard Severity Zones in LRA. Website: https://osfm.fire.ca.gov/media/6739/fhszl_map30.pdf.pdf (accessed June 26, 2020).

is a mixed-use development located southwest of the project site, and includes a 4,241 sf automatic car wash, 1,870 sf drive-through restaurant, 2,700 sf sit-down restaurant, and a 2,846 sf movie theater. Related Project No. 17 is a commercial development to the southeast of the project site and includes a 36,763 sf food manufacturing facility. Related Project No. 26 is a residential project to the northeast of the project site and includes 40 single-family homes.

For the proposed project, impacts due to hazardous materials would be less than significant. Although some of the related projects listed also have potential impacts associated with hazardous materials, the environmental concerns associated with hazardous materials are site specific. Each project is required to address any issues related to hazardous material or wastes. Federal, State, and local regulations require mitigation to protect against site contamination by hazardous materials. Therefore, there would be no cumulative hazardous materials impacts.

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4.9 HYDROLOGY AND WATER QUALITY

This section evaluates the potential impacts to hydrology and water quality conditions from implementation of the Amazon Facility project (proposed project). The analysis in this section is based in part on the *Preliminary Water Quality Management Plan* (WQMP) (raSmith 2020) (Appendix H), the *Preliminary Hydrology and Hydraulic Report* (raSmith 2020) (Appendix I), and the *Limited Geotechnical Investigation* (Geotechnical Investigation) (Southern California Geotechnical 2019) (Appendix E) that were prepared for the proposed project and are included in this Environmental Impact Report (EIR).

4.9.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. No comment letters included comments related to Hydrology and Water Quality.

The letter from the California Department of Transportation (Caltrans) District 12 noted that work within the State Right of Way must conform to Caltrans Standard Plans and Standard Specifications for Water Pollution Control. The proposed project's potential to violate any water quality standards or waste discharge requirements is discussed under Threshold 4.9.1 below.

4.9.2 Existing Environmental Setting

4.9.2.1 Watersheds

The project site is located in the Anaheim Bay-Huntington Harbour Watershed (Anaheim Bay Watershed). The Anaheim Bay Watershed covers 80.35 square miles (sq mi) in northwestern Orange County, and includes portions of the cities of Anaheim, Cypress, Fountain Valley, Garden Grove, Huntington Beach, Los Alamitos, Santa Ana, Seal Beach, Stanton and Westminster.[1]

The project site is located within the jurisdictional boundary of the Santa Ana Regional Water Quality Control Board (RWQCB). For planning purposes, the Santa Ana RWQCB uses a watershed classification system that divides surface waters into hydrologic units (HUs), hydrologic areas (HA), and hydrologic subareas (HSA). As designated by the RWQCB, the project site is located within the Los Angeles-San Gabriel River HU, the Anaheim HA Split, and the Anaheim HSA Split (Santa Ana RWQCB 1995, updated 2019).[2]

4.9.2.2 Drainage

In the existing condition, stormwater runoff sheet flows to multiple inlet drains located throughout the project site. Stormwater runoff from the central portions of the project site, which comprise the majority of the project site, drains to an existing 42-inch storm drain located on the western portion

[1] Orange County Public Works. 2020. Anaheim Bay Huntington Harbour Watershed Programs and Projects. Website: https://www.ocwatersheds.com/programs/ourws/anaheim_bay_huntington_harbour/anaheim_bay_huntington_harbour_watershed_programs_n_projects#:~:text=The%20Anaheim%20Bay%20Huntington%20Harbour,Seal%20Beach%2C%20Stanton%20and%20Westminster (accessed July 6, 2020).

[2] Santa Ana Regional Water Quality Control Board (RWQCB). 1995. Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin (updated June 2019).

of the project site and discharges directly to the Stanton Channel. Stormwater runoff from the northeastern and southeastern portions of the project site drains into a storm drain on Holder Street, which also discharges to the Stanton Channel. Ultimately, stormwater runoff drains from the Stanton Channel to Bolsa Chica Channel and discharges runoff to Anaheim Bay.

4.9.2.3 Surface Water Quality

As discussed in greater detail in Section 4.9.3, below, Anaheim Bay is impaired for nickel, polychlorinated biphenyls (PCBs), and toxicity. Bolsa Chica Channel is impaired for ammonia (unionized), indicator bacteria, and pH. There are no approved TMDLs for Bolsa Chica Channel or Anaheim Bay.

4.9.2.4 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, which underlies a coastal alluvial plain in the northwestern portion of Orange County. The basin is bound on the northwest and the north by a low topographic divide (which is approximated by the Los Angeles-Orange County line), on the northeast by the Whittier Fault Zone and consolidated rocks of the Puente Hills and Chino Hills, on the east by consolidated rocks of the Santa Ana Mountains, on the south by consolidated rocks of the Laguna Hills and San Joaquin Hills, and on the southwest by the Pacific Ocean. Groundwater recharge to the basin is derived from percolation of Santa Ana River flow, infiltration of precipitation, and injection into wells.[1]

For management purposes, groundwater basins are designated in the Santa Ana RWQCB's Water Quality Control Plan (Basin Plan) as Groundwater Management Zones. The project site is within the Orange County Groundwater Management Zone in the Lower Santa Ana River Basin. The Orange County Groundwater Management Zone is demarcated to the north by the Chino Hills and Santa Ana Mountains, to the east by State Route 55 (SR-55) and the Irvine Groundwater Management Zone, to the south by the Pacific Ocean, and to the west by a low topographic divide approximated by the Orange County/Los Angeles County line.[2]

According to the Geotechnical Investigation (Appendix E), the historic high groundwater level at the project site is approximately 11 feet (ft) below ground surface (bgs). However, groundwater was encountered between 5 to 8.5 ft bgs during drilling at all of the boring locations conducted on the project site. Based on the conditions encountered in the borings, a static groundwater table is considered to be present at a depth of 5 to 6.5 ft.

4.9.2.5 Groundwater Quality

Groundwater in the Coastal Plain of the Orange County Groundwater Basin is primarily sodium-calcium bicarbonate based. In general, total dissolved solids (TDS) content in groundwater ranges from 232 milligrams per liter (mg/L) to 661 mg/L, with an average of 475 mg/L. Groundwater

[1] California Department of Water Resources (DWR). 2004. California's Groundwater Bulletin 118. Coastal Plains of Orange County Groundwater Basin.

[2] Ibid.

impairments include salinity (from seawater intrusion), colored water (from natural organic materials), high nitrates, and methyl tertiary butyl ether (MTBE).[1]

4.9.2.6 Flooding

According to the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Map (FIRM) No. 06059C0117J (December 3, 2009), the project site is located within Zone X, which comprises areas of 0.2 percent annual chance flood (500-year flood). This means that there is a very low likelihood of flooding within the project site.

According to the Safety Element of the City of Cypress (City) General Plan, the project site is located within the inundation zone of Prado Dam.[2] There are no open bodies of water in the vicinity of the project site and the project is therefore not located within an inundation zone of a seiche. The project site is located approximately 6 miles northeast of the Pacific Ocean and is not located within a tsunami inundation zone, according to the Orange County Tsunami Inundation Maps.[3] The levee inundation zone of Coyote Creek/Carbon Creek is located west of the project site; however, the project site is not located within this inundation area.

4.9.3 Regulatory Setting

4.9.3.1 Federal Regulations

Clean Water Act. In 1972, the Federal Water Pollution Control Act (now referred to as the Clean Water Act [CWA]) was amended to require that the discharge of pollutants into waters of the United States from any point source be effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, the CWA was again amended to require that the United States Environmental Protection Agency (USEPA) establish regulations for the permitting of stormwater discharges (as a point source) by municipal and industrial facilities and construction activities under the NPDES permit program. The regulations require that Municipal Separate Storm Sewer System (MS4) discharges to surface waters be regulated by an NPDES permit.

The CWA requires states to adopt water quality standards for water bodies and have those standards approved by the 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).

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1 California Department of Water Resources (DWR). 2020. Water Data Library (WDL) Station Map. Website: http://wdl.water.ca.gov/waterdatalibrary/ (accessed July 6, 2020).

2 City of Cypress. 2001. City of Cypress General Plan Safety Element. October 5. Website: https://www.cypressca.org/home/showdocument?id=714 (accessed July 1, 2020).

3 California Department of Conservation. 2019. Orange County Tsunami Inundation Maps. Website: https://www.conservation.ca.gov/cgs/tsunami/maps/orange (accessed July 1, 2020).

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.

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.

Clean Water Act, Section 303, List of Impaired Water Bodies. The State Water Resources Control Board (SWRCB), in compliance with Section 303(d) of the CWA, prepared a 2014/2016 list of impaired water bodies in California. The SWRCB approved the 2014/2016 California Integrated Report (CWA Section 303(d) List/305(b) Report) on October 3, 2017. On April 6, 2018, the USEPA approved the 2014/2016 California 303(d) List of Water Quality Limited Segments (303[d] list). The 303(d) list includes a priority schedule for the development of TMDL implementation for each contaminant impacting the water body. Anaheim Bay is impaired for nickel, Polychlorinated biphenyls (PCBs), and toxicity. Bolsa Chica Channel is impaired for ammonia (unionized), indicator bacteria, and pH. There are no approved TMDLs for Bolsa Chica Channel or Anaheim Bay.

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. FEMA administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in a floodplain. FEMA issues FIRMs of communities participating in the NFIP. These maps delineate flood hazard zones in the community. The City of Cypress manages local stormdrain facilities, and the Orange County Flood Control District (OCFCD) is responsible for regional flood control planning within Orange County.

4.9.3.2 State Regulations

State Industrial General Permit. The General Permit for Storm Water Discharges Associated with Industrial Activities, State Water Resources Control Board Order WQ 2014-0057-DWQ as amended by Orders 2015-0122-DWQ and the 2018 Amendment documents (IGP), regulates industrial storm water discharges and authorized non-storm water discharges from industrial facilities in California. The Industrial General Permit is called a general permit because many industrial facilities are covered by the same permit but comply with its requirements at their individual industrial facilities. The SWRCB and RWQCBs implement and enforce the Industrial General Permit. Industrial facilities subject to the Industrial General Permit shall comply with all applicable requirements specified in the IGP, including the preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) to control and minimize the impacts of industrial-related activities, materials, and pollutants on the watershed. To obtain coverage under

the Industrial General Permit, the business owner must electronically file all permit registration documents with the SWRCB prior to the start of the industrial activity/ business.

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).

California Toxics Rule. 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 stormwater 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 stormwater 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 deleterious effects. Chronic criteria provide benchmarks for an extended period of time (i.e., 4 days or more) without deleterious effects. The acute CTR criteria have a shorter relevant averaging period (less than 4 days) and provide a more appropriate benchmark for comparison for stormwater 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. 2009-0009-DWQ, NPDES No. CAS000002, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ (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 Best Management Practices (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.

Sustainable Groundwater Management Act. The Sustainable Groundwater Management Act (SGMA) of 2014 is a comprehensive three-bill package that Governor Jerry Brown signed into California state law in September 2014. The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention if necessary to protect the resource. The plan is intended to ensure a reliable groundwater supply for California for years to come.

The SGMA requires governments and water agencies of high- and medium-priority basins to halt overdrafts of groundwater basins. Specifically, SGMA requires the formation of local Groundwater Sustainability Agencies (GSAs), which are required to adopt Groundwater Sustainability Plans (GSPs), or an approved alternative to a GSP, to manage the sustainability of groundwater basins in California. The project site is located within the Coastal Plain of the Orange County Groundwater Basin, which is managed by the Orange County Water District. The Coastal Plain is identified by the Department of Water Resources as a medium-priority basin;[1] therefore, development of a GSP or an approved GSP alternative is required. In lieu of a GSP, Orange County Water District, Irvine Ranch Water District, and the City of La Habra developed the Basin 8-1 Alternative, which establishes objectives and criteria for groundwater management within the Coastal Plain of the Orange County Groundwater Basin, and is designed to be functionally equivalent to a GSP.[2]

4.9.3.3 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 for Anaheim Bay (Outer Bay) include navigation (NAV), water contact recreation (REC 1), non-contact water recreation (REC 2), preservation of biological habitats of special significance (BIOL), wildlife habitat (WILD), rare, threatened or endangered species (RARE), spawning, reproduction and development (SPWN), and marine habitat (MAR). Anaheim Bay is excepted from the municipal and domestic supply (MUN) beneficial use designation. There are no designated beneficial uses listed in the Basin Plan for Bolsa Chica Channel. Beneficial uses of the Orange Groundwater Management Zone include municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), industrial process supply (PROC).

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 enclosed bays and estuaries 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

1 California Department of Water Resources (DWR). 2016. SGMA Basin Prioritization Dashboard, Groundwater Basins 2016. Website: https://gis.water.ca.gov/app/bp-dashboard/p2/ (accessed June 12, 2020).

2 Orange County Water District. 2017. Basin 8-1 Alternative – OCWD Management Area. January 1, 2017.

waters. Relevant surface water quality objectives for all enclosed bays and estuaries enclosed bays and estuaries, inland surface waters, 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 4.9.A, 4.9.B, and 4.9.C, respectively.

Table 4.9.A: Surface Water Quality Objectives for Enclosed Bays and Estuaries

Constituent	Concentration
Algae	Waste discharges shall not contribute to excessive algal growth in receiving waters.
Chlorine (residual)	To protect aquatic life, the 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 which 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)	The dissolved oxygen content of enclosed bays and estuaries shall not be depressed to levels that adversely affect beneficial uses as a result of controllable water quality factors.
Pathogen Indicator Bacteria	REC-1 Fecal coliform: log mean less than 200 organisms/1001 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.
pH	The pH of bay or estuary waters 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	Radioactive materials shall not be present in the bay or estuarine waters of the region in concentrations which are deleterious to human, plant or animal life.
Solids (suspended and settleable)	Enclosed bays and estuaries shall not contain suspended or settleable solids in amounts which cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.
Sulfides	The dissolved sulfide content of enclosed bays and estuaries shall not be increased as a result of controllable water quality factors.
Surfactants	Waste discharges shall not contain concentrations of surfactants which result in foam in the course of flow or the use of the receiving water, or which adversely affect aquatic life.
Taste and Odor	The enclosed bays and estuaries of the region shall not contain, as a result of controllable water quality factors, taste- or odor-producing substances at concentrations which cause a nuisance or adversely affect beneficial uses. The natural taste and odor of fish, shellfish or other enclosed bay and estuarine water resources used for human consumption shall not be impaired.
Temperature	All bay and estuary waters shall meet the objective specified in the Thermal Plan.
Toxic Substances	Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to level which are harmful to human health. The concentrations of toxic substances 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 NTU and 100 NTU, increases shall not exceed 10 NTU. Where natural turbidity is greater than 100 NTU, increases shall not exceed 10%.

Source: *Water Quality Control Plan, Santa Ana River Basin* (Santa Ana RWQCB 1995, updated June 2019).
mg/L = milligrams per liter
NTU = nephelometric turbidity units
RWQCB = Regional Water Quality Control Board

Table 4.9.B: Surface Water Quality Objectives for Inland Surface Waters

Constituent	Concentration
Algae	Waste discharges shall not contribute to excessive algal growth in inland surface receiving waters.
Boron	Shall not exceed 0.75 mg/L in inland surface waters of the region as a result of controllable water quality factors.
Chlorine (residual)	Chlorine residual in wastewater discharged to inland surface waters 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 surface 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.
Metals	Varies based on hardness.
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)	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.
pH	Shall not be raised above 8.5 or depressed below 6.5 as a result of controllable water quality factors.
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 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 RWQCB that such alteration in temperature does not adversely affect beneficial uses.
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 NTU and 100 NTU, increases shall not exceed 10 NTU. Where natural turbidity is greater than 100 NTU, increases shall not exceed 10%. All inland surface waters of the region shall be free of changes in turbidity which adversely affect beneficial uses.

Source: *Water Quality Control Plan, Santa Ana River Basin* (Santa Ana RWQCB 1995, updated June 2019).
mg/L = milligrams per liter
NTU = nephelometric turbidity units
RWQCB = Regional Water Quality Control Board

Table 4.9.C: Groundwater Quality Objectives for Groundwater Basins

Constituent	Concentration
Arsenic	Waters with MUN Beneficial Use Designation: Shall not exceed 0.05 mg/L as a result of controllable water quality factors.
Bacteria, Coliform	Waters with MUN Beneficial Use Designation: Total coliform numbers shall not exceed 2.2 organisms/100 mL median over any 7-day period as a result of controllable water quality factors.
Barium	Waters with MUN Beneficial Use Designation: Shall not exceed 1.0 mg/L as a result of controllable water quality factors.
Boron	Shall not exceed 0.75 mg/L as a result of controllable water quality factors.
Chloride	Waters with MUN Beneficial Use Designation: Shall not exceed 500 mg/L as a result of controllable factors.
Color	Waste discharges shall not result in coloration of the receiving waters that causes a nuisance or adversely affects beneficial uses.
Cyanide	Waters with MUN Beneficial Use Designation: Shall not exceed 0.2 mg/L as a result of controllable water quality factors.
Fluoride	Waters with MUN Beneficial Use Designation: Shall not exceed 1.0 mg/L as a result of controllable water quality factors.
Hardness	Waters with MUN Beneficial Use Designation: Shall not be increased as a result of waste discharges to levels that adversely affect beneficial uses.
Metals	Waters with MUN Beneficial Use Designation: Shall not exceed the following: Cadmium 0.01 mg/L; Chromium 0.05 mg/L; Cobalt 0.2 mg/L; Copper 1.0 mg/L; Iron 0.3 mg/L; Lead 0.05 mg/L; Manganese 0.05 mg/L; Mercury 0.002 mg/L; Selenium 0.01 mg/L; and Silver 0.05 mg/L, as a result of controllable water quality factors.
Methylene Blue-Activated Substances	Waters with MUN Beneficial Use Designation: Shall not exceed 0.05 mg/L as a result of controllable water quality factors.
Oil and Grease	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.
pH	Shall not be raised above 9 or depressed below 6 as a result of controllable water quality factors.
Radioactivity	Waters with MUN Beneficial Use Designation: Shall not exceed the California Code of Regulations, Title 22, standards of 5 pCi/L for combined radium-226 and radium-228, 15 pCi/L for gross alpha particle activity, 20,000 pCi/L for tritium, 8 pCi/L for strontium-90, 50 pCi/L for gross beta particle activity, and 20 pCi/L for uranium.
Sodium	Waters with AGR Beneficial Use Designation: Shall not exceed a sodium absorption rate of 9.
	Waters with MUN Beneficial Use Designation: Shall not exceed 180 mg/L as a result of controllable water quality factors.
Sulfate	Waters with MUN Beneficial Use Designation: Shall not exceed 500 mg/L as a result of controllable water quality factors.
Taste and Odor	Shall not contain taste- or odor-producing substances in concentrations that adversely affect beneficial uses.
Toxic Substances	All waters 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: *Water Quality Control Plan, Santa Ana River Basin* (Santa Ana RWQCB 1995, updated June 2019).
AGR = agricultural supply
mg/L = milligrams per liter
mL = milliliter
MUN = municipal supply
pCi/L = picocuries per liter
pH = percentage of hydrogen

In addition, the site-specific water quality objectives for the Orange Groundwater Management Zone are:

- **Total Dissolved Solids:** 580 mg/L
- **Nitrate as Nitrogen:** 3.4 mg/L

There are no site-specific water quality objectives listed in the Basin Plan for the surface receiving waters for the project site.

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 Development Projects. The proposed project is considered a Priority Development Project because it is a redevelopment project that includes the addition or replacement of 5,000 square feet (sf) or more of impervious surface area.

Drainage Area Management Program. The Drainage Area Management Plan (DAMP) (2003) 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 countywide 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 Cypress 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 Development Projects. The proposed project is categorized as a redevelopment project that would add or replace more than 5,000 sf of imperious surface area and, thus, is considered a Priority Development Project.

Priority Development 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 (TGD) 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 the 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.

Groundwater Dewatering Permit. The Santa Ana RWQCB requires a permit for discharging wastes to surface waters from activities involving groundwater extraction. The *General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimis) Threat to Water Quality (*Order No. R8-2020-0006, NPDES No. CAG998001) covers general waste discharge requirements for discharges to surface waters that pose an insignificant (*de minimis*) threat to water quality within the Santa Ana Region. Under this order, permittees are required to monitor their discharges of groundwater extraction waste from construction to ensure that effluent limitations for constituents are not exceeded.

4.9.3.4 Local Regulations

Cypress Municipal Code. Chapter 13, Article IV, Cypress Water Quality, of the City Municipal Code regulates stormwater and surface runoff water quality. The Municipal Code requires compliance with the Drainage Area Management Plan (DAMP) and Local Implementation Plan (LIP), including preparation of WQMPs for priority development projects. Prior to issuance of a grading permit, building permit, and/or safety permit for any new development or significant redevelopment, the property owner is required to submit to and obtain the approval of the WQMP by the City.

4.9.4 Methodology

Project impacts to hydrology and water quality are evaluated based on the proposed project's adherence to local, regional, State, and federal standards; the proposed land uses and project design; changes in pre- and post-project stormwater flows; and proposed BMPs for control of surface runoff and reduction of pollutants in stormwater runoff.

4.9.5 Thresholds of Significance

The thresholds for hydrology and water quality impacts used in this analysis are consistent with the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to hydrology and water quality if it would:

Threshold 4.9.1: **Violate any water quality standards or waste discharge requirements?**

Threshold 4.9.2: **Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**

Threshold 4.9.3: **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

Threshold 4.9.4: **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

Threshold 4.9.5: **Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Threshold 4.9.6: **Otherwise substantially degrade water quality?**

Threshold 4.9.7: **Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

Threshold 4.9.8: **Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

Threshold 4.9.9: **Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

Threshold 4.9.10: **Inundation by seiche, tsunami, or mudflow?**

Threshold 4.9.11: **Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens,**

petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash)

Threshold 4.9.12: **Result in significant alteration of receiving water quality during or following construction?**

Threshold 4.9.13: **Could the proposed project result in increased erosion downstream?**

Threshold 4.9.14: **Result in increased impervious surfaces and associated increased runoff?**

Threshold 4.9.15: **Create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?**

Threshold 4.9.16: **Be tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?**

Threshold 4.9.17: **Be tributary to other environmentally sensitive areas? If so, can it exacerbate already existing sensitive conditions?**

Threshold 4.9.18: **Have a potentially significant environmental impact on surface water quality to either marine, fresh, or wetland waters?**

Threshold 4.9.19: **Have a potentially significant adverse impact on groundwater quality?**

Threshold 4.9.20: **Cause or contribute to an exceeded applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?**

Threshold 4.9.21: **Impact aquatic, wetland, or riparian habitat?**

Threshold 4.9.22: **Would the project include new or retrofitted stormwater treatment control Best Management Practices (e.g., water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g., increased vectors or odors)?**

4.9.6 Project Impacts

Threshold 4.9.1: **Would the project violate any water quality standards or waste discharge requirements?**

Or

Threshold 4.9.6: **Would the project otherwise substantially degrade water quality?**

Or

Threshold 4.9.11: Would the project result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).

Or

Threshold 4.9.12: Would the project result in significant alteration of receiving water quality during or following construction?

Or

Threshold 4.9.18: Would the project have a potentially significant environmental impact on surface water quality to either marine, fresh, or wetland waters?

Less Than Significant Impact.

Construction. 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, approximately 3.96 acres of soil would be disturbed (approximately 5.5 acres of the existing parking areas will be reused as parking. Parking lot improvements would not expose soil and therefore does not count toward the disturbed soil area). During soil-disturbing 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 have the potential to be transported via stormwater runoff into receiving waters. Sediment from increased soil erosion and chemicals from spills and leaks have the potential to be discharged to downstream receiving waters during storm events, which can affect water quality and impair beneficial uses.

Because construction of the proposed project would disturb greater than 1 acre of soil, the proposed project is subject to the requirements of the Construction General Permit, as specified in Regulatory Compliance Measure 4.9-1. As also specified in Regulatory Compliance Measure 4.9-1, a SWPPP would be prepared and construction BMPs detailed in the SWPPP would be implemented during construction, in compliance with the requirements of the Construction General Permit. The SWPPP would detail the BMPs to be implemented during construction. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site, and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. Compliance with the requirements of the Construction General Permit, including incorporation of construction BMPs to target and reduce pollutants of concern in stormwater runoff, would ensure that construction impacts related to waste discharge requirements, water quality standards, degradation of water quality, increased pollutant discharge, alteration of receiving water quality, or surface water quality impacts to marine, fresh, or wetland waters, would be less than significant.

According to the Geotechnical Investigation (Appendix E), free water was encountered during drilling at all of the boring locations between 5 to 8.5 ft bgs. Based on the conditions encountered in the borings, the static groundwater table is considered to be present at a depth of 5 to 6.5 ft. Because of the presence of shallow groundwater, it is likely that groundwater dewatering would be required during excavation activities. Groundwater may contain high levels of total dissolved solids, nitrate, salinity, or other constituents, or high or low pH levels that could be introduced to surface waters when dewatered groundwater is discharged to receiving waters. If groundwater dewatering is necessary, groundwater would be discharged to either the sanitary sewer system or stormdrain system. If discharged to the sanitary sewer system, a permit from the City of Cypress Public Works Department would be required, as specified in Regulatory Compliance Measure 4.9-2, to ensure that there is sufficient capacity available to accommodate the discharge to prevent sanitary sewer overflow, which can result in a discharge of pollutants to surface waters. If groundwater is discharged to the storm drain system, coverage under the Santa Ana RWQCB's NPDES Permit *General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimis) Threat to Water Quality* (Order No. R8-2020-0006, NPDES No. CAG998001) would be required, as also specified in Regulatory Compliance Measure 4.9-2. This permit requires testing and treatment (as necessary) of groundwater encountered during groundwater dewatering prior to release to the stormdrain system. As a result, groundwater dewatering would not introduce pollutants to receiving waters at levels that would violate water quality standards or waste discharge requirements, degrade water quality, increase pollutant discharge, alter the quality of the receiving water, or impact surface water quality to marine, fresh, or wetland waters. Impacts to surface water quality from groundwater dewatering would be less than significant.

Operation. Expected pollutants of concern from long-term operation of the proposed project include suspended solids/sediment, nutrients, heavy metals, pathogens (bacteria/virus), pesticides, oil and grease, toxic organic compounds, and trash and debris. According to the *Water Quality Management Plan* prepared for the project, potential sources of these pollutants include the following:

- **Suspended Solids/Sediment:** Landscaping
- **Nutrients:** Landscaping
- **Heavy Metals:** Outdoor storage, metal roofs, vehicles
- **Pathogens (Bacteria/Virus):** food uses
- **Pesticides:** Landscaping
- **Oil and Grease:** Automotive uses
- **Toxic Organic Compounds:** Pesticides used on landscaping as well as PCBs leaked from cars
- **Trash and Debris:** Landscaping activities, human activities

The project would comply with the requirements of the Santa Ana RWQCB's NPDES Permit *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* (Order No. R8-2009-0030, NPDES No. CAS618030, as amended by Order No. R8-2010-0062) (North Orange County MS4 Permit), as specified in Regulatory Compliance Measure 4.9-3. The North Orange County MS4 Permit requires that a WQMP be prepared for priority new development and redevelopment projects.

If the proposed on-site activities or uses include vehicle maintenance shops, equipment cleaning operations, or any type of vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), the project would also comply with the provisions of the State Water Resource Control Board *General Permit for Stormwater Discharges Associated with Industrial Activities* (Order WQ 2014-0057-DWQ, as amended by Orders 2015-0122-DWQ and the 2018 Amendment documents) (Industrial General Permit). As specified in Regulatory Compliance Measure 4.9-4, the proposed project would comply with all applicable requirements as specified in the Industrial General Permit, including the preparation of a SWPPP and implementation of BMPs to control and minimize the impacts of industrial-related activities, materials, and pollutants on the watershed.

WQMPs specify the BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff. The *Preliminary Water Quality Management Plan* (WQMP) prepared for the project specifies the Source Control and LID BMPs (biotreatment/hydromodification BMPs) proposed for the project. Source Control BMPs are preventative measures that are implemented to prevent the introduction of pollutants into stormwater. LID BMPs mimic a project site's natural hydrology by using design measures that capture, filter, store, evaporate, detain, and infiltrate runoff rather than allowing runoff to flow directly to piped or impervious storm drains. The BMPs specified in the Preliminary WQMP would be implemented and maintained, as specified in Regulatory Compliance Measure 4.9-3. The proposed project BMPs are detailed below.

Proposed Non-Structural Source Control BMPs include education for property owners, tenants and occupants; common area landscape management; BMP maintenance; local industrial permit compliance; uniform fire code implementation; common area litter control; employee training; housekeeping of loading docks; common area catch basin inspection; and street sweeping private streets and parking lots. Proposed Structural Source Control BMPs include storm drain stenciling and signage; design and construct trash and waste storage areas to reduce pollution introduction; efficient use of irrigation systems and landscape design, water conservation, smart controllers, and source control; and dock areas. Please refer to the Preliminary WQMP included in Appendix H for additional details of the proposed Non-Structural Source Control BMPs and Structural Source Control BMPs.

Proposed LID BMPs (specifically, biotreatment/hydromodification BMPs) include proprietary vegetated biotreatment systems (Filterra Bioscape Vaults) and bioretention basins with underdrains.

In the proposed condition, stormwater runoff from 1.74 acres in the central portion of the project site would not be treated prior to discharge to the Holder Street storm drain. Runoff from the remaining portion of the project site would be treated prior to discharge to the 42-inch storm drain, which discharges to Stanton Channel. Stormwater runoff from the northeast portion of the project site would drain to a bioretention basin with underdrains prior to being discharged into the Holder Street storm drain. Stormwater runoff from the remainder of the project site would drain to the existing 42-inch storm drain on the western portion of the project site. Generally, stormwater runoff from the northern portion of the project site would be treated by Filterra Bioscape Vaults prior to being discharged to the existing 42-inch storm drain. Stormwater runoff from the southern portion of the project site will be treated and retained by bioretention basins with underdrains prior to being discharged to the existing 42-inch storm drain. In addition, an underground detention will be

located below the central parking lot to detain and reduce stormwater flows. Ultimately, all stormwater from the project site would discharge to Stanton Channel then to the Bolsa Chica Channel, and ultimately to the Anaheim Bay.

The proposed BMPs would target and reduce pollutants of concern from runoff from the project site in compliance with the North Orange County MS4 Permit requirements. Compliance with the requirements of the North Orange County MS4 Permit as well as the Industrial General Permit, including incorporation of operational BMPs to target pollutants of concern (as specified in Regulatory Compliance Measures 4.9-3 and 4.9-4), would ensure that water quality impacts, degradation of water quality, increased pollutant discharge, alteration of receiving water quality, or impacts on surface water quality to marine, fresh, or wetland waters during project operation would be less than significant.

Threshold 4.9.2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. According to the Geotechnical Investigation (Appendix E) prepared for the project, the static groundwater table is considered to be present at a depth of 5 to 6.5 ft bgs. Because of the presence of shallow groundwater, it is likely that groundwater dewatering would be required during construction activities. However, groundwater dewatering would be localized and temporary, and the volume of groundwater removed would not be substantial. In addition, any volume of water removed during groundwater dewatering would be minimal compared to the size of the Coastal Plain of the Orange County Groundwater Basin, which has a surface area of 350 sq mi and a storage capacity of 38,000,000 acre-feet.[1] Construction and operation of the proposed project would not involve direct groundwater extraction. Additionally, the project would not substantially change infiltration because the site is currently primarily (69 percent) impervious surface areas. Increased water use would not substantially affect groundwater supplies, because the groundwater basin has been sustainably managed by Orange County Water District (OCWD) over the last 10 years, and it is anticipated that the Coastal Plain of the Orange County Groundwater Basin will continue to be sustainably managed with implementation of the Basin 8-1 Alternative. The Basin 8-1 Alternative establishes objectives and criteria for groundwater management within the Coastal Plain of the Orange County Groundwater Basin.[2] Therefore, construction and operational impacts related to a decrease in groundwater supplies or interference with groundwater recharge would be less than significant, and no mitigation is required.

Threshold 4.9.3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a

1 California Department of Water Resources (DWR). 2004. California's Groundwater Bulletin 118. Coastal Plains of Orange County Groundwater Basin.

2 Orange County Water District. 2017. Basin 8-1 Alternative – OCWD Management Area. January 1, 2017.

manner which would result in substantial erosion or siltation on- or off-site?

Or

Threshold 4.9.13: Could the proposed project result in increased erosion downstream?

Less Than Significant Impact.

Construction. During project construction activities, soil would be exposed and disturbed, drainage patterns would be 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. Project construction would not alter the course of a stream or river. As discussed above, the Construction General Permit requires preparation of a SWPPP (Regulatory Compliance Measure 4.9-1). The SWPPP would detail Erosion Control and Sediment Control BMPs to be implemented during project construction to minimize erosion and retain sediment on site. With compliance with the requirements of the Construction General Permit and with implementation of the construction BMPs, construction impacts related to on-site, off-site, or downstream erosion or siltation would be less than significant, and no mitigation is required.

Operation. According to the Preliminary WQMP prepared for the project, impervious surface area on site would increase by approximately 0.77 acre (an 8 percent increase), which would increase on-site stormwater flows. Although the project would increase impervious surface area, impervious surface areas associated with development of the project site are not prone to erosion or siltation, because no loose soil would be included in these areas. The remaining acreage of the approximately 22.3-acre project site would consist of pervious surface area, which would contain landscaping that would minimize on-site erosion and siltation by stabilizing the soil. Therefore, on-site erosion and siltation impacts would be minimal.

As a result of the 0.77-acre increase in impervious surface area, the proposed project would increase runoff from the site during storm events, which can increase off-site erosion and siltation. As discussed previously, the proposed BMPs include Filterra Bioscape Vaults and bioretention basins with underdrains, which would be designed to retain stormwater runoff from the project site and would reduce the volume of stormwater discharged to the local storm drain system off-site. The central parking lot will also include underground detention to detain and reduce stormwater flows.

Significant redevelopment projects are subject to specific hydromodification[1] requirements of the North Orange County MS4 Permit and must implement measures for site design, source control, runoff reduction, stormwater treatment, and baseline hydromodification management. According to the Preliminary WQMP, the project site is located in an area of hydrologic condition of concern

[1] Hydromodification is defined as hydrologic changes resulting from increased runoff from increases in impervious surfaces. Hydromodification impacts can included changes in downstream erosion and sedimentation.

(HCOC).[1] However, as specified in Regulatory Compliance Measure 4.9-3, the proposed project would be required to comply with the following hydromodification requirements of the North Orange County MS4 Permit:

- Post-development runoff volume for the 2-year frequency storm does not exceed that of the predevelopment condition by more than 5 percent; and

- Time of concentration of post-development runoff for the two-year storm event is not less than that for the predevelopment condition by more than 5 percent.

Additionally, the downstream storm drain system is overcapacity. As a result, the City restricts peak discharges from the project site to 30.43 cubic feet per second (cfs) for the 25-year frequency, 24-hour storm, as determined by the Master Plan of Drainage. As specified in the *Preliminary Hydrology and Hydraulic Report,* the proposed peak flow rate (without detention) for the 25-year frequency, 24-hour storm discharged to the 42-inch stormdrain on the western portion of the project site would be 34.16 cfs. The proposed peak flow rate (without detention) for the 25-year frequency, 24-hour storm discharged to the Holder Street stormdrain would be 0.54 cfs. Therefore, underground detention would be required to reduce peak flow rates in order to meet the maximum allowable discharge rate of 30.43 cfs. With incorporation of the underground detention system, peak flows discharged to the 42-inch stormdrain for the 25-year frequency, 24-hour storm would be reduced to 20.38 cfs. Stormwater discharge to the Holder Street stormdrain would be reduced to 0.22 cfs for the 25-year frequency, 24-hour storm. Therefore, the total peak flow rate would be reduced to 20.6 cfs, which is below the maximum allowable discharge rate of 30.43 cfs.

As the Filterra Bioscape Vaults, the bioretention basins with underdrains, and the underground detention system would reduce stormwater flows to meet both the City's drainage requirement and the North Orange County MS4 hydromodification requirements, the proposed project would not contribute to the downstream capacity exceedences or existing flooding. Because the stormwater runoff from the project site would not exceed the North Orange County MS4 Permit hydromodification requirements or the City's drainage requirements, an analysis of flooding impacts and erosion and slope stability for project receiving waters is not required. Compliance with the hydromodification requirements of the North Orange County MS4 Permit and the City's drainage requirements, as determined by the Master Plan of Drainage, are specified in Regulatory Compliance Measures 4.9-3 and 4.9-5. Implementation of Regulatory Compliance Measures 4.9-3 and 4.9-5 would ensure that the proposed project would not increase downstream erosion or siltation impacts. For these reasons, operation impacts related to substantial on- or off-site and downstream erosion or siltation would be less than significant, and no mitigation is required.

Threshold 4.9.4: **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

[1] Areas designated as hydrologic conditions of concern are watersheds of unarmored or soft-armored drainages that are vulnerable to geomorphology changes due to hydromodification.

Or

Threshold 4.9.15: Create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?

Less than Significant Impact.

Construction. As discussed above, project construction would comply with the requirements of the Construction General Permit and would include the preparation and implementation of a SWPPP. The SWPPP would include construction BMPs to control and direct on-site surface runoff and would include detention facilities, if required to ensure that stormwater runoff from the construction site does not exceed the capacity of the stormwater drainage systems. With implementation of construction BMPs as specified in Regulatory Compliance Measure 4.9-1, construction impacts related to a substantial increase in the rate or amount of surface runoff, flow, and volume that would result in flooding would be less than significant, and no mitigation is required.

Operation. Although the project would increase the amount of impervious surface at the project site by approximately 0.77 acre, the proposed project would generally conform to existing on-site drainage patterns or alter the course of a stream or river. However, the increase in impervious surface area would increase stormwater runoff compared to existing conditions. In the proposed condition, stormwater runoff will sheet flow to proposed BMPs dispersed throughout the project site (Filterra Bioscape Vaults, bioretention basins with underdrains, and underground detention) to treat runoff prior to entering either the existing 42-inch storm drain on site or the existing storm drain on Holder Street. The Filterra Bioscape Vaults, bioretention basins with underdrains, and underground detention system would detain and reduce the stormwater runoff from the entire site.

As demonstrated by the hydraulic modeling conducted as part of the Preliminary Hydrology and Hydraulic Report, the proposed BMPs (Filterra Bioscape Vaults, bioretention basins with underdrains, and underground detention system) would reduce stormwater peak flows to 20.6 cfs. Therefore, with incorporation of the operational BMPs, the runoff volume would comply with the North Orange County Permit hydromodification and City drainage requirements. In addition, as specified in Regulatory Compliance Measure 4.9-5, a Final Hydrology Report would be prepared based on final project plans and would be approved by the City. The Hydrology Report would confirm that the project drainage facilities comply with City and County requirements to ensure that stormwater runoff is reduced to meet the hydromodification requirements and the allowable City discharge requirements for the project site, as determined by the City Master Plan of Drainage. Therefore, the project would not contribute to the downstream capacity exceedences or existing flooding. With implementation of the proposed BMPs, operational impacts related to a substantial increase in the rate or amount of surface runoff, flow, and volume that would result in flooding would be less than significant, and no mitigation is required.

Threshold 4.9.5: Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact.

Construction. As discussed above, construction of the proposed project has the potential to introduce pollutants to the stormdrain system from erosion, siltation, and accidental spills. However, as specified in Regulatory Compliance Measure 4.9-1, the Construction General Permit requires preparation of a SWPPP, which would identify the construction BMPs to be implemented during construction to reduce impacts to water quality, including those impacts associated with soil erosion, siltation, and spills. In addition, any groundwater extracted during groundwater dewatering activities that is discharged to surface waters would be tested and treated (if necessary) to ensure that any discharges meet the water quality limits specified in the applicable NPDES permit (as specified in Regulatory Compliance Measure 4.9-2). Regulatory Compliance Measures 4.9-1 and 4.9-2 are existing NPDES requirements with which the project is required to comply. These measures would prevent substantial additional sources of polluted runoff being discharged to the stormdrain system through implementation of construction BMPs that target pollutants of concern in runoff from the project site as well as testing and treatment (if required) of groundwater prior to its discharge to surface waters.

Additionally, the SWPPP would include construction BMPs to control and direct surface runoff on site and would include detention measures if required to ensure that stormwater runoff from the construction site does not exceed the capacity of the stormwater drainage systems. For these reasons, construction impacts related to creation or contribution of runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff would be less than significant, and no mitigation is required.

Operation. As discussed above, operation of the project has the potential to introduce pollutants to the stormdrain system from the proposed on-site uses. However, as specified in Regulatory Compliance Measure 4.9-3, permanent operational BMPs that target and reduce pollutants of concern in stormwater runoff would be implemented and maintained throughout the life of the project. Regulatory Compliance Measure 4.9-3 is an existing NPDES requirement with which the project is required to comply. This measure would prevent substantial additional sources of polluted runoff being discharged to the stormdrain system through implementation of operational BMPs to target pollutants of concern in runoff from the project site. Additionally, the proposed Filterra Bioscape Vaults, bioretention basins with underdrains, and underground detention system would reduce stormwater flows to 20.6 cfs. Therefore, with incorporation of the operational BMPs, the runoff volume would comply with the North Orange County Permit hydromodification and City drainage requirements. As specified in Regulatory Compliance Measure 4.9-5, the Final Hydrology Report would demonstrate compliance with these City and County requirements, and would verify the maximum allowable discharge rate for the project site to ensure that downstream storm drain capacity is not exceeded. For these reasons, operational impacts related to creation or contribution of runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff would be less than significant, and no mitigation is required.

Threshold 4.9.7: Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Threshold 4.9.8: Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. The project site is not located within a 100-year floodplain. According to the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Map (FIRM) No. 06059C0117J (December 3, 2009), the project site is located within Zone X, which comprises areas of 0.2 percent annual chance flood (500-year flood). Additionally, the project does not include construction of housing. As the project is not located within a 100-year floodplain, the project would not place housing or structures within a 100-year flood hazard area. No impact would occur, and no mitigation is required.

Threshold 4.9.9: Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less Than Significant Impact. The levee inundation zone of Coyote Creek/Carbon Creek is located west of the project site; however, the project site is not located within this inundation area.[1] Therefore, the project site is not located within the inundation zone of a levee. Additionally, the project is not located in an area subject to flooding from a 100-year storm. However, according to the Safety Element of the City of Cypress General Plan, the project site is located within the inundation zone of Prado Dam.[2]

Prado Dam was designed in the 1930s, but increased its functioning capability due to Seven Oaks Dam, which was completed in November 1999, and is approximately 40 miles upstream on the Santa Ana River. During a flood, Seven Oaks Dam stores water destined for Prado Dam for as long as the reservoir pool at Prado Dam is rising. When the flood threat at Prado Dam has passed, Seven Oaks Dam begins to release its stored flood water at a rate that does not exceed the downstream channel capacity. Working in tandem, the Prado and Seven Oaks Dams provide increased flood protection to Orange County.

Prado Dam is maintained and inspected to ensure its integrity and to ensure that risks are minimized. In addition, construction of the Santa Ana River Mainstem Project was initiated in 1989, and is scheduled for completion in 2021. The Santa Ana River Mainstem Project will increase levels of flood protection to more than 3.35 million people in Orange, San Bernardino, and Riverside Counties. Improvements to 23 miles of the Lower Santa Ana River channel, from Prado Dam to the Pacific Ocean, are 95 percent complete, with the remaining bank protection improvements in Yorba Linda currently under construction. Improvements to the Santa Ana River channel include construction of new levees and dikes. In addition, the Santa Ana River Mainstem Project includes improvements to Prado Dam that are currently underway and are estimated to be completed in 2021. The Prado Dam embankment has been raised and the outlet works have been reconstructed to convey additional discharges. Remaining improvements to Prado Dam include acquisition of

1 U.S. Army Corps of Engineers. 2015. Periodic Inspection Report No. 1, Generalized Executive Summary. June 4.

2 City of Cypress. 2001. City of Cypress General Plan Safety Element. October 5.

additional land for the expansion of the Prado Reservoir, construction of protective dikes, and raising of the spillway.[1]

Although the project would construct new structures in an inundation zone, the proposed project would not increase the chance of inundation from failure of Prado Dam. Additionally, the entire City of Cypress is within a dam inundation zone. The potential for dam failure is remote and the City's emergency evacuation plans would be implemented if these dams were susceptible to rupture during heavy rains or other events. Therefore, project impacts related to the exposure of people and structures to significant risk associated with flooding as a result of dam failure would be less than significant. No mitigation is required.

Threshold 4.9.10: Inundation by seiche, tsunami, or mudflow?

No Impact. According to the Safety Element of the City's General Plan, the project site is located within the inundation zone of Prado Dam.[2] There are no open bodies of water in the vicinity of the project site and the project is therefore not located within an inundation zone of a seiche. The project site is located approximately 6 miles northeast of the Pacific Ocean and is not located within a tsunami inundation zone, according to the Orange County Tsunami Inundation Maps.[3] The levee inundation zone of Coyote Creek/Carbon Creek is located west of the project site; however, the project site is not located within this inundation area. Therefore, no impact from inundation by seiche, tsunami, or mudflow would occur, and no mitigation is required.

Threshold 4.9.14: Result in increased impervious surfaces and associated increased runoff?

Less Than Significant Impact. The proposed project would increase the impervious surface area on site by approximately 0.77 acre. As a result of the 0.77-acre increase in impervious surface area, the proposed project would increase stormwater runoff from the site during storm events. As discussed previously, the proposed BMPs include Filterra Bioscape Vaults, bioretention basins with underdrains, and underground detention system, which would be designed to retain and treat stormwater runoff from the project site and would reduce the volume of polluted stormwater discharged to the local storm drain system off-site. Additionally, as stated in the Preliminary Hydrology and Hydraulic Report prepared for the project, stormwater flows would be reduced to 20.6 cfs. Therefore, with incorporation of the operational BMPs, the runoff volume would comply with the North Orange County Permit hydromodification and City drainage requirements. As specified in Regulatory Compliance Measure 4.9-5, a Final Hydrology Report would also be required to demonstrate that the final design of the project meets these requirements. With implementation of Regulatory Compliance Measure 4.9-5, impacts related to the increase of impervious surfaces and associated increased runoff would be less than significant, and no mitigation is required.

1 Orange County Public Works. 2019. Orange County Flood Division. Santa Ana River Project. Website: http://www.ocflood. com/sarp (accessed July 6, 2019).

2 City of Cypress. 2001. City of Cypress General Plan Safety Element. October 5.

3 California Department of Conservation. 2019. Orange County Tsunami Inundation Maps. Website: https://www.conservation.ca.gov/cgs/tsunami/maps/orange (accessed July 1, 2020).

Threshold 4.9.16: Be tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?

Less Than Significant Impact. After entering the stormdrain system in Katella Avenue, runoff from the project site is eventually discharged to the Bolsa Chica Channel, and ultimately, Anaheim Bay. Anaheim Bay is impaired for nickel, Polychlorinated biphenyls (PCBs), and toxicity. Bolsa Chica Channel is impaired for ammonia (unionized), indicator bacteria, and pH.

As discussed above, construction of the proposed project has the potential to introduce pollutants to the stormdrain system from erosion, siltation, and accidental spills. During construction activities, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked. Therefore, construction has the potential to contribute to pH impairments. Grading and earthmoving equipment are sources of chemicals, liquid products, and petroleum products if the equipment leaks and could contribute to the metals (nickel), and pH impairments in downstream receiving waters. If concrete-related wastes are spilled or leaked, they could affect the pH of downstream receiving waters. Temporary or portable sanitary facilities provided for construction workers could be a source of sanitary waste and contribute to downstream indicator bacteria impairments. However, sanitary waste generated from temporary or portable sanitary facilities would be disposed of in compliance with all applicable regulations. Project construction would not involve the use of PCBs, which were banned in the U.S. in 1979. Therefore, project construction would not contribute to the PCBs impairment. The CWA 303(d) list does not specify the source of toxicity in Anaheim Bay. However, project construction is not anticipated to contribute to the toxicity impairment as construction activities would be required to comply with applicable State and federal regulations for proper transport, use, storage, and disposal of excess hazardous materials and hazardous construction waste. Additionally, project construction is not anticipated to involve the use of ammonia, which in urban environments, is most commonly used in household cleaning products and fertilizers. As specified in Regulatory Compliance Measure 4.9-1, compliance with the Construction General Permit requires preparation of a SWPPP to identify construction BMPs to be implemented during project construction to reduce impacts to water quality. Construction BMPs would include, but not be limited to, Erosion 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. Implementation of construction BMPs would reduce pollutants of concern in stormwater runoff, and would reduce the potential of contributing to receiving water impairments. In addition, during groundwater dewatering, Regulatory Compliance Measure 4.9-2 would ensure that pollutants are not introduced to receiving waters and that water quality standards and waste discharge requirements are met.

During operation, expected pollutants of concern include suspended solids/sediment, nutrients, heavy metals, pathogens (bacteria/virus), pesticides, oil and grease, toxic organic compounds, and trash and debris. Pets utilizing the landscaped areas would be a potential source of bacteria (e.g., fecal matter) which could contribute to the indicator bacteria impairment. Vehicles operating within the project site and metal roofs could be a source of heavy metals (nickel). Household cleaning agents and fertilizers used during operation could be a source of ammonia. Therefore, there is the

potential for operational pollutants to contribute to the nickel, toxicity, ammonia (unionized), indicator bacteria, and pH impairments in receiving waters. Project operation would not involve the use of PCBs. Therefore, the project would not contribute to PCBs impairment.

As specified in Regulatory Compliance Measures 4.9-3 and 4.9-4, post-construction BMPs would be implemented and maintained during operation to target and reduce pollutants in stormwater runoff from the project site during operation. The Source Control and LID BMPs specified in the Preliminary WQMP would target and reduce pollutants of concern in stormwater runoff from the project site, including those contributing to downstream water quality impairments. Therefore, with implementation of Regulatory Compliance Measures 4.9-3 and 4.9-4, impacts related to an increase in pollutants for which the receiving waterbody is already impaired as listed on the CWA Section 303(d) list would be less than significant, and no mitigation is required.

Threshold 4.9.17: Would the project be tributary to other environmentally sensitive areas? If so, can it exacerbate already existing sensitive conditions?

No Impact. According to the North Orange County MS4 Permit, Environmentally Sensitive Areas are areas such as those designated in the Ocean Plan as Areas of Special Biological Significance (ASBS) or waterbodies listed on the CWA Section 303(d) list of impaired waters. The project site is not tributary to an ASBS.[1] In addition, the proposed project does not meet the priority development project definition of "a development of 2,500 sf of impervious surface or more, adjacent to (within 200 ft) or discharging directly into Environmentally Sensitive Areas." The nearest CWA Section 303(d) impaired waterbody is the Bolsa Chica Channel, which is located approximately 2.3 miles downstream of the project site. In addition, the project would not discharge directly into this CWA Section 303(d) impaired water. Therefore, implementation of the proposed project would not result in any impacts to environmentally sensitive areas. No mitigation is required.

Threshold 4.9.19: Would the project have a potentially significant adverse impact on groundwater quality?

Or

Threshold 4.9.20: Would the project cause or contribute to an exceeded applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?

Less Than Significant Impact. Although groundwater dewatering may be required, dewatered groundwater would not be discharged back to groundwater and instead would be discharged to either the sanitary sewer system or stormdrain system. As a result, groundwater dewatering would not substantially degrade groundwater quality or result in the exceedance of water quality objectives or degradation of beneficial uses.

[1] State Water Resources Control Board (SWRCB). 2019. California's Areas of Special Biological Significance. Website: https://www.Water boards.ca.gov/water_issues/programs/ocean/asbs_map.shtml (accessed July 6, 2020).

Infiltration of stormwater has the potential to affect groundwater quality in areas of shallow groundwater. As stated previously, the static groundwater table is considered to be present at a depth of 5 to 6.5 ft. Therefore, due to the shallow groundwater table, stormwater may infiltrate during project construction and operation, and has a potential to affect groundwater quality because there is a direct path for pollutants to reach the groundwater table. Proposed construction BMPs, as required by the Construction General Permit and as specified in Regulatory Compliance Measure 4.9-1, would reduce infiltration of pollutants to groundwater during construction. Proposed LID BMPs include proprietary vegetated biotreatment systems (Filterra Bioscape Vaults) and bioretention basins with underdrains. These proposed LID BMPs would capture and filter stormwater runoff on site, and would reduce the volume of stormwater and the infiltration of pollutants into groundwater during operation. Additionally, the project would not substantially change infiltration because the site is currently primarily (69 percent) impervious surface areas. Therefore, minimal infiltration would occur on site during operation. Project construction and operation would not involve groundwater injection. Additionally, infiltration BMPs are not proposed. Because minimal infiltration would occur and no groundwater injection would occur, project construction and operation would not substantially degrade groundwater quality or result in the exceedance of water quality objectives or degradation of beneficial uses. Impacts would be less than significant, and no mitigation would be required.

Threshold 4.9.21: Impact aquatic, wetland, or riparian habitat?

Less Than Significant Impact. The project site is currently developed and located in an urban area. As discussed further in Section 4.3, Biological Resources, no natural streams, federally protected wetlands, or riparian habitat are located on the project site. Bolsa Chica Channel, a downstream receiving water, is a rock-lined trapezoidal channel, and does not provide aquatic, wetland, or riparian habitat. Anaheim Bay, the ultimate receiving water, is a wetland that supports aquatic and riparian habitat. However, the proposed project would not directly discharge into Anaheim Bay, and would implement construction and operational BMPs, as specified in Regulatory Compliance Measures 4.9-1 and 4.9-3, to reduce pollutant loading to receiving waters. With implementation of Regulatory Compliance Measures 4.9-1 and 4.9-3, development of the proposed project would have a less than significant impact on aquatic, wetland, or riparian habitat. No mitigation is required.

Threshold 4.9.22: Would the project include new or retrofitted stormwater treatment control Best Management Practices (e.g., water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g., increased vectors or odors)?

Less Than Significant Impact. As discussed above, the project would include implementation of post-construction BMPs (Filterra Bioscape Vaults and bioretention basins with underdrains) to reduce impacts related to hydrology and water quality. These post-construction BMPs would not result in additional impacts not already evaluated throughout this EIR. The post-construction BMPs would be routinely inspected and maintained to reduce impacts related to vectors and odors. Therefore, impacts related to BMPs would be less than significant, and no mitigation is required.

4.9.6.2 Level of Significance Prior to Mitigation

Construction and operational impacts related to hydrology and water quality would be less than significant with implementation of Regulatory Compliance Measures 4.9-1 through 4.9-5.

4.9.7 Regulatory Compliance Measures and Mitigation Measures

4.9.7.1 Regulatory Compliance Measures

The following regulatory compliance measures are existing regulations that are applicable to the proposed project and are considered in the analysis of potential impacts related to hydrology and water quality. The City of Cypress considers these requirements to be mandatory; therefore, they are not mitigation measures.

Regulatory Compliance Measure 4.9-1

Construction General Permit. Prior to commencement of construction activities, the Applicant/Developer shall obtain coverage under the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit),* NPDES No. CAS000002, Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ, or any other subsequent permit. This shall include submission of Permit Registration Documents (PRDs), including permit application fees, a Notice of Intent (NOI), a risk assessment, a site plan, a Stormwater Pollution Prevention Plan (SWPPP), a signed certification statement, and any other compliance-related documents required by the permit, to the State Water Resources Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). Construction activities shall not commence until a Waste Discharge Identification Number (WDID) is obtained for the project from the SMARTS and provided to the Director of the City of Cypress (City) Community Development Department, or designee, to demonstrate that coverage under the Construction General Permit has been obtained. Project construction shall comply with all applicable requirements specified in the Construction General Permit, including, but not limited to, preparation of a SWPPP and implementation of construction site best management practices (BMPs) to address all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate risk level identified for the project. The SWPPP shall identify the sources of pollutants that may affect the quality of stormwater and shall include BMPs (e.g., Sediment

Control, Erosion Control, and Good Housekeeping BMPs) to control the pollutants in stormwater runoff. Construction Site BMPs shall also conform to the requirements specified in the latest edition of the Orange County Stormwater Program *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers* to control and minimize the impacts of construction and construction-related activities, materials, and pollutants on the watershed. Upon completion of construction activities and stabilization of the project site, a Notice of Termination shall be submitted via SMARTS.

Regulatory Compliance Measure 4.9-2

Groundwater Dewatering Permit. If groundwater dewatering is required during construction or excavation activities and the dewatered groundwater is discharged to the sanitary sewer system, the Applicant/Developer shall obtain a discharge permit from the Director of the City of Cypress Public Works Department. If the dewatered groundwater is discharged to the stormdrain system, the Applicant/Developer shall obtain coverage under the *General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimis) Threat to Water Quality (*Order No. R8-2020-0006, NPDES No. CAG998001), which covers discharges to surface waters that pose an insignificant (de minimis) threat to water quality within. This shall include submission of a Notice of Intent for coverage under the permit to the RWQCB at least 45 days prior to the start of dewatering. The Applicant/Developer shall provide the Waste Discharge Identification Number (WDID) to the Director of the City's Public Works Department, or designee, to demonstrate proof of coverage under the *De Minimis* Permit. Groundwater dewatering shall not be initiated until a WDID is received from the Santa Ana Regional Water Quality Control Board (RWQCB) and is provided to the Director of the City's Public Works Department, or designee. Groundwater dewatering activities shall comply with all applicable provisions in the permit, including water sampling, analysis, treatment (if required), and reporting of dewatering-related discharges. Upon completion of groundwater dewatering activities, a Notice of Termination shall be submitted to the Santa Ana RWQCB.

Regulatory Compliance Measure 4.9-3 **Water Quality Management Plan.** Prior to the issuance of grading or building permits, the Applicant/Developer shall submit a Final Water Quality Management Plan (WQMP) to the City of Cypress Engineer, or designee, for review and approval in compliance with the 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 (Order No. R8-2009-0030, NPDES No. CAS618030, as amended by Order No. R8-2010-0062) (North Orange County MS4 Permit)*. The Final WQMP shall be prepared consistent with the requirements of the *Technical Guidance Document for Water Quality Management Plans* (December 2013) and the Water Quality Management Plan template, or subsequent guidance manuals. The Final WQMP shall specify the BMPs to be incorporated into the project design to target pollutants of concern in runoff from the project area. The City shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design.

Regulatory Compliance Measure 4.9-4 **Industrial General Permit.** Prior to commencement of industrial activities and issuance of a Certificate of Occupancy, the Applicant/Developer shall obtain coverage under the State Water Resources Control Board Industrial General Permit (Order WQ 2014-0057-DWQ as amended by Orders 2015-0122-DWQ and the 2018 Amendment documents) (Industrial General Permit) if the proposed on-site activities include transportation uses that require compliance with the Industrial General Permit (e.g. vehicle maintenance shops, equipment cleaning operations, or any type of vehicle maintenance [including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication]). The Industrial General Permit regulates the discharge of stormwater associated with industrial activity as defined by the United States Environmental Protection Agency. The proposed industrial activity at the proposed project falls under the Standard Industrial Code 4212 (Local Trucking without Storage), which is regulated under the Industrial General Permit. The proposed project shall comply with all applicable requirements specified in the Industrial General Permit, including the preparation of a SWPPP and implementation of BMPs to control and minimize the

impacts of industrial-related activities, materials, and pollutants on the watershed.

Regulatory Compliance Measure 4.9-5

Final Hydrology and Hydraulic Analysis. The Applicant/ Developer shall submit a Final Hydrology Study to the City of Cypress Director of Engineering, or his/her designee, for review and approval prior to issuance of grading and building permits. The Final Hydrology Study 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 Study shall demonstrate that the on-site drainage facilities and on-site underground detention systems are designed in compliance with 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 (Order No. R8-2009-0030, NPDES No. CAS618030, as amended by Order No. R8-2010-0062) (North Orange County MS4 Permit)* and the City peak flow restrictions from the City of Cypress Master Plan of Drainage. The Final Hydrology Study shall also demonstrate that the on-site drainage facilities and on-site underground detention systems are adequately sized to accommodate stormwater runoff from the design storm so that post-development runoff volume for the 25-year, 24 hour frequency storm does not exceed the pre-development flow rate, does not exceed the hydromodification requirements, and does not exceed the maximum allowable discharge for the project site ($Q_{allowable}$). The City Director of Engineering, or designee, shall ensure that the drainage facilities specified in the Final Hydrology Study are incorporated into the final project design.

4.9.7.2 Mitigation Measures

There are no mitigation measures required for the proposed project.

4.9.8 Level of Significance after Mitigation

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

4.9.9 Cumulative Impacts

Cumulative development in the Anaheim Bay-Huntington Harbour Watershed is a continuation of the existing urban pattern of development that has already resulted in extensive modifications to watercourses in the area. The area's watercourses have been channelized, and drainage systems have been put into place to respond to the past urbanization that has occurred in this area. For the cumulative analysis related to hydrology and water quality, the cumulative projects being considered include the related projects within the same watershed as the proposed project (i.e., the Anaheim Bay-Huntington Harbour Watershed) and/or discharging to the same stormdrain systems as the proposed project (i.e., the Katella Avenue stormdrain, Stanton Channel, and Bolsa Chica Channel). Please refer to Table 4.A and Figure 4.1, in Chapter 4.0, Existing Setting, Environmental Analysis, Impacts, and Mitigation Measures, for the descriptions and locations of these related projects.

Related Projects 16 through 27, as shown in Table 4.A, Summary of Related Projects, in Chapter 4.0, Existing Setting, Environmental Analysis, Impacts, and Mitigation Measures, would likely discharge to Bolsa Chica Channel and/or Anaheim Bay. 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 stormdrain system and the Anaheim Huntington Harbour Watershed, thereby resulting in cumulative impacts to hydrology and surface water quality.

New development and redevelopment can result in increased stormwater runoff and increased urban pollutants in stormwater runoff from each of the related 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. Specifically, the related projects that disturb 1 acre or more of soil must comply with the requirements of the Construction General Permit and the North Orange County MS4 Permit. The preparation and approval of a SWPPP (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 report 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, cities review 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 Anaheim Bay Huntington Harbour 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 Anaheim Bay Huntington Harbour Watershed would continue its 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 Construction General Permit 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, a WQMP, and a hydrology report, and would be evaluated individually to determine appropriate BMPs and treatment measures to reduce impacts to surface water quality and hydrology.

Many City stormdrain systems, are currently at capacity. Other related projects that would discharge stormwater to the same stormdrain system as the proposed project would have the potential to result in a cumulative impact related to stormdrain capacity and flooding. However, each individual project would be required to prepare a hydrology report, which would be reviewed and approved by the applicable city. The hydrology report would be required to demonstrate that the project would reduce stormwater discharge to at or below that allowed by the city for the individual project site. The City of Cypress has established discharge requirements for each property within its jurisdiction. As those properties are developed or redeveloped, the projects are required to reduce stormwater runoff from the property to meet the runoff restriction established by the City. The runoff restriction ensures that as development and redevelopment within the City continues, stormwater discharged to the existing stormdrain system will continue to be reduced, lessening the existing stormdrain capacity deficit. Because the proposed project includes proposed LID BMPs (Filterra Bioscape Vaults and bioretention basins with underdrains) that would be adequately sized and designed to reduce flows, the project would not contribute to the existing stormdrain capacity deficit.

In summary, because the proposed project and other related projects would comply with applicable NPDES requirements and would include BMPs and drainage facilities 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's incremental hydrology and water quality impacts would not be cumulatively considerable.

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4.10 LAND USE AND PLANNING

This section describes the existing land uses on the Amazon Facility project (proposed project) site and in its vicinity, and evaluates the compatibility of the proposed project with surrounding land uses and relevant policy and planning documents. The consistency analysis presented in this section was prepared in compliance with *State CEQA Guidelines* Section 15125(d). Information presented in this section is based on information provided in the City of Cypress (City) General Plan, the Cypress Corporate Center Amended Specific Plan (last amended in 1989), the City's General Plan Land Use Map, the City's Zoning Code (2020), and the City's Zoning Map. In addition, pursuant to *State CEQA Guidelines* Section 15125(d), this 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, Existing Environmental Setting, Environmental Analysis, Impacts, and Mitigation Measures.

4.10.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. One comment letter included comments related to land use and planning. The letter from Derek Balsillie received on July 6, 2020, suggested that the proposed project is not an allowable use under the zoning for the project site. Refer to the discussion under Threshold 4.10.2 below for an analysis of the project's consistency with the City's Zoning Ordinance.

4.10.2 Methodology

The impact analysis presented in this Land Use and Planning section evaluates potential physical impacts of the proposed project on land use compatibility and considers whether the proposed project would result in potential inconsistencies with relevant plans or policies contained in applicable planning documents adopted by the City and other agencies. Neither CEQA nor the *State CEQA Guidelines* set forth standards for determining whether or not a project is consistent with an applicable plan; rather, the final determination that a project is consistent or inconsistent with an applicable plan is made by the Lead Agency when it acts on the project. The analysis in this Draft EIR discusses the findings of policy review and is meant to provide a guide for decision-makers during policy interpretation.

A project's inconsistency with a plan or policy is only considered significant if such inconsistency would result in a significant physical environmental impact (per *State CEQA Guidelines* Section 15382). This EIR section determines whether or not the proposed project would conflict with any adopted land use policies or programs and whether mitigation is feasible. Under this approach, 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. In some cases, an inconsistency may be evidence that an underlying physical impact is significant and adverse.

4.10.3 Existing Environmental Setting

The project site is located in the southeastern portion of the City of Cypress, California, which is in the northwest portion of Orange County. As illustrated in Figure 3.2, Project Vicinity Land Uses, in Chapter 3.0, Project Description, of this EIR, the project site is on the southwest corner of Katella Avenue and Holder Street. The project site is rectangular in shape and consists of one approximately 22.3-acre parcel (Assessor's Parcel Number [APN] 224-261-04).

In its existing setting, the project site is characterized by several buildings that were recently vacated by Mitsubishi Motors of America, a paved parking lot with existing light poles and landscaping. The existing buildings consist of a three-story office building located on the northern portion of the project site, three research and development buildings located on the west-central portion of the project site, and a warehouse building located on the southwestern portion of the project site. A loading dock is located along the northern wall of the warehouse building. Additionally, a tennis court is located in the southeastern portion of the project site. Exposed soil and decomposed turf grass is present east of the existing warehouse. The project site is bounded on the north by Katella Avenue, on the west by commercial/industrial uses, on the south by the Stanton Storm Channel, and on the east by Holder Street.

Most of the project site is currently paved and includes some ornamental landscaping around the existing buildings, and along the edges of the project site. Public sidewalks exist along Katella Avenue and Holder Street on the northern and eastern borders of the project site, respectively. Vehicular access is currently provided to the project site by two driveways off Holder Street on the eastern edge of the project site.

The project site is within the boundaries of the Cypress Corporate Center Amended Specific Plan (Specific Plan), which covers an approximately 110-acre Specific Plan area situated directly north of the City of Garden Grove and east of the City of Los Alamitos.

Figure 3.2 also shows that the project site is surrounded by a variety of office, commercial, warehouse, and residential uses. Specifically, commercial/office uses are located directly north of the project site across Katella Avenue. Warehouse uses are located east and west of the project site. Single-family residential uses are located south of the project site, on the other side of the Stanton Storm Channel.

4.10.4 Regulatory Setting

4.10.4.1 Federal Regulations

There are no federal regulations applicable to land use and planning.

4.10.4.2 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 include the following seven elements in their general plan:

- Land Use
- Circulation
- Housing
- Conservation
- Open Space
- Noise
- Safety

Cities and counties in the San Joaquin Air Pollution Control District 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.[1]

Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375). This statute requires California's regional planning agencies to include a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy in their Regional Transportation Plans (RTPs). Senate Bill (SB) 375 was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under the law, California's regional planning agencies are required to include an SCS in their RTPs. The SCS provides a plan for meeting the regional emissions reduction targets established by the California Air Resources Board (CARB). If the emissions reduction targets cannot be met through the SCS, an Alternative Planning Strategy (APS) may be developed that shows how the targets would be achieved through alternative development patterns, infrastructure, or additional transportation policy measures. SB 375 also offers local governments regulatory and other incentives to encourage more compact new development and transportation alternatives.

The requirements of SB 375 are reflected in the 2020 RTP/SCS adopted by the Southern California Association of Governments (SCAG), which serves as the regional planning agency in the six-county metropolitan region composed of Orange, Los Angeles, Ventura, Riverside, San Bernardino, and Imperial Counties. The 2020–2045 RTP/SCS is discussed in further detail below.

4.10.4.3 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

[1] Senate Bill 1000 (SB 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."

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 are relevant to the project.

Regional Transportation Plan/Sustainable Communities Strategy. On May 7, 2020, SCAG adopted the 2020–2045 RTP/SCS (Connect SoCal). The 2020–2045 RTP/SCS is a long-range planning document that provides a common foundation for regional and local planning, policymaking, and infrastructure goals in the SCAG region. The core vision for the 2020–2045 RTP/SCS is to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal includes new initiatives at the intersection of land use, transportation and technology to close the gap and reach greenhouse gas reduction goals. The plan also includes robust financial analysis that considers operations and maintenance costs to ensure the existing transportation system's reliability, longevity, resilience and cost effectiveness. In addition, Connect SoCal is supported by a combination of transportation and land use strategies that outline how the region can achieve California's greenhouse gas emission reduction goals and federal Clean Air Act requirements. The plan also strives to achieve broader regional objectives, such as the preservation of natural lands, improvement of public health, increased roadway safety, support for the region's vital goods movement industries and more efficient use of resources.

The following goals in the 2020–2045 RTP/SCS are applicable to the proposed project:

Goal 1: Encourage regional economic prosperity and global competitiveness

Goal 5: Reduce greenhouse gas emissions and improve air quality

Goal 6: Support healthy and equitable communities

4.10.4.4 Local Regulations

The City has preeminent decision-making authority regarding allowable land uses on the project site. As discussed in greater detail below, the City's General Plan and Zoning Code both apply to the project site; however, the Specific Plan largely governs the permitted uses on, and development standards for, the project site.

City of Cypress General Plan. The City of Cypress General Plan contains goals, policies, and plans that are intended to guide land use and development decisions. The General Plan consists of a Land Use Map and the following eight elements, or chapters, which together fulfill the State requirements for a General Plan:

- Land Use Element
- Housing Element
- Circulation Element
- Conservation/Open Space/Recreation Element (satisfies the State's Conservation and Open Space Element requirements)

- Safety Element
- Noise Element
- Air Quality Element (optional element not required by State law)
- Growth Management Element (optional element not required by State law)

The City of Cypress General Plan was last comprehensively updated by the City Council in September 2001. The Housing Element was last updated in January 2013.

At the heart of the General Plan is the Land Use Element (2001). This element presents the City's goals and policies directing the long-term growth, development, and revitalization of the City. The Land Use Element serves as a guide to the allocation of land use in the City and has major impacts on key issues and subject areas examined in the other elements of the General Plan. The Land Use Map, which illustrates land uses within the City, is a primary feature of the Land Use Element. Land use designations indicate the type and nature of development that is allowed in a given location.

As shown on Figure 3.4, General Plan Land Uses, the Cypress General Plan Land Use Policy Map designates the project site as "Specific Plan Area" in recognition that the project site is subject to the Cypress Corporate Center Specific Plan (Specific Plan). The Specific Plan is discussed in further detail below.

The following goals and policies included in the General Plan are relevant to the proposed project:

- **Land Use Element**
    - **Goal LU-1:** Create a well balanced land use pattern that accommodates existing and future needs for housing, commercial, industrial and open space/recreation uses, while providing adequate community services to City residents.
    - **Goal LU-2:** Ensure that new development is compatible with surrounding land uses, the circulation network, availability of public facilities, and existing development constraints.
        - **Policy LU-2.1:** Ensure a sensitive transition between commercial or business park uses and residential uses by implementing precise development standards with such techniques as buffering, landscaping, and setbacks.
        - **Policy LU-2.4:** Mitigate traffic congestion and unacceptable levels of noise, odors, dust, and light and glare which affect residential areas and sensitive receptors, where feasible.
    - **Goal LU-10:** Carefully regulate future development in the Business Park to ensure the current high quality environment is maintained.
        - **Policy LU-10.1:** As a condition of development approval in the Business Park, consider the impacts of site utilization, access, and occupancy on traffic generation.

- **Goal LU-15:** Retain and facilitate the expansion of businesses throughout the City.

- **Circulation Element**
  - **Goal CIR-1:** Maintain a safe, efficient, economical, and aesthetically pleasing transportation system providing for the movement of people, goods, and services to serve the existing and future needs of the City of Cypress.
    - **Policy CIR-1.4:** Require new development to conform to the standards and criteria of the City of Cypress and other mandated programs. This includes mitigation of traffic impacts to the surrounding street system.
    - **Policy CIR-2.8:** Enhance the sidewalk environment to encourage pedestrian activities through streetscape and transit enhancement programs.

- **Conservation/Open Space/Recreation Element**
  - **Goal COSR-3:** Conserve energy resources through the use of available technology and conservation practices.
  - **Goal COSR-5:** Preserve Cypress' archaeologic and paleontologic resources.
    - **Policy COSR-5.2:** Prior to development in previously undeveloped areas, require strict adherence to the CEQA guidelines for environmental documentation and mitigation measures where development will affect archaeological or paleontological resources.

- **Safety Element**
  - **Goal SAF-1:** Protect residents, workers, and visitors from flood hazards, including dam inundation.
  - **Goal SAF-2:** Protect life and property in Cypress from seismic events and resulting hazards.
  - **Goal SAF-3:** Minimize risks to life and property associated with the handling, transporting, treating, generating, and storing of hazardous materials.
  - **Goal SAF-5:** Protect life and property in Cypress from urban fires. Maintain the Orange County Fire Authority's high level of service to community businesses and residents.
  - **Goal SAF-6:** Maintain the police department's high quality of service to the City.
  - **Goal SAF-8:** Protect Cypress residents from air operation accidents.

- **Noise Element**
    - **Goal N-2:** Incorporate noise considerations into land use planning decisions.
    - **Goal N-3:** Minimize noise spillover from commercial uses into nearby residential neighborhoods.
- **Air Quality Element**
    - **Goal AQ-1:** Reduce air pollution through proper land use and transportation planning.
    - **Goal AQ-2:** Improve air quality by reducing the amount of vehicular emissions in Cypress.
- **Growth Management Element**
    - **Goal GM-1:** Reduce traffic congestion.

Cypress Corporate Center Specific Plan. As set forth in the Land Use Element of the City's General Plan, Specific Plans implement General Plan goals and policies by designating land uses, densities, development, and design standards in more specific detail. The original Cypress Corporate Center Master Plan was adopted as a specific plan by the Cypress City Council on April 29, 1981. The Cypress Corporate Center Amended and Restated Specific Plan was adopted in March 1989. The Cypress Corporate Center Specific Plan covers an approximately 110-acre area in the southeastern portion of the City. The Specific Plan designates the project site for Business Park uses.

The project site currently has a zoning designation of PC-2, Cypress Corporate Center, which is intended to provide for the development of uses as allowed by the Specific Plan. The Cypress Corporate Center Amended Specific Plan is the regulatory plan that constitutes the zoning for the project site. Therefore, the Specific Plan largely governs the permitted uses and development standards associated with the project site.

4.10.5 Thresholds of Significance

The thresholds for land use and planning impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist.* The proposed project may be deemed to have a significant impact with respect to land use and planning if it would:

Threshold 4.10.1: **Physically divide an established community?**

Threshold 4.10.2: **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?**

4.10.6 Project Impacts

Threshold 4.10.1: **Would the project physically divide an established community?**

No Impact. The project site is currently developed with several buildings that were recently vacated by Mitsubishi Motors of America. The project site is located in a largely developed portion of the City of Cypress. The area surrounding the project site is developed with a variety of commercial, warehouse, office, and residential uses. The proposed project would demolish the existing buildings on the project site, except for the existing 150,000 square-foot (sf) warehouse building on the southwest portion of the project site and an existing 180,000 sf office building along the northern edge of the project site and develop a last mile logistics facility on the project site. Primary access to the project site would be provided via three driveways from Holder Street, and a fourth employee right-in/right-out driveway would be provided on Katella Avenue. Additionally, the proposed project would improve the existing concrete sidewalk on the northern edge of the project site and the adjacent pavement along Katella Avenue.

Although implementation of the proposed project would result in changes on the project site (demolition of buildings and expansion of the parking area) to allow for the operation of the last mile logistics facility, it would not result in new structures on the project site or changes to the existing parcel configuration of adjacent parcels. As such, the proposed project would not divide or separate any existing land uses or neighborhoods. Therefore, construction and implementation of the project would not result in the physical division of an established community. No mitigation would be required.

Threshold 4.10.2: 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

Less Than Significant Impact. As discussed above, the main documents regulating land use on the project site and the immediate vicinity are the City's General Plan, the Zoning Ordinance, and the Specific Plan. The proposed project's relationship to these planning documents and the proposed project's consistency with the 2020–2045 RTP/SCS are provided below.

SCAG Regional Transportation Plan/Sustainable Communities Strategy. Table 4.10.A provides a consistency analysis of the goals from the 2020–2045 RTP/SCS that are relevant to the proposed project. In order to eliminate repetitive goals and focus on key issues, goals that are not relevant to the proposed project are not included in Table 4.10.A. As stated in Table 4.10.A, the proposed project would be consistent with applicable goals in the 2020–2045 RTP/SCS, and no mitigation is required.

City of Cypress General Plan. The Cypress General Plan Land Use Policy Map designates the project site as "Specific Plan Area" in recognition that the project site is subject to the Cypress Corporate Center Specific Plan (Specific Plan). Therefore, the Specific Plan largely governs the permitted uses and development standards associated with the project site. Table 4.10.B provides a consistency analysis of the goals and policies from the City's General Plan that are relevant to the proposed project. As stated in Table 4.10.B, the proposed project would be consistent with all of the applicable General Plan goals and policies.

Table 4.10.A: RTP/SCS Consistency Analysis

Relevant RTP/SCS Goals	Consistency Analysis
RTP/SCS Goal 1: Encourage regional economic prosperity and global competitiveness	**Consistent.** The proposed project would result in the development of a last mile logistics facility, which would reactivate the recently vacated project site. The proposed project would also result in employment on the site. Therefore, the proposed project would be consistent with Goal 1 in the 2020–2045 RTP/SCS.
RTP/SCS Goal 5: Reduce greenhouse gas emissions and improve air quality	**Consistent**. As described in Section 4.2, Air Quality, of this EIR, construction and operation of the proposed project would result in less than significant air quality impacts. As described in Section 4.7, Greenhouse Gas Emissions, of this EIR, construction and operation of the proposed project would result in less than significant impacts related to greenhouse gas emissions. Because the proposed project would not degrade air quality or result in significant impacts related to greenhouse gas emissions, the proposed project would be consistent with Goal 5 in the 2020–2045 RTP/SCS.
RTP/SCS Goal 6: Support healthy and equitable communities	**Consistent.** As described in Section 4.2, Air Quality, of this EIR, construction and operation of the proposed project would result in less than significant air quality impacts. Additionally, the health risk report prepared for the proposed project determined that the proposed project would not cause a significant human health or cancer risk to adjacent residences or workers. Because the proposed project would not degrade air quality or result in mobile source health risk impacts, the proposed project would be consistent with Goal 6 in the 2020–2045 RTP/SCS.

Source: Southern California Association of Governments. 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy.
EIR = Environmental Impact Report
RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy

Table 4.10.B: General Plan Consistency Analysis

Relevant General Plan Goals/Policies	Consistency Analysis
Land Use Element	
Goal LU-1: Create a well balanced land use pattern that accommodates existing and future needs for housing, commercial, industrial and open space/ recreation uses, while providing adequate community services to City residents.	**Consistent.** The proposed project would develop a warehouse storage project in an area of the City that is currently characterized by a mix of commercial, warehouse, office, and residential uses. As discussed further in Section 4.12, Public Services, and Section 4.15, Utilities and Service Systems, the affected public and utility service providers were contacted during preparation of this EIR to determine potential project-related impacts to affected public and utility service providers. As described in Sections 4.12 and 4.15, the project's impacts to utilities and other public services would be less than significant. Therefore, project implementation would contribute to a well-balanced land use pattern that accommodates the City's existing and future needs for commercial uses, while providing adequate community services to City residents. Therefore, the proposed project would be consistent with General Plan Land Use Element Goal LU-1.
Goal LU-2: Ensure that new development is compatible with surrounding land uses, the circulation network, availability of public facilities, and existing development constraints.	**Consistent.** As demonstrated in Section 4.2, Air Quality, and Section 4.11, Noise, the project is designed to be compatible with surrounding land uses. As discussed further in Section 4.13, Transportation, the proposed project would have less than significant impacts on the local circulation network. According to Section 4.12, Public Services, and Section 4.15, Utilities and Service Systems, the proposed project would not have a significant impact on public facilities in light of existing development constraints. Therefore, the proposed project would be consistent with General Plan Land Use Element Goal LU-2.
Policy LU-2.1: Ensure a sensitive transition between commercial or business park uses and residential uses by implementing precise development standards with such techniques as buffering, landscaping, and setbacks.	**Consistent.** The proposed project would comply with all applicable development standards as outlined in the Specific Plan, which would ensure a sensitive transition between the proposed project and the residential uses south of the drainage channel. Therefore, the proposed project would be consistent with General Plan Land Use Element Policy LU-2.1.
Policy LU-2.4: Mitigate traffic congestion and unacceptable levels of noise, odors, dust, and light and glare which affect residential areas and sensitive receptors, where feasible.	**Consistent.** As discussed in Section 4.13, Transportation, the proposed project would not generate significant adverse impacts related to traffic and transportation. As discussed in Section 4.1, Aesthetics, Section 4.2, Air Quality, and Section 4.11, Noise, sensitive receptors at nearby residential neighborhoods would not experience unacceptable levels of noise, odors, dust, light, or glare as a result of project implementation. Therefore, the proposed project would be consistent with General Plan Land Use Element Policy LU-2.4.
Goal LU-10: Carefully regulate future development in the Business Park to ensure the current high quality environment is maintained.	**Consistent.** The proposed project would comply with all applicable development standards in the Specific Plan and as detailed throughout this EIR, the proposed project would include mitigation measures and regulatory compliance measures that would minimize environmental impacts to the extent feasible. Therefore, the proposed project would be consistent with General Plan Land Use Element Goal LU-10.

Table 4.10.B: General Plan Consistency Analysis

Relevant General Plan Goals/Policies	Consistency Analysis
Policy LU-10.1: As a condition of development approval in the Business Park, consider the impacts of site utilization, access, and occupancy on traffic generation.	**Consistent.** The proposed project would utilize a recently vacated site and would result in the development of a last mile logistics facility. The proposed project would provide access to the project site via three driveways from Holder Street and a fourth employee right-in/right-out driveway on Katella Avenue. As discussed in Section 4.13, Transportation, the proposed project would result in less than significant traffic impacts. Consistent with the referenced policy, this information will be provided to City decision-makers prior to considering approval of the proposed project. Therefore, the proposed project would be consistent with General Plan Land Use Element Policy LU-10.1
Goal LU-15: Retain and facilitate the expansion of businesses throughout the City.	**Consistent.** The proposed project would result in the development of a last mile logistics facility on a currently vacant parcel, which would introduce a new business to the City and would facilitate the expansion of businesses throughout the City. Therefore, the proposed project would be consistent with General Plan Land Use Element Goal LU-15.
Circulation Element	
Goal CIR-1: Maintain a safe, efficient, economical, and aesthetically pleasing transportation system providing for the movement of people, goods, and services to serve the existing and future needs of the City of Cypress.	**Consistent.** As discussed in Section 4.13, Transportation, the proposed project would result in less than significant impacts related to traffic at all study area intersections. Therefore, the proposed project would be consistent with General Plan Circulation Element Goal CIR-1.
Policy CIR-1.4: Require new development to conform to the standards and criteria of the City of Cypress and other mandated programs. This includes mitigation of traffic impacts to the surrounding street system.	**Consistent.** As discussed in Section 4.13, Transportation, the proposed project would comply with all applicable standards related to transportation. Therefore, the proposed project would be consistent with General Plan Circulation Element Policy CIR-1.4.
Policy CIR-2.8: Enhance the sidewalk environment to encourage pedestrian activities through streetscape and transit enhancement programs.	**Consistent.** The proposed project would improve the existing concrete sidewalk on the northern edge of the project site along Katella Avenue. Additionally, the proposed project would preserve the grass lawn adjacent to the sidewalk and office building for aesthetic purposes. Therefore, the proposed project would be consistent with General Plan Circulation Element Policy CIR-2.8.
Conservation/Open Space/Recreation Element	
Goal COSR-3: Conserve energy resources through the use of available technology and conservation practices.	**Consistent.** As described in Section 4.5, Energy, the proposed project would comply with the energy efficiency standards included in Title 24 (Regulatory Compliance Measure 4.5-1), which would significantly reduce energy usage. Therefore, the proposed project would be consistent with General Plan Conservation/Open Space/Recreation Element Goal COSR-3.
Goal COSR-5: Preserve Cypress' archaeologic and paleontologic resources.	**Consistent.** As described in Section 4.6, Geology and Soils, the proposed project would implement Mitigation Measure 4.6-2, which would require that a qualified paleontologist be contacted in the event that any paleontological resources are discovered during ground-disturbing activities so the discovery can be assessed for scientific importance. The qualified paleontologist shall then make recommendations regarding treatment and disposition of the discovery, the need for paleontological monitoring, and preparation of the appropriate report.

Table 4.10.B: General Plan Consistency Analysis

Relevant General Plan Goals/Policies	Consistency Analysis
	Implementation of Mitigation Measure 4.6-2 would ensure that impacts to paleontological resources are reduced to a level that is less than significant. As described in Section 4.4, Cultural Resources, the proposed project would implement Mitigation Measure 4.4-1, which requires monitoring by a qualified archaeologist. The measure includes procedures for recovering any significant or unique archaeological resource and for preparation of a report that documents any cultural resource recovery at the project site. Implementation of Mitigation Measure 4.6-1 would ensure that impacts to archaeological resources are reduced to a level that is less than significant. Therefore, the proposed project would be consistent with General Plan Conservation/Open Space/Recreation Element Goal COSR-5.
Policy COSR-5.2: Prior to development in previously undeveloped areas, require strict adherence to the CEQA guidelines for environmental documentation and mitigation measures where development will affect archaeological or paleontological resources.	**Consistent.** Refer to Mitigation Measure 4.4-1 in Section 4.4, Cultural Resources, and Mitigation Measure 4.6-2 in Section 4.6, Geology and Soils. The proposed project has the potential to affect unknown archaeological and paleontological resources. The proposed project would adhere to the *State CEQA Guidelines* for environmental documentation and mitigation measures where development could affect these resources. Mitigation Measures 4.4-1 and 4.6-2 would ensure project compliance with CEQA, the California Code of Regulations, the State Health and Safety Code, and the California Public Resources Code as they relate to archaeological and paleontological resources, respectively. Therefore, the proposed project would be consistent with General Plan Conservation/Open Space/Recreation Element Policy COSR-5.2.
Safety Element	
Goal SAF-1: Protect residents, workers, and visitors from flood hazards, including dam inundation.	**Consistent.** As described in further detail in Section 4.9, Hydrology and Water Quality, the proposed project would not result in significant impacts related to flooding. Additionally, the project site has a low likelihood of flooding and the proposed on-site stormdrain system would be adequately sized to accommodate stormwater runoff so that on-site flooding would not occur. Therefore, the proposed project would be consistent with General Plan Safety Element Goal SAF-1.
Goal SAF-2: Protect life and property in Cypress from seismic events and resulting hazards.	**Consistent.** As discussed in further detail in Section 4.6, Geology and Soils, with the implementation of Mitigation Measure 4.6-1, which requires compliance with the recommendations in the project Geotechnical Assessment, all impacts related to geological hazards would be less than significant. As such, the proposed project would be consistent with General Plan Safety Element Goal SAF-2.

Table 4.10.B: General Plan Consistency Analysis

Relevant General Plan Goals/Policies	Consistency Analysis
Goal SAF-3: Minimize risks to life and property associated with the handling, transporting, treating, generating, and storing of hazardous materials.	**Consistent.** As discussed in further detail in Section 4.8, Hazards and Hazardous Materials, the proposed project would not result in any significant impacts related to the routine transport, use, or disposal of hazardous materials. Therefore, the proposed project would be consistent with General Plan Safety Element Goal SAF-3.
Goal SAF-5: Protect life and property in Cypress from urban fires. Maintain the Orange County Fire Authority's high level of service to community businesses and residents.	**Consistent.** As discussed in further detail in Section 4.12, Public Services, the proposed project requires the implementation of Mitigation Measure 4.12-1, which requires the Applicant/Developer to enter into a Secured Fire Protection Agreement with the Orange County Fire Authority. The Secured Fire Protection Agreement with the Orange County Fire Authority would ensure adequate service to the project site. As such, the proposed project would be consistent with General Plan Safety Element Goal SAF-5.
Goal SAF-6: Maintain the police department's high quality of service to the City.	**Consistent.** As discussed in further detail in Section 4.12, Public Services, the proposed project is expected to be adequately served by existing police facilities. Additionally, the Cypress Police Department would review the site plan during the project approval phase and would impose standard conditions of approval. As such, the proposed project would be consistent with General Plan Safety Element Goal SAF-6.
Goal SAF-8: Protect Cypress residents from air operation accidents.	**Consistent.** As discussed in further detail in Section 4.8, Hazards and Hazardous Materials, the proposed project would not result in a safety hazard for people in the project area because the proposed project would comply with all appropriate Federal Aviation Administration (FAA) standards and requirements, including compliance with Federal Aviation Regulations [FAR] Part 77 requirements. As such, the proposed project would be consistent with General Plan Safety Element Goal SAF-8.
Noise Element	
Goal N-2: Incorporate noise considerations into land use planning decisions.	**Consistent.** As discussed in further detail in Section 4.11, Noise, the proposed uses on the project site would be compatible with surrounding uses based on noise standards established by the City. Therefore, the proposed project would result in the development of land uses consistent with the City's noise standards and the proposed project would be consistent with General Plan Noise Element Goal N-2.
Goal N-3: Minimize noise spillover from commercial uses into nearby residential neighborhoods.	**Consistent.** As discussed in further detail in Section 4.11, Noise, with the implementation of Regulatory Compliance Measure 4.11-1, which includes measures to reduce noise impacts during construction to surrounding residential areas, noise impacts would be less than significant. As such, the proposed project would be consistent with General Plan Noise Element Goal N-3.

Table 4.10.B: General Plan Consistency Analysis

Relevant General Plan Goals/Policies	Consistency Analysis
Air Quality Element	
Goal AQ-1: Reduce air pollution through proper land use and transportation planning.	**Consistent**. As discussed in further detail in Section 4.2, Air Quality, the proposed project would not result in significant air quality impacts. Additionally, the proposed project would result in the development of a last mile logistics facility directly adjacent to Katella Avenue, which is one of the City's major travel corridors. As such, the proposed project would be consistent with General Plan Air Quality Element Goal AQ-1.
Goal AQ-2: Improve air quality by reducing the amount of vehicular emissions in Cypress.	**Consistent**. As discussed in further detail in Section 4.2, Air Quality, the proposed project would not result in significant air quality impacts related to vehicular emissions. As such, the proposed project would be consistent with General Plan Air Quality Element Goal AQ-2.
Growth Management Element	
Goal GM-1: Reduce traffic congestion.	**Consistent.** As discussed in Section 4.13, Transportation, the proposed project would result in less than significant impacts related to traffic at all study area intersections. Therefore, the proposed project would be consistent with General Plan Growth Management Element Goal GM-1.

Source: City of Cypress General Plan (2001).

Cypress Corporate Center Specific Plan. As described in Chapter 3.0, Project Description, the proposed project would require the approval of a conditional use permit (CUP). The proposed project includes a "last mile" logistics facility. Permitted uses in the Specific Plan area include all general administrative, and professional uses, general research facilities, and laboratories, service industries, industries engaged in storage and warehousing, and construction industries. Since the proposed use is relatively new and does not clearly fit into any of the existing Specific Plan permitted uses, the City has determined that the appropriate entitlement would be a Conditional Use Permit. The proposed project would be consistent with development requirements as outlined in the Specific Plan. The Specific Plan does not include any applicable goals or policies. Therefore, upon its approval by the City Council, the proposed project would be consistent with the Specific Plan.

Zoning Ordinance. The City's Zoning Ordinance is the primary implementation tool for its General Plan Land Use Element (2001) and the goals and policies therein. For this reason, the Zoning Map must be consistent with the General Plan Land Use Map. The General Plan Land Use Map indicates the general location and extent of future land use in Cypress. The Zoning Ordinance, which includes the Zoning Map, contains more detailed information about permitted land uses, building intensities, and required development standards.

The Cypress Corporate Center Specific Plan is the regulatory plan that constitutes the zoning for the project site. The project site currently has the zoning designation Cypress Corporate Center (PC-2), which is consistent with the proposed project's intended warehouse storage uses. The project does not propose any amendments to the City's General Plan, the Specific Plan, or the City's Zoning Ordinance. Therefore, the proposed project is consistent with the City's Zoning Ordinance.

Summary. As discussed above, the proposed project would be consistent with the 2020–2045 RTP/SCS, the City's General Plan, Zoning Ordinance, and the Specific Plan. Therefore, the proposed project would result in less than significant impacts related to potential conflicts with applicable land use plans, policies, and regulations, and no mitigation is required.

4.10.7 Level of Significance Prior to Mitigation

The proposed project would result in less than significant impacts related to land use and planning.

4.10.8 Regulatory Compliance Measures and Mitigation Measures

There are no regulatory compliance measures applicable to the proposed project. The proposed project would not result in potentially significant impacts related to land use and planning; therefore, no mitigation is required.

4.10.9 Level of Significance after Mitigation

No mitigation is required. The proposed project would not result in potentially significant impacts related to land use and planning.

4.10.10 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 impact area for land use for the proposed project is the City of Cypress. Several development projects are approved and/or pending within the City. Table 4.A (refer to Chapter 4.0, Existing Setting, Environmental Analysis, Impacts, and Mitigation Measures) lists approved and planned projects within the City, and Figure 4.1, Related Projects, maps the locations of these projects. Each of these projects, as well as all proposed development in the City, would be subject to its own General Plan consistency analysis and would be reviewed for consistency with adopted land use plans and policies.

The City of Cypress is an urbanized area with a wide variety of established land uses. The land around the project site has been developed with a variety of commercial, warehouse, office, and residential land uses. As previously stated, the project site is designated for Business Park uses in the Specific Plan. Although the proposed project requires the approval of a conditional use permit, the proposed project would result in the development of a last mile logistics facility, consistent with the uses permitted on the project site by the Specific Plan. Should the City Council approve the proposed project, the proposed project would be consistent with the Specific Plan and cumulative land use impacts would be considered less than significant.

The proposed project would include land uses that would be compatible with the existing and planned commercial areas and neighborhoods surrounding the project site and would replace the recently vacated corporate headquarters on the project site. Therefore, the proposed project would not contribute to a pattern of development that adversely impacts adjacent land uses or conflicts with existing on site or surrounding land uses.

There are no incompatibilities between the proposed project and planned future projects in the City, which primarily include mixed-use and residential developments. As discussed previously, the proposed project would not divide an established community; conflict with the SCAG 2020–2045 RTP/SCS or any City-adopted plans or policies. All identified City-related projects would be reviewed for consistency with adopted land use plans and policies by the City. For this reason, the related projects are anticipated to be consistent with applicable General Plan and zoning requirements, or would be subject to allowable exceptions; further, they would be subject to CEQA, mitigation requirements, and design review. Therefore, the proposed project would not contribute to a significant cumulative land use compatibility impact in the study area, and no mitigation is required.

4.11 NOISE

This section evaluates the potential short-term and long-term noise impacts associated with the construction and operation of the Amazon Facility project (proposed project). This section is based on the *Katella Avenue Amazon Facility Noise Impact Analysis* (Noise Impact Analysis) (Urban Crossroads, July 7, 2020). This report is included as Appendix J to this Draft Environmental Impact Report (EIR). This section also incorporates data from the Noise Element (2000) of the City of Cypress General Plan.

4.11.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. Three comment letters included comments related to noise.

The letter from the City of Los Alamitos received on June 30, 2020, requested quantification of noise generated by delivery trucks and vans including noise generated by idling engines, loading and unloading, and sound emanating from vehicles traveling along the path of delivery to and from the proposed project. Additionally, six members of the public also expressed concerns regarding truck-related noise.

4.11.2 Methodology

Evaluation of noise and vibration impacts associated with the proposed project includes the following:

- Determination of the short-term construction noise and vibration impacts.
- Determination of the long-term off-site and on-site traffic noise impacts.
- Determination of the long-term stationary noise impacts from project operations.
- Determination of the required mitigation measures to reduce short-term construction–related noise and vibration impacts and long-term stationary and mobile source noise impacts.

The evaluation of noise and vibration impacts was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the City of Cypress Noise Element and Municipal Code and Federal Transit Administration (FTA) criteria.

4.11.2.1 Characteristics of Sound

Noise is usually defined as “unwanted sound.” Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health.

To the human ear, sound has two important characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a wave resulting in the tone’s range from high to low. Loudness is the strength of a sound that describes a noisy or quiet environment and is measured by the amplitude

of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity is the average rate of sound energy transmitted through a unit area perpendicular to the direction in which the sound waves are traveling. This characteristic of sound can be precisely measured with instruments. In analyzing the potential noise impacts of a proposed project, the existing noise environment in the vicinity of the project site is identified and the potential noise effects of the project are evaluated in terms of sound intensity and the effect on adjacent sensitive land uses.

4.11.2.2 Measurement of Sound

Sound intensity is measured through the A-weighted decibel (dBA) scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Decibels (dB), unlike the linear scale (e.g., inches or pounds), is a scale based on powers of 10.

Each interval of 10 dB indicates a sound energy 10 times greater than before. For example, 10 dB is 10 times more intense than 0 dB, 20 dB is 100 times more intense than 0 dB, and 30 dB is 1,000 times more intense than 0 dB. Thirty (30 dB) dB represents 1,000 times as much acoustic energy as 0 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as a doubling of the loudness of the sound. Ambient sounds generally range from 30 dB (very quiet) to 100 dB (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is applicable to noise generated by stationary equipment. If noise is produced by a line source (which approximates the effect of several point sources), such as highway traffic or railroad operations, the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source sound levels decrease 4.5 dB for each doubling of distance in a relatively flat environment with absorptive vegetation.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also account for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for communities in the State of California are the L_{eq} and Community Noise Equivalent Level (CNEL) or the day-night average noise level (L_{dn}) based on A-weighted decibels. CNEL is the time-weighted average noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noises occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the relaxation. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable.

Other noise rating scales used when assessing the annoyance factor of noise include the maximum noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. Short-term noise impacts are specified in terms of maximum levels denoted by L_{max}. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise. For enforcement purposes, it is often used with another noise scale (or noise standards in terms of percentile noise levels) in noise ordinances. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period.

4.11.2.3 Vibration

According to the United States Department of Transportation (USDOT) FTA's 2018 *Transit Noise and Vibration Impact Assessment Manual*, vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or anthropogenic causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency. Vibration is often described in units of velocity (inches per second) and discussed in decibel units in order to compress the range of numbers required to describe vibration. Vibration impacts are generally associated with activities such as train operations, construction, and heavy truck movements.

The background vibration velocity level in residential areas is generally 50 vibration velocity decibels (VdB). Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The relevant range of vibration for the purposes of this analysis is from approximately 50 VdB, the typical background vibration velocity level, to 100 VdB, the general threshold where minor damage can occur in fragile buildings.

4.11.3 Existing Environmental Setting

4.11.3.1 Overview of the Existing Noise Environment

The primary existing noise sources in the vicinity of the project site are associated with surface streets such as Holder Street and include automobile and truck, including heavy truck, activities. Another source of noise in the vicinity of the project site includes aircraft noise from the Joint Forces Training Base (JFTB) Los Alamitos.

4.11.3.2 Existing Sensitive Land Uses in the Project Vicinity

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Noise-sensitive land uses include residences, hospitals, school classrooms,

churches, libraries, and parks. Noise-sensitive land uses in the vicinity of the project site include residences to the north and south and a hotel to the northeast of the project site. Other land uses immediately adjacent to the project site include commercial/office uses to the north, warehouse uses to the east and west and single-family residences to the south.

4.11.3.3 Existing Noise Levels

The existing noise levels at the project site are assessed from ambient noise levels measurements conducted on the project site, existing aircraft noise, and existing traffic noise levels along roadways in the project vicinity. The existing noise levels in the area surrounding the project site are further described in detail below.

Long-term (24-hour) noise level measurements were conducted on May 14, 2020, using Piccolo Type 2 integrating sound level meter and data loggers at five locations positioned as close to the nearest sensitive receiver locations as possible. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. Table 4.11.A shows the hourly equivalent continuous sound level (L_{eq}) results from the long-term measurements, as well as the calculated CNEL. As shown in Table 4.11.A, the calculated CNELs range from 50.7 dBA CNEL to 61.7 dBA CNEL. The long-term monitoring locations are also shown in Figure 4.11.1, Noise Measurement Locations.

Table 4.11.A: 24-Hour Ambient Noise Level Measurements

Monitor No.	Location Description	Date	Energy Average Noise Level (dBA L_{eq})[1]		CNEL
			Daytime	Nighttime	
L1	Located north of the project site by Holder Street near existing single-family residential home at 10753 Maple Street	5/14/20	56.3	50.5	58.7
L2	Located northeast of the project site by the Hampton Inn at 10900 Yamaha Way	5/14/20	57.0	54.6	61.7
L3	Located southeast of the project site on Capers Way near existing multi-family residential homes	5/14/20	48.2	46.3	53.3
L4	Located south of the project site on Holder Street near existing single-family residential home at 6471 Cantiles Avenue	5/14/20	51.9	49.1	50.7
L5	Located southwest of the project site by Barbados Avenue by existing single-family home at 11250 Providencia Street	5/14/20	52.4	45.0	54.0

Source: *Katella Avenue Amazon Facility Noise Impact Analysis* (Urban Crossroads 2020).
[1] Energy (logarithmic) average levels.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.
CNEL = Community Noise Equivalent Level L_{eq} = equivalent continuous sound level
dBA = A-weighted decibels

4.11.3.4 Existing Aircraft Noise Levels

The Joint Forces Training Base (JFTB) Los Alamitos is located approximately 0.6 mile southwest of the project site in the City of Los Alamitos. According to the Airport Environs Land Use Plan for JFTB Los Alamitos and Exhibit SAF-8 in the Safety Element (2001) of the City's General Plan, the project site is within the 60 dBA CNEL noise contour but outside of the 65 dBA CNEL noise contour for JFTB Los Alamitos. In addition, there are no private airstrips located on or within the vicinity of the project site.



FIGURE 4.11.1

Amazon Facility
Noise Measurement Locations

SOURCE: Urban Crossroads

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4.11.3.5 Existing Traffic Noise Levels

Noise contours were used to assess the existing traffic noise levels. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. Because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area. Existing noise levels are expected to range from 55.3 to 76.2 dBA CNEL. The existing traffic noise levels along roadway segments within the vicinity of the project site are presented in Table 4.11.B. These traffic noise levels are representative of a worst-case scenario that assumes a flat terrain and no shielding between the traffic and the noise contours. The specific assumptions used in developing these noise levels and the model printouts are provided in Appendix J.

Table 4.11.B: Existing (2020) Traffic Noise Levels

Roadway Segment	ADT	CNEL at Receiving Land Use (dBA)[1]	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)
Valley View St. north of Katella Ave.	45,670	75.0	130	279	602
Valley View St. south of Katella Ave.	60,487	76.2	156	337	726
Holder St. north of Katella Ave.	8,546	66.3	RW	52	111
Holder St. south of Katella Ave.	2,274	60.6	RW	RW	46
Holder St. south of Driveway 2	1,900	59.8	RW	RW	RW
Holder St. north of Driveway 4	671	55.3	RW	RW	RW
Knott Ave. north of Katella Ave.	28,293	70.8	56	121	261
Knott Ave. south of Katella Ave.	31,688	71.3	61	131	282
Western Way north of Katella Ave.	23,593	71.7	59	127	273
Katella Ave. west of Valley View St.	51,028	75.5	140	301	648
Katella Ave. east of Valley View St.	35,430	73.9	109	236	508
Katella Ave. west of Holder St.	35,430	73.9	109	236	508
Katella Ave. east of Holder St.	37,516	74.2	114	245	528
Katella Ave. east of Knott Ave.	34,113	73.8	107	230	495
Katella Ave. east of Western Way	30,536	73.3	99	214	460

Source: Compiled by LSA (2020).
[1] The CNEL is calculated at the boundary of the right-of-way of the receiving adjacent land use.
ADT = average daily traffic
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet
RW = location of respective noise contour falls within the right-of-way of the road

4.11.4 Regulatory Setting

4.11.4.1 Federal Regulations

Federal Transit Administration. Numerical construction thresholds based on the guidelines set forth in the FTA *Transit Noise and Vibration Impact Assessment Manual* (2018) are used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use.

The FTA identifies guidelines for the maximum acceptable vibration levels for different types of land uses. These guidelines are based on the potential for interference or annoyance from vibration

levels in a building and the potential for building damage. According to the FTA, ground vibrations from construction activities generally do not reach levels that can damage structures, but they can achieve the audible and feel-able ranges in buildings very close to the construction site. Exceptions include non-engineered timber and masonry buildings such as residential buildings and old or fragile buildings, where special care must be taken to avoid damage. Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment, such as air compressors, light trucks, and hydraulic loaders, generates little or no ground vibration.

Occasionally, large bulldozers and loaded trucks can cause perceptible vibration levels at close proximity. Ground vibration levels associated with various types of construction equipment are summarized in Table 4.11.C. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential project construction vibration levels using the following vibration assessment methods defined by the FTA.

Table 4.11.C: Vibration Source Levels for Construction Equipment

Equipment	Vibration Decibels (VdB) at 25 Feet
Small Bulldozer	58
Jackhammer	79
Loaded Trucks	86
Large Bulldozer	87
Pile Driver	93

VdB = vibration velocity decibels

4.11.4.2 State Regulations

State of California Noise Requirements. The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element, which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research (OPR). The purpose of the Noise Element, as defined by the OPR guidelines, is to limit the exposure of the community to excessive noise levels. In addition, the *State CEQA Guidelines* include thresholds of significance for analyzing environmental noise impacts.

4.11.4.3 Regional Regulations

There are no regional regulations related to noise that are applicable to the proposed project.

4.11.4.4 Local Regulations

City of Cypress General Plan. The City of Cypress has adopted a Noise Element of the General Plan to control and abate environmental noise, and to protect the citizens of the City of Cypress from excessive exposure to noise. The City of Cypress General Plan Noise Element specifies the maximum

allowable unmitigated exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, the City of Cypress General Plan Noise Element identifies several goals and policies to minimize the impacts of excessive noise levels throughout the community and establishes noise level requirements for all land uses. To limit the exposure of City residents to excessive noise, the City of Cypress General Plan Noise Element contains the following five goals:

- **N-1** Reduce noise impacts from transportation noise sources.
- **N-2** Incorporate noise considerations into land use planning decisions.
- **N-3** Minimize noise spillover from commercial uses into nearby residential neighborhoods.
- **N-4** Minimize the noise impacts associated with the development of residential units above ground floor commercial uses in mixed use developments.
- **N-5** Develop measures to control non-transportation noise impacts.

To satisfy these five overarching goals, the City of Cypress General Plan Noise Element identifies policies to reduce noise levels at sensitive land uses. For transportation noise sources (Goal N-1), the City of Cypress General Plan Noise Element requires the incorporation of attenuation measures, such as noise barriers, in the design of new developments. Further, the City has established criteria to determine the land use compatibility of new developments based on the noise level criteria defined in Table N-2, and the interior and exterior noise standards in Table N-3 of the City of Cypress General Plan Noise Element (Goal N-2). To minimize the noise spillover from commercial to residential land uses (Goal N-3), the City of Cypress General Plan Noise Element sets noise level limits for commercial properties and landscape buffer distance requirements, in addition to enforcing the City's Noise Ordinance. Additional policies are identified to reduce commercial noise in mixed-use developments where residential units are located above ground floor commercial uses (Goal N-4). Goal N-5 of the City of Cypress General Plan Noise Element requires compliance with the Noise Ordinance for noise-generating activities on land uses such as commercial and industrial.

The Noise and Land Use Compatibility Matrix (Table N-2) in the City of Cypress General Plan Noise Element lists land use categories and the acceptable and unacceptable levels of community noise exposure. The compatibility criteria shown on Table N-2 of the Cypress General Plan (provided as Figure 4.11.2, Noise and Land Use Compatibility Matrix, in this EIR), provide the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. The Noise and Land Use Compatibility Matrix describes categories of compatibility, but not specific noise standards. According to these categories of transportation-related noise compatibility, the proposed project's industrial land uses are considered normally acceptable with unmitigated exterior noise levels below 70 dBA CNEL and conditionally acceptable with noise levels below 75 dBA CNEL. For conditionally acceptable land use, "new construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice" (City of Cypress General Plan Noise Element, Table N-2).

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Land Use Category	Community Noise Exposure			
	Ldn or CNEL, dB			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential-Low Density	50-60	60-65	65-75	75-85
Residential-Multiple Family	50-60	60-65	65-75	75-85
Transient Lodging-Motel, Hotels	50-65	65-70	70-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-65	65-80	80-85
Auditoriums, Concert Halls, Amphitheaters	NA	50-65	NA	65-85
Sports Arenas, Outdoor Spectator Sports	NA	50-70	NA	70-85
Playgrounds, Neighborhood Parks	50-70	NA	70-75	75-85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	NA	70-80	80-85
Office Buildings, Business Commercial and Professional	50-67.5	67.5-75	75-85	NA
Industrial, Manufacturing, Utilities, Agriculture	50-70	70-75	75-85	NA

Source: Modified from U.S. Department of Housing and Urban Development Guidelines and State of California Standards.

NOTES: **NORMALLY ACCEPTABLE**
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
NORMALLY UNACCEPTABLE
New Construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.
NA: Not Applicable

Source: *City of Cypress General Plan Noise Element,* Table N-2 (2000).

Figure 4.11.2: Noise and Land Use Compatibility Matrix

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City of Cypress Municipal Code.

Construction Noise Standards. Section 13-70(e) of the City's Municipal Code states that "noise sources associated with construction, repair, remodeling or grading of any real property, provided said activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, and before 9:00 a.m. and after 8:00 p.m. on Saturdays, or at any time on Sundays or a federal holiday."

While the City establishes limits to the hours during which construction activity may take place, neither the City's General Plan or Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers. Therefore, a numerical construction threshold based on the FTA's *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use.

Operational Noise Standards. The City of Cypress Municipal Code exterior noise standards are shown in Table 4.11.D.

Table 4.11.D: City of Cypress Operational Exterior Noise Standards

Receiving Land Use	Time Period	Exterior Noise Level Standards (dBA)[1]				
		L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (Anytime)
Noise Zone 1 (Residential)	Daytime	55	60	65	70	75
	Nighttime	50	55	60	65	70

Source: City of Cypress Municipal Code Section 13-68. Exterior Noise Standards (Appendix 3.1).
[1] The percent noise level is the level exceeded "n" percent of the time. L50 is the noise level exceeded 50% of the time. "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.
dBA = A-weighted decibels
L_{eq} = Equivalent continuous sound level
L_{max} = Maximum noise level

The percentile noise descriptors are provided to ensure that the duration of the noise source is fully considered. However, due to the relatively constant intensity of the project operational activities, the L_{50} or average L_{eq} noise level metrics best describe the parcel delivery activity, loading dock activity, truck movements, roof-top air conditioning units, and trash compactor activity. In addition, the L_{eq} noise level metric accounts for noise fluctuations over time by averaging the louder and quieter events and giving more weight to the louder events. In addition, due to the mathematical relationship between the median (L_{50}) and the mean (L_{eq}), the L_{eq} will always be larger than or equal to the L_{50}. The more variable the noise becomes, the larger the L_{eq} becomes in comparison to the L_{50}. Therefore, this noise analysis conservatively relies on the average L_{eq} sound level limits to describe the project operational noise levels.

***Construction Ground-borne Vibration Standards*.** Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment, such as air compressors, light trucks, and hydraulic loaders,

etc., generates little or no ground vibration. To analyze vibration impacts originating from the construction of the proposed project, vibration-generating activities are appropriately evaluated against standards established under a city's Municipal Code, if such standards exist. However, the City of Cypress does not identify specific construction ground-borne vibration level limits. Therefore, to describe the potential project construction vibration levels, this analysis relies on the FTA's 2018 *Transit Noise and Vibration Impact Assessment Manual* guidelines for the maximum-acceptable vibration levels for different types of land uses. These acceptable guidelines allow for ground-borne vibration levels of 90 VdB for industrial (workshop) use, 84 VdB for office use, 78 VdB for daytime residential uses, and 72 VdB for nighttime uses in buildings where people normally sleep.

Operational Ground-borne Vibration Standards. Section 3.10.120 of the City of Cypress Municipal Code requires that uses shall not generate inherent and recurrent ground-borne vibrations that are perceptible, without the aid of instruments, at the boundary of the parcel on which a use is located. This restriction shall not apply to temporary construction activity. According to the FTA's *Transit Noise and Vibration Impact Assessment Manual,* the threshold of perception is approximately 65 VdB. Although the perceptibility threshold is approximately 65 VdB, human response to ground-borne vibration is not usually substantial unless the vibration exceeds 70 VdB. Therefore, to ensure that the operational ground-borne vibration levels of the proposed project are not perceptibly consistent with Section 3.10.120 of the City of Cypress Municipal Code, a threshold of 65 VdB is used to assess the potential project operational vibration levels.

4.11.5 Thresholds of Significance

The thresholds for noise impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist.* The proposed project may be deemed to have a significant impact with respect to noise if it would:

Threshold 4.11.1: **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Threshold 4.11.2: **Generation of excessive groundborne vibration or groundborne noise levels?**

Threshold 4.11.3: **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?**

In addition to the *State CEQA Guidelines Appendix G* thresholds above, the quantitative noise and vibration standards in Table 4.11.E below, are used in this analysis to evaluate construction and operational impacts related to noise and vibration.

Table 4.11.E: Summary of Noise and Vibration Standards/Significance Criteria

Noise Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site	Noise-Sensitive[1]	If ambient is <50 dBA CNEL	≥ 7 dBA CNEL Project increase	
		If ambient is 50-55 dBA CNEL	≥ 5 dBA CNEL Project increase	
		If ambient is 55-60 dBA CNEL	≥ 3 dBA CNEL Project increase	
		If ambient is 60-65 dBA CNEL	≥ 2 dBA CNEL Project increase	
		If ambient is 65-75 dBA CNEL	≥ 1 dBA CNEL Project increase	
		If ambient is >75 dBA CNEL	0 dBA CNEL Project increase	
	Office[2]	if ambient is > 67.5 dBA CNEL	≥ 3 dBA CNEL Project increase	
	Industrial[2]	if ambient is > 70 dBA CNEL	≥ 3 dBA CNEL Project increase	
Operational	Residential	Noise Zone 1[3]	See Table 4.11.D	
	Noise-Sensitive[1]	If ambient is < 50 dBA L_{eq}	≥ 7 dBA L_{eq} Project increase	
		If ambient is 50 - 55 dBA L_{eq}	≥ 5 dBA L_{eq} Project increase	
		If ambient is 55 - 60 dBA L_{eq}	≥ 3 dBA L_{eq} Project increase	
		If ambient is 60 - 65 dBA L_{eq}	≥ 2 dBA L_{eq} Project increase	
		If ambient is 65 - 75 dBA L_{eq}	≥ 1 dBA L_{eq} Project increase	
		If ambient is > 75 dBA L_{eq}	0 dBA L_{eq} Project increase	
		Vibration Level Threshold[1]	65 VdB	
Construction	Noise-Sensitive	Permitted hours of construction of 7:00 a.m. to 8:00 p.m. on weekdays, 9:00 a.m. to 8:00 p.m. on Saturdays except Sundays or a federal holiday[4]		
		Noise level Threshold[1]	80 dBA L_{eq}	N/A
	Residential	Ground-borne Vibration level threshold	78 VdB	72 VdB
	Office		84 VdB	
	Industrial		90 VdB	

Source: *Katella Avenue Amazon Facility Noise Impact Analysis* (Urban Crossroads 2020).
Note: "Daytime" = 7:00 a.m.–10:00 p.m.; "Nighttime" = 10:00 p.m.–7:00 a.m.
[1] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual
[2] City of Cypress General Plan Noise Element Noise and Land Use Compatibility Matrix
[3] City of Cypress Municipal Code Section 13-68 (Appendix 3.1)
[4] City of Cypress Municipal Code, Section 13-70 (Appendix 3.2)
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
L_{eq} = Equivalent continuous sound level
N/A = Not applicable. Construction during nighttime hours is not permitted. Therefore, no nighttime construction noise level threshold is identified.

4.11.6 Project Impacts

Threshold 4.11.1: **Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Less Than Significant Impact.

Construction Noise Impacts. Noise generated by the project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. Reference construction noise levels were modeled to determine project construction noise levels at the nearby sensitive receiver locations shown on Figure 4.11.3, Sensitive Receiver Locations.

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FIGURE 4.11.3

Amazon Facility
Sensitive Receiver Locations

SOURCE: Urban Crossroads

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In addition, the highest noise levels impacts were assessed when the equipment with the highest reference noise level is operating at the closest point from the edge of the project site to each receiver location (highest construction levels). Based on this assessment, construction noise levels are expected to range from 41.9 to 65.3 dBA L_{eq}, and, as shown in Table 4.11.F, the highest construction levels are expected to range from 52.0 to 65.3 dBA L_{eq} at the nearby receiver locations.

Table 4.11.F: Temporary Construction Noise Level Increases (L_{eq})

Receiver Location[1]	Distance to Receiver	Highest Construction Noise Levels	Measurement Location[2]	Reference Ambient Noise Levels[3]	Combined Project and Ambient[4]	Temporary Worst-Case Project Contribution[5]	Threshold Exceeded?[6]
R1	1,449 ft	52.0	L1	56.3	57.7	1.4	No
R2	1,378 ft	57.0	L2	57.0	60.0	3.0	No
R3	122 ft	63.5	L3	48.2	63.6	15.4	No
R4	88 ft	65.3	L4	51.9	65.5	13.6	No
R5	408 ft	59.0	L5	52.4	59.9	7.5	No

Source: *Katella Avenue Amazon Facility Noise Impact Analysis* (Urban Crossroads 2020).
[1] See Figure 4.11.3 for receiver locations.
[2] Ambient noise level measurement locations as shown on Figure 4.11.1.
[3] Observed daytime ambient noise levels
[4] Represents the combined daytime ambient noise conditions plus the Project construction activities
[5] The temporary noise level increase expected with the addition of the proposed Project activities
[6] Based on the significance criteria in Table 4.11.E
ft = foot/feet
L_{eq} = equivalent continuous sound level

To evaluate whether the proposed project would generate potentially significant short-term noise levels at nearby receiver locations, a construction-related noise level threshold of 80 dBA L_{eq} is used as a reasonable threshold to assess construction noise level impacts. As stated above, the highest construction level is 65.3 dBA L_{eq} and is below the noise level threshold of 80 dBA L_{eq}. Although temporary construction noise level impacts would be below the threshold of 80 dBA L_{eq}, the proposed project would comply with the permitted construction hours from 7:00 a.m. to 8:00 p.m. on weekdays and Saturdays specified in the Cypress Corporate Center Amended Specific Plan (Specific Plan). No construction shall be permitted outside of these hours or on Sundays or federal holidays (refer to Regulatory Compliance Measure 4.11-1 in this section). Therefore, the noise impacts due to project construction are considered less than significant at all receiver locations, and no mitigation is required.

Less Than Significant Impact.

Operational Noise. Operational noise consists of noise generated by vehicles accessing the project site as well as noise generated by on-site activities. Each of these ***operational noise sources*** is described below.

Off-Site Traffic Noise Impacts. The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to evaluate traffic noise in the vicinity of the project site. Table 4.11.G shows the modeled traffic noise levels under the existing (2020) year without and with the proposed project. Table 4.11.H shows the modeled traffic noise levels under the opening

year (2021) conditions without and with the proposed project. These traffic noise levels are representative of a worst-case scenario that assumes a flat terrain and no shielding between the traffic and the noise contours. The specific assumptions used in developing these noise levels and the model printouts are provided in Appendix J.

As shown in Table 4.11.G, existing without project exterior noise levels are expected to range from 55.3 to 76.2 dBA CNEL and existing with project conditions will range from 56.8 to 76.3 dBA CNEL. Table 4.11.G shows that the project off-site traffic noise level impacts will range from 0.0 to 3.9 dBA CNEL.

As shown in Table 4.11.H, opening year without project exterior noise levels are expected to range from 55.4 to 76.5 dBA CNEL and opening year with project conditions will range from 56.8 to 76.5 dBA CNEL. Table 4.11.H shows that the project off-site traffic noise level increases will range from 0.0 to 3.3 dBA CNEL.

Based on the significance criteria for off-site traffic noise presented in Table 4.11.E, land uses adjacent to the study area roadway segments would experience less than significant noise level impacts due to unmitigated project-related traffic noise levels.

Long-Term Stationary-Source Noise Impacts. The following describes noise level impacts associated with the expected typical daytime and nighttime activities at the project site. To present the potential worst-case noise conditions, this analysis assumes the proposed project would be operational 24 hours per day, 7 days per week. Consistent with similar warehouse uses, the project business operations would primarily be conducted within the enclosed buildings, except for traffic movement, parking, as well as loading and unloading of trucks at designated loading bays. The on-site project-related noise sources are expected to include: parcel delivery activity, loading dock activity, truck movements, rooftop air conditioning units, and trash compactor activity and would vary throughout the day. Each on-site activity was evaluated relative to the sensitive receivers identified above (refer to Receiver Locations R1 through R5).

Parcel Delivery Loading Activity. The proposed project would include four new loading ramps on the eastern side of the warehouse to facilitate delivery van loading in the driveway loop. Noise sources within delivery areas typically include a combination of switcher cabs towing trailers, docking at loading dock doors, idling, multiple backup alarms, air brakes, and background switcher cab movements. Modeled daytime and nighttime hourly noise levels for parcel delivery activity are estimated to be between 30.5 and 49.8 dBA L_{eq} at sensitive receiver locations.

Loading Dock Activity. The proposed project would include loading docks on the north side of the warehouse building. Noise sources within loading dock areas typically include employees unloading a docked truck container including the squeaking of the truck's shocks when weight is removed from the truck, employees playing music over a radio, as well as a forklift horn and backup alarm. In addition, noise sources such as truck engines, idling, air brakes noise, and on-going idling of already docked trucks may be present. Modeled daytime and nighttime hourly noise levels for loading dock activity are estimated to be between 23.2 and 36.2 dBA L_{eq} at sensitive receiver locations.

Table 4.11.G: Existing (2020) Without and With Project Traffic Noise Level Increases

Roadway Segment	CNEL at Receiving Land Use (dBA)[2]				Noise Sensitive Land Use?	Exterior Noise Standard	Incremental Noise Level Increase Threshold[3]	
	Receiving Land Use[1]	Without Project	With Project	Project Addition			Limit	Exceeded?
Valley View St. north of Katella Ave.	GNC/LDR	75.0	75.1	0.1	Yes	65	1.5	No
Valley View St. south of Katella Ave.	A/R	76.2	76.3	0.1	Yes	65	1.5	No
Holder St. north of Katella Ave.	I	66.3	66.4	0.1	No	70	5.0	No
Holder St. south of Katella Ave.	I	60.6	64.5	3.9	No	70	5.0	No
Holder St. south of Driveway 2	I	59.8	63.7	3.9	No	70	5.0	No
Holder St. north of Driveway 4	R	55.3	56.8	1.5	Yes	65	5.0	No
Knott Ave. north of Katella Ave.	GC/LDR	70.8	70.8	0.0	Yes	65	1.5	No
Knott Ave. south of Katella Ave.	GC/HDR	71.3	71.3	0.0	Yes	65	1.5	No
Western Way north of Katella Ave.	GMU/GC/HDR	71.7	71.8	0.1	Yes	65	1.5	No
Katella Ave. west of Valley View St.	C	75.5	75.6	0.1	No	70	3.0	No
Katella Ave. east of Valley View St.	C	73.9	74.1	0.2	No	70	3.0	No
Katella Ave. west of Holder St.	I	73.9	74.2	0.3	No	70	3.0	No
Katella Ave. east of Holder St.	I	74.2	74.4	0.2	No	70	3.0	No
Katella Ave. east of Knott Ave.	GC/HDR/MDR/GMU	73.8	73.9	0.1	Yes	65	1.5	No
Katella Ave. east of Western Way	GC/HDR/OS	73.3	73.4	0.1	Yes	65	1.5	No

Source: *Katella Avenue Amazon Facility Noise Impact Analysis* (Urban Crossroads 2020).

[1] Source: City of Cypress General Plan Land Use Policy Map, Warland/Cypress Business Center Specific Plan Exhibit 3, Stanton General Plan Update General Plan Land Use Diagram, McDonnell Center Specific Plan Land Use Plan Exhibit 3, Cypress Corporate Center Amended Specific Plan Surrounding Land Use Map

[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4.11.E)?

A = Agriculture
CNEL = Community Noise Equivalent Level
GC = General Commercial
GMU = General Mixed Use
GNC = General Neighborhood
HDR = High Density Residential
I = Industrial
LDR = Low Density Residential
MDR = Medium Density Residential
OS = Open Space
R = Residential

Table 4.11.H: Opening Year (2021) Without and With Project Traffic Noise Level Increases

Roadway Segment	CNEL at Receiving Land Use (dBA)[2]				Noise Sensitive Land Use?	Exterior Noise Standard	Incremental Noise Level Increase Threshold[3]	
	Receiving Land Use[1]	Without Project	With Project	Project Addition			Limit	Exceeded?
Valley View St. north of Katella Ave.	GNC/LDR	76.5	76.5	0.0	Yes	65	1.5	No
Valley View St. south of Katella Ave.	A/R	76.5	76.5	0.0	Yes	65	1.5	No
Holder St. north of Katella Ave.	I	66.5	66.5	0.0	No	70	5.0	No
Holder St. south of Katella Ave.	I	62.5	65.4	2.9	No	70	5.0	No
Holder St. south of Driveway 2	I	60.8	64.1	3.3	No	70	5.0	No
Holder St. north of Driveway 4	R	55.4	56.8	1.5	Yes	65	5.0	No
Knott Ave. north of Katella Ave.	GC/LDR	70.9	70.9	0.0	Yes	65	1.5	No
Knott Ave. south of Katella Ave.	GC/HDR	71.4	71.4	0.0	Yes	65	1.5	No
Western Way north of Katella Ave.	GMU/GC/HDR	71.9	71.9	0.0	Yes	65	1.5	No
Katella Ave. west of Valley View St.	C	75.9	76.0	0.1	No	70	3.0	No
Katella Ave. east of Valley View St.	C	74.2	74.4	0.2	No	70	3.0	No
Katella Ave. west of Holder St.	I	74.2	74.4	0.2	No	70	3.0	No
Katella Ave. east of Holder St.	I	74.5	74.6	0.1	No	70	3.0	No
Katella Ave. east of Knott Ave.	GC/HDR/MDR/GMU	74.0	74.1	0.1	Yes	65	1.5	No
Katella Ave. east of Western Way	GC/HDR/OS	73.5	73.6	0.1	Yes	65	1.5	No

Source: *Katella Avenue Amazon Facility Noise Impact Analysis* (Urban Crossroads 2020).

[1] Source: City of Cypress General Plan Land Use Policy Map, Warland/Cypress Business Center Specific Plan Exhibit 3, Stanton General Plan Update General Plan Land Use Diagram, McDonnell Center Specific Plan Land Use Plan Exhibit 3, Cypress Corporate Center Amended Specific Plan Surrounding Land Use Map

[2] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

[3] Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4.11.E)?

A = Agriculture
CNEL = Community Noise Equivalent Level
GC = General Commercial
GMU = General Mixed Use
GNC = General Neighborhood
HDR = High Density Residential
I = Industrial
LDR = Low Density Residential
MDR = Medium Density Residential
OS = Open Space
R = Residential

Truck Movements. Truck movement activity would mainly occur around the perimeter of the project site and around the loading dock area. Noise sources related to truck movements typically include rattling and squeaking during normal opening and closing operations, gate closure equipment, truck engines idling outside the entry gate, truck movements through the entry gate, and forklift backup alarm noise. The proposed project is expected to generate a total of approximately 2,490 trip-ends per day (actual vehicles) and includes 58 truck trip-ends per day. Modeled daytime hourly noise levels for truck movement are estimated to be between 5.9 and 24.6 dBA L_{eq} at sensitive receiver locations and between 0.0 and 15.4 dBA L_{eq} for the nighttime hourly noise levels.

Roof-Top Air Conditioning Units. It is anticipated that there will be nine rooftop air conditioning units included as part of the proposed project. Modeled daytime hourly noise levels for the rooftop air conditioning units are estimated to be between 12.7 and 26.7 dBA L_{eq} at sensitive receiver locations and between 10.3 and 24.3 dBA L_{eq} for the nighttime hourly noise levels.

Trash Compactors. For the noise analysis, it was assumed that the proposed project would include one trash compactor. Modeled daytime hourly noise levels for the trash compactor are estimated to be between 0.9 and 16.0 dBA L_{eq} at sensitive receiver locations and between 0.0 and 15.0 dBA L_{eq} for the nighttime hourly noise levels.

To demonstrate compliance with local noise regulations, the project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Cypress exterior noise level standards at nearby noise-sensitive receiver locations. Table 4.11.I shows that the operational noise levels associated with proposed project will satisfy the City of Cypress 55 dBA L_{eq} daytime and 50 dBA L_{eq} nighttime exterior noise level standards at all nearby receiver locations. Therefore, the operational noise impacts are considered less than significant at the nearby noise-sensitive receiver locations, and no mitigation is required.

Table 4.11.I: Operational Noise Level Compliance

Receiver Location[1]	Project Operational Noise Levels (dBA L_{eq})		Noise Level Standards (dBA L_{eq})[2]		Noise Level Standards Exceeded?[3]	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	33.9	33.8	55	50	No	No
R2	39.4	39.4	55	50	No	No
R3	47.4	47.4	55	50	No	No
R4	49.8	49.8	55	50	No	No
R5	32.7	32.2	55	50	No	No

Source: *Katella Avenue Amazon Facility Noise Impact Analysis* (Urban Crossroads 2020).
[1] See Figure 4.11.3 for receiver locations.
[2] Exterior noise level standards for noise as shown on Table 4.11.E
[2] Do the estimated Project operational noise source activities exceed the noise level standards? "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.
dBA = A-weighted decibels
L_{eq} = equivalent continuous sound level

To describe the project operational noise level increases, the project operational noise levels are combined with the existing ambient noise levels measurements for the nearby receiver locations potentially impacted by project operational noise sources. The difference between the combined project and ambient noise levels describe the project noise level increases to the existing ambient noise environment. Noise levels that would be experienced at receiver locations when project source noise is added to the daytime and nighttime ambient conditions are presented in Tables 4.11.J and 4.11.K. As indicated on Tables 4.11.J and 4.11.K, the proposed project will generate daytime and nighttime operational noise level increases ranging from 0.0 to 3.6 dBA L_{eq} at the nearby receiver locations. Project-related operational noise level increases will satisfy the noise level increase significance criteria presented in Table 4.11.E. Therefore, the incremental project operational noise level increase is considered less than significant at all receiver locations, and no mitigation is required.

Threshold 4.11.2: Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?

Less Than Significant Impact. 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 intrusion. The proposed project's construction activities most likely to cause ground-borne vibration impacts are:

- **Heavy Construction Equipment:** Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to buildings, the ground-borne 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 ground-borne 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 by the FTA. Construction activities that would have the potential to generate low levels of ground-borne vibration within the project site include grading. Using the vibration source levels for construction equipment provided in Table 4.11.C and the construction vibration assessment methodology published by the FTA, it is possible to estimate the project ground-borne vibration impacts. Table 4.11.L presents the expected typical construction equipment vibration levels at the nearby receiver locations. In addition to the five nearby noise sensitive receiver locations, Table 4.11.L presents the construction vibration levels at the nearest office and industrial land uses. Please refer to Figure 4.11.4, Typical Construction Noise Source Locations, for the locations of the typical construction noise sources.

Table 4.11.J: Daytime Project Operational Noise Level Increases

Receiver Location[1]	Total Project Operational Noise Level	Measurement Location[2]	Reference Ambient Noise Levels	Combined Project and Ambient	Project Increase	Noise Sensitive Land Use?	Increase Criteria[3]	Increase Criteria Exceeded?[3]
R1	33.9	L1	56.3	56.3	0.0	Yes	3.0	No
R2	39.4	L2	57.0	57.1	0.1	Yes	3.0	No
R3	47.4	L3	48.2	50.8	2.6	Yes	7.0	No
R4	49.8	L4	51.9	54.0	2.1	Yes	5.0	No
R5	32.7	L5	52.4	52.4	0.0	Yes	5.0	No

Source: *Katella Avenue Amazon Facility Noise Impact Analysis* (Urban Crossroads 2020).

[1] See Figure 4.11.3 for receiver locations.

[2] See Figure 4.11.1 for measurement locations.

[3] Significance increase criteria as shown on Table 4.11.E

Table 4.11.K: Nighttime Project Operational Noise Level Increases

Receiver Location[1]	Total Project Operational Noise Level	Measurement Location[2]	Reference Ambient Noise Levels	Combined Project and Ambient	Project Increase	Noise Sensitive Land Use?	Increase Criteria[3]	Increase Criteria Exceeded?[3]
R1	33.9	L1	50.5	50.6	0.1	Yes	5.0	No
R2	39.4	L2	54.6	54.7	0.1	Yes	5.0	No
R3	47.4	L3	46.3	49.9	3.6	Yes	7.0	No
R4	49.8	L4	49.1	52.5	3.4	Yes	7.0	No
R5	32.7	L5	45.0	45.2	0.2	Yes	7.0	No

Source: *Katella Avenue Amazon Facility Noise Impact Analysis* (Urban Crossroads 2020).

[1] See Figure 4.11.3 for receiver locations.

[2] See Figure 4.11.1 for measurement locations.

[3] Significance increase criteria as shown on Table 4.11.E.

Table 4.11.L: Temporary Construction Noise Level Increases (L_{eq})

Receiver Location[1]	Land Use	Distance to Construction Activity (feet)	Receiver Vibration Levels (VdB)[2]					Threshold VdB[3]	Threshold Exceeded?[4]
			Small Bulldozer	Jack-Hammer	Loaded Trucks	Large Bulldozer	Highest Vibration Levels		
R1	Residential	1,499	5.1	26.1	33.1	34.1	34.1	78	No
R2	Hotel	1,378	5.8	26.8	33.8	34.8	34.8	78	No
R3	Residential	122	37.3	58.3	65.3	66.3	66.3	78	No
R4	Residential	88	41.6	62.6	69.6	70.6	70.6	78	No
R5	Residential	408	21.6	42.6	49.6	50.6	50.6	78	No
V1	Industrial	137	35.8	56.8	63.8	54.8	64.8	90	No
V2	Industrial	119	37.7	58.7	65.7	66.7	66.7	90	No
V3	Industrial	56	47.5	68.5	75.5	76.5	76.5	90	No
V4	Office	202	30.8	51.8	58.8	59.8	59.8	84	No
V5	Office	200	30.9	51.9	58.9	59.9	59.9	84	No
V6	Office	205	30.6	51.6	58.6	59.6	59.6	84	No
V7	Industrial	181	32.2	53.2	60.2	61.2	51.2	90	No
V8	Industrial	183	32.1	53.1	60.1	61.1	61.1	90	No

Source: *Katella Avenue Amazon Facility Noise Impact Analysis* (Urban Crossroads 2020).

[1] See Figure 4.11.4 for receiver locations.

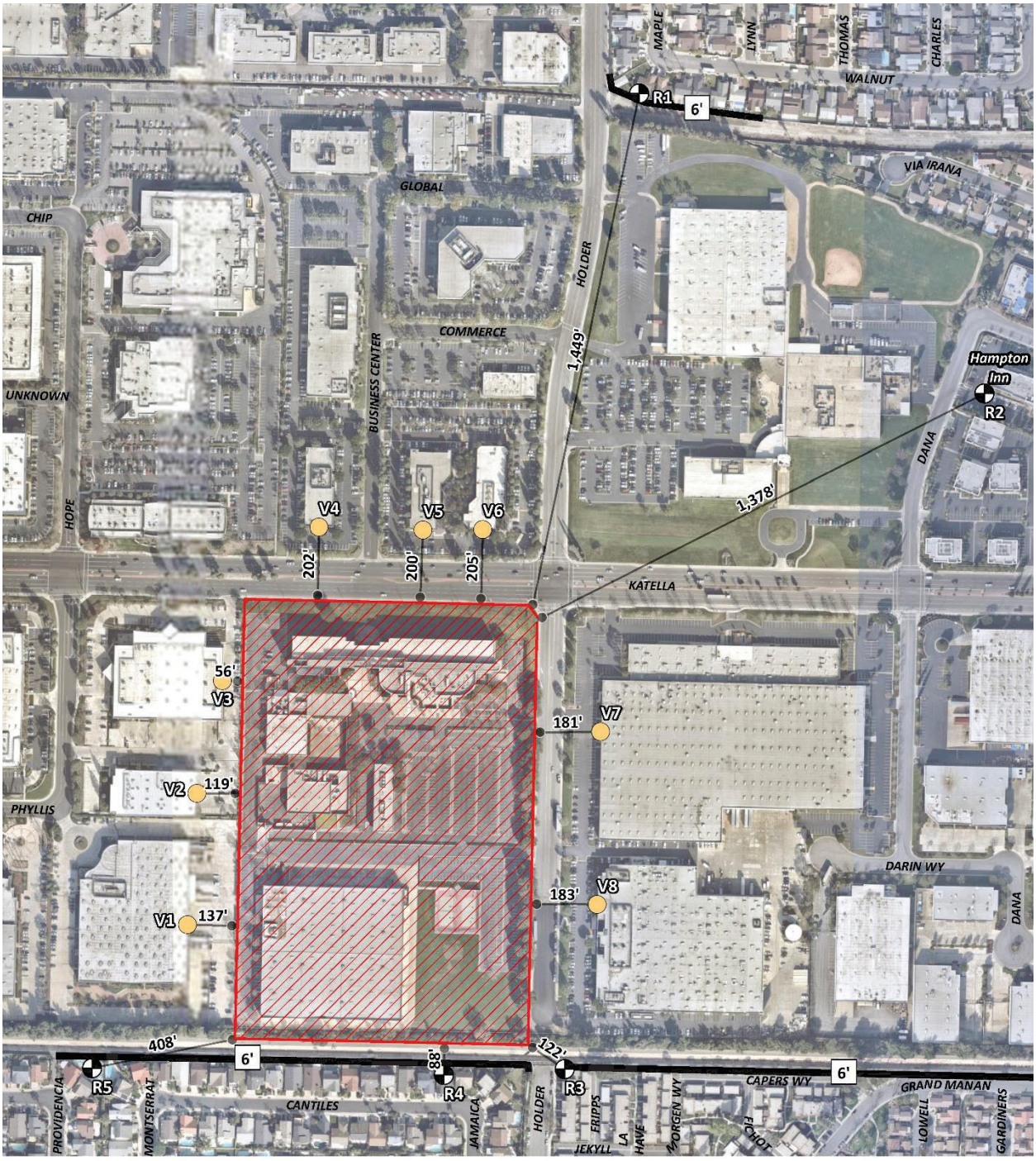
[2] Based on the Vibration Source Levels of Construction Equipment included on Table 4.11.C.

[3] FTA Transit Noise and Vibration Impact Assessment Manual maximum acceptable vibration criteria as shown on Table 4.11.E.

[4] Does the vibration level exceed the maximum acceptable vibration threshold?

FTA = Federal Transit Administration

VdB = vibration velocity decibels



LSA

FIGURE 4.11.4

Amazon Facility

Typical Construction Noise Source Locations

SOURCE: Urban Crossroads

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At distances ranging from 56 feet to 1,449 feet from the project site boundary, construction vibration levels are estimated to range from 5.1 to 76.5 VdB, and the highest expected construction vibration levels are estimated to range from 34.1 to 76.5 VdB and will remain below the FTA *Transit Noise and Vibration Impact Assessment Manual* maximum acceptable vibration criteria at all receiver locations. Therefore, the project-related vibration impacts are considered less than significant, and mitigation is not required.

Further, the vibration levels due to project construction do not represent vibration levels capable of causing building damage to nearby receiver locations since building damage due to construction vibration is generally limited to prolonged annoyance from activities such as pile driving and blasting. Since no pile driving or blasting is planned during project construction, the construction vibration levels at nearest receivers are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the project site boundary.

The project operational ground-borne vibration impacts will include heavy trucks moving on site to and from the loading dock areas. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. According to the FTA T*ransit Noise Impact and Vibration Assessment* trucks rarely create vibration that exceed 70 VdB (unless there are bumps due to frequent potholes in the road). Since the trucks transiting on site will be travelling at very low speeds on smooth surfaces, it is expected that delivery truck vibration impacts at nearby receiver locations will satisfy the vibration perceptibility threshold of 65 VdB and, therefore, will be less than significant.

Threshold 4.11.3: 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?

Less than Significant Impact. The closest airport is the Los Alamitos Joint Forces Training Base (JFTB), Los Alamitos airfield. The project site is located approximately 0.6 mile northeast of the JFTB. The noise contour boundaries of JFTB show that the project is located outside of the 65 dBA CNEL noise contour boundary. Therefore, since industrial land use is considered normally acceptable with exterior noise levels of 50–70 dBA CNEL, the JFTB noise impacts are considered less than significant, and no mitigation is required.

4.11.7 Level of Significance Prior to Mitigation

The project would result in less than significant impacts related to temporary construction and operational noise impacts, ground-borne vibration, and ground-borne noise levels and to the exposure of people to excessive noise levels within the vicinity of an airport or private airstrip.

4.11.8 Regulatory Compliance Measures and Mitigation Measures

4.11.8.1 Regulatory Compliance Measures

The following regulatory compliance measure is an existing regulation that is applicable to the proposed project and is considered in the analysis of potential impacts related to noise. The City of Cypress considers this requirement to be mandatory; therefore, it is not a mitigation measure.

Regulatory Compliance Measure 4.11-1 The construction contractor shall limit all construction-related activities to between the hours of 7:00 a.m. and 8:00 p.m. on weekdays and Saturdays. No construction shall be permitted outside of these hours or on Sundays or a federal holiday.

4.11.8.2 Mitigation Measures

No mitigation measures are required for the proposed project.

4.11.9 Level of Significance after Mitigation

With the implementation of mitigation measures, all impacts would be reduced to a less than significant level.

4.11.10 Cumulative Impacts

Less Than Significant Impact.

Construction Noise. Construction activities associated with the proposed project and other construction projects in the area may overlap, resulting in construction noise in the area. However, construction noise impacts primarily affect the areas immediately adjacent to each construction site. Construction noise for the proposed project was determined to be less than significant. Cumulative development in the vicinity of the project site could result in elevated construction noise levels at sensitive receptors in the area surrounding the project site. However, each project would be required to comply with the applicable city's Municipal Code limitations on construction. Therefore, cumulative construction noise impacts would be less than significant.

Operational Traffic Source Noise Impacts. According to the U.S. Environmental Protection Agency (USEPA), cumulative noise impacts represent the combined and incremental effects of human activities that accumulate over time. While the incremental impacts may be insignificant by themselves, the combined effect may result in a significant impact. Conversely, although there may be a significant noise increase due to the proposed project in combination with other related projects (combined effects), it must also be demonstrated that the project has an incremental effect. In other words, a significant portion of the noise increase must be due to the proposed project.

As stated in Section 4.13, Transportation, the results of the opening year cumulative 2021 (baseline plus project) peak-hour level of service (LOS) analysis for the study area intersections show that all study area intersections are forecast to operate at satisfactory LOS during both peak hours. The

information in the cumulative traffic analysis was used to determine the "No Project" cumulative baseline for analyzing the proposed project's traffic noise impacts in 2021, as shown in Table 4.11.H. Table 4.11.H further shows that project-related traffic would result in noise level increases between 0.0 to 3.3 dBA CNEL along roadway segments in the vicinity of the project site under the project opening year (2021) condition. These levels are below the significance criteria for off-site traffic noise. Therefore, none of the roadway segments in the vicinity of the project site would experience a substantial noise level increase greater than the applicable noise thresholds and the proposed project would not have a cumulatively significant traffic noise impact.

Operational Stationary Source Noise. Long-term stationary noise sources associated with the development at the proposed project, combined with other cumulative projects, could cause local noise level increases. Noise levels associated with the proposed project and related projects together could result in higher noise levels than considered separately. As previously described, on-site noise sources associated with the proposed project would not exceed any applicable noise standards. Additionally, each of the related projects would be required to comply with the City's noise level standards and include mitigation measures if standards are exceeded. Therefore, cumulative noise impacts from stationary noise sources would be less than significant.

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4.12 PUBLIC SERVICES

This section describes the public services providers within the jurisdiction of where the Amazon Facility project (proposed project) site is located and evaluates the potential impacts of the proposed project on public services. This section is based on multiple data sources, including: written correspondence and coordination with public service providers (Appendix K). This section addresses the following public services (service providers are noted in parentheses):

- Fire Protection (Orange County Fire Authority [OCFA])
- Police Protection (Cypress Police Department [CPD])
- Parks (City of Cypress Recreation and Community Services Department)
- Schools (Cypress School District (CSD) and Anaheim Union High School District (AUHSD)

4.12.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. One comment letter included comments related to public services.

The letter from Allyssa J. Holcomb (On behalf of Warland Investments Company) received on July 6, 2020 expressed concern regarding significant impacts to public services, including the provision of public services to the project and to the surrounding residential and business communities. Impacts related to the provision of public services are discussed under Thresholds 4.12.1(i), 4.12.1(ii), 4.12.1(iii), and 4.12.1 (iv) below.

4.12.2 Methodology

Public service providers were sent questionnaires requesting information regarding current services being provided to the project site, and any information that would result in possible constraints or impacts to those services associated with project buildout. The impact analyses are based on responses to the questionnaires, data obtained through websites. Correspondence with public service providers is included in Appendix K.

4.12.3 Existing Environmental Setting

4.12.3.1 Fire Protection

The Orange County Fire Authority (OCFA) is a Joint Powers Authority responsible for reducing loss of life and property from fire, medical, and environmental emergencies. The OCFA is a regional fire service agency that serves 23 cities in Orange County (County) and all unincorporated areas in the County. The OCFA protects over 1,930,382 residents from its 77 fire stations located throughout the County. In addition, OCFA Reserve Firefighters work 10 stations throughout the County.[1]

[1] Orange County Fire Authority (OCFA). 2020a. Member Cities. Website: https://www.ocfa.org/aboutus/PartnerCities.aspx (accessed July 7, 2020); and OCFA. 2020. Response to Fire Service Questionnaire. Received July 6, 2020.

In addition to providing fire suppression, emergency medical services, hazardous materials response, wildland firefighting, technical rescue, and airport rescue firefighting services, the OCFA provides a variety of public services, including the following:

- 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 are ordinances relative to fire and life safety issues associated with commercial, industrial, and residential development;
- Maintaining firefighting helicopters used for emergency responses throughout the year;
- Coordinating the inspection of commercial buildings, investigating all fires, and enforcing fire code hazardous materials regulations;
- Working with developers and jurisdictional planning departments on development projects impacting fire protection services, from conception through planning process approval;
- Conducting new construction inspections, fire safety inspections, and State Fire Marshal-required inspections (including high rise, jail board and care, and day care inspections), and enforcing applicable fire codes and ordinances;
- Interacting with developers, architects, and engineers to meet the fire protection requirements for buildings and developments by reviewing architectural blue prints, development plans, and proposals submitted in OCFA's jurisdiction;
- Conducting a permit program of hazardous materials stored, handled, and used within OCFA's jurisdiction.
- Conducting California Fire Code inspections, assists in reducing risks associated with the use of hazardous materials in the community.
- Investigating fires to determine their cause, preparing arson and hazardous materials cases for the district attorney, 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

The City of Cypress is located in Operations Division 7, which serves the cities of Buena Park, Cypress, La Palma, and Stanton along with portions of several unincorporated communities.[1]

OCFA is a regional fire agency that engages in service agreements with other local and regional fire agencies. There are four OCFA stations within two miles of the project site, with OCFA Fire Station No. 84 being the closest.[2]

Fire Station No.84 is located at 12191 Valley View Street in the City of Garden Grove, approximately 1.8 miles southwest from the project site. As noted by the questionnaire response submitted by the OCFA, Fire Station No. 84 would be designated as the "first in" station to the project site in the event of an emergency. Fire Station No. 84 is equipped with one fire engine on site, and is staffed daily by one captain, one engineer, and two firefighters.

"Second call" stations are fire stations that support the "first in" station. The OCFA has designated Fire Stations No. 17, 46, and 63 as "second call" stations to support Fire Station No. 84.[3] Fire Station No. 17 located at 4991 Cerritos Avenue in Cypress, is approximately 2.1 miles northwest of the project site. Fire Station No. 17 is equipped with one fire engine, one fire truck, and is staffed daily by two captains, 2 engineers, and four firefighters. Fire Station No. 46 located at 7871 Pacific Street in Stanton, is approximately 2.2 miles northeast of the project site. Fire Station No. 46 is equipped with one fire engine, one paramedic engine, and is staffed daily by 2 captains, 1 engineer, and 3 firefighters. Fire Station No. 63 located at 9120 Holder Street in Buena Park, is approximately 2.0 miles north of the project site. Fire Station No. 63 is equipped with one fire engine, and is staffed daily by 1 captain, 1 engineer, and 2 firefighters.

OCFA's goal is to have the first responding company for a fire call to reach emergency scene within 8 minutes and paramedics to reach the scene within 5 minutes, at least 90 percent of the time. In Fiscal Year 2019-2020, OCFA responded to emergency calls within 9 minutes and seven seconds 90 percent of the time across all service areas.[4] Although the ratio of firefighters per 10,000 residents increased slightly in the last two fiscal years from 5.33 to 5.80 firefighters for every 10,000 residents, the OCFA has experienced a 74 percent increase in call load over the past 10 years.[5] According to the OCFA, there are currently no plans for expanded services or facilities near the project area.

4.12.3.2 Police Protection

The Cypress Police Department (CPD) would serve the project site. Management and supervision of the CPD is provided by one chief, three commanders, 1 civilian manager, ten sergeants, and one civilian supervisor. [6] Of the CPD's 55 sworn personnel, 41 are dedicated to the delivery of patrol services. In addition to the 55 officers, the department is supported by 23 civilian employees and

1 OCFA. 2020b. Operations Directory. Website: https://www.ocfa.org/AboutUs/Departments/Operations Directory/Division7.aspx (accessed July 7, 2020).
2 OCFA. 2020e. Response to Fire Service Questionnaire. Received July 6, 2020.
3 Ibid.
4 OCFA. 2020. Fiscal Year 2018/2019 Adopted Budget. Website:https://www.ocfa.org/Uploads/ Transparency/OCFA%202019-2020%20Adopted%20Budget.pdf (accessed July 7, 2020).
5 Ibid.
6 Cypress Police Department. 2020. Response to Police Services Questionnaire. Received July 9, 2020.

numerous volunteers.[1] The current officer-to-resident ratio in 2019 is 1.0 CPD officer per 1,000 residents.

The services provided by the CPD include a detective bureau, canine teams, narcotics team, vice and intelligence, motorcycle officers, Personnel & Training, Positive Actions thru Character Education (P.A.C.E.) program, S.W.A.T. and a Lead Patrol Officer program. In addition, the Department has established Community Policing, or Cypress Policing, as the philosophy for providing public safety services.[2]

West Cities Police Communications Center (West-Comm) provides police dispatch services for the City of Cypress. West-Comm is a consolidated police dispatch center, formed by a Joint Powers Authority between the cities of Cypress, Los Alamitos, and Seal Beach. Located at the Seal Beach Police Department, West-Comm serves a combined population of approximately 90,000 and handles approximately 100,000 calls for service each year.[3]

4.12.3.3 Parks

According to the Conservation/Open Space/Recreation Element of the City's General Plan (2001), there are currently a total of 20 developed public parks within the City, which include approximately 82 acres of park and recreational facilities. However, the recent development of 2.9 acres of park space at the former Mackay School site increased its park space to 84.9 acres.[4] The City is also currently in the process of planning a new, approximately 9-acre park at the southeastern corner of Lexington Drive and Cerritos Avenue, which is expected to open in 2021.[5]

4.12.3.4 Public Schools

The provision of education and school facilities in the City is the responsibility of the Cypress School District (CSD), which serves the City's kindergarten through sixth-grade students and the Anaheim Union High School District (AUHSD), which serves the City's junior high and high school districts (grades 7 through 12).

1 City of Cypress. 2020b. Cypress Police Department Overview. Website: https://www.cypressca.org/government/departments/police/inside-cypress-pd/the-community-we-serve#overview (accessed July 7, 2020).

2 Ibid.

3 City of Cypress. 2020b. Cypress Police Department Overview. Website: https://www.cypressca.org/government/departments/police/inside-cypress-pd/the-community-we-serve#overview (accessed July 7, 2020).

4 City of Cypress. 2017. Cypress City Council Breaks Ground at Mackay Park. January 23. Website: http://www.cypressca.org/Home/Components/News/News/54/ (accessed July 7, 2020).

5 City of Cypress. 2020. Cypress Receives Donation of Over 8 Acres for New Park from Los Alamitos Race Course, May 21, 2018. Website: https://www.cypressca.org/Home/Components/News/News/1158/17?arch=1 (accessed July 7, 2020).

The CSD currently operates six elementary schools; five are located within Cypress and one is in La Palma. The CSD's 2018–2019 enrollment was 3,923.[1] Additionally, all of the CSD's schools offer on-site privately owned and operated childcare and preschool services.

The AUHSD encompasses 46 square miles and has schools in Anaheim, Cypress, Buena Park, La Palma, and Stanton. AUHSD's enrollment totaled 30,292 students in the 2018–2019 school year.[2]

The project site is within the attendance boundaries of the following schools: Frank Vessels Elementary (1.5 miles northwest of the site), Orangeview Junior High (2.1 miles northeast of the site), and Cypress High School (2.1 miles northwest of the site). Planned improvements for Orangeview Junior High School and Cypress High School include improvements to existing infrastructure and services but do not include the new construction of classrooms.[3]

4.12.4 Regulatory Setting

4.12.4.1 Federal Regulations

The proposed project is not subject to any federal policies related to public services.

4.12.4.2 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 have been 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 Fees revenues generated, and (ii) there is a nexus or relationship between the need for School Fee revenues and the type of development project on 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 *Shappell Industries vs. Milpitas Unified School District.*)

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 wildfire hazard areas.

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1 California Department of Education. DataQuest. Enrollment Data 2018–2019. Website: https://dq.cde.ca.gov/dataquest/ (accessed July 8, 2020).

2 California Department of Education. DataQuest. Enrollment Data 2018–2019. Website: https://dq.cde.ca.gov/dataquest/ (accessed July 8, 2020).

3 AUHSD. 2014. *Facilities Master Plan*. Website: https://auhsdblueprint.auhsd.us/overview.aspx (accessed July 9, 2020)

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.

Senate Bill 50 and California Education Code Section 17620. Senate Bill 50, the Leroy F. Greene 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. Districts that are unable to provide some or all of the local match requirements are able to meet financial hardship provisions may be eligible for additional State funding.[1] SB 50 (codified as California Education Code Section 17620) allows school districts to levy a fee, charge, dedication, or other requirement against any 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 fees are collected by the AUHSD and are shared equally with the CSD.

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 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 and 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.

4.12.4.3 Regional Regulations

The proposed project is not subject to any applicable regional policies or regulations related to public services.

4.12.4.4 Local Regulations

City of Cypress Municipal Code. The Cypress Municipal Code includes the following requirement that would apply to the proposed project related to the provision of public services:

- **Section 5-3 (California Fire code, adoption, amendments)** adopts the 2019 CFC, with some amendments and modifications. Generally, the intent of the CFC is to prescribe regulations for the safeguarding of life and property from the hazard of fire and explosion.

[1] State of California. 2007. State Allocation Board. Office of Public School Construction, School Facility Program Handbook. April.

4.12.5 Thresholds of Significance

The thresholds for public services impacts used in this analysis are consistent with Appendix G of the State CEQA Guidelines and the City's *Initial Study/Environmental Checklist*. The proposed Project may be deemed to have a significant impact with respect to public services if it would:

Threshold 4.12.1(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 4.12.1(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 4.12.1(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 4.12.1(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?**

Threshold 4.12.1(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?**

As described in Chapter 4, Existing Environmental Setting, as part of the scoping and environmental analysis carried out for the proposed project, impacts to public libraries were considered but no adverse impacts were identified. The proposed project would not have an impact on the existing Orange County Public Library (OCPL) system because are no nearby libraries that could be impacted by construction activities and the proposed project is not expected to result in population growth

and therefore, would not generate demand for library services. Therefore, Threshold 4.13.1(v) will not be addressed in the following analysis.

4.12.6 Project Impacts

Threshold 4.12.1(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?

4.12.6.1 Construction

Less than Significant Impact. The proposed project would incrementally increase demand for fire services. The proposed project would not result in construction activities that would substantially change the existing fire protection needs in the area and there would be minimal fire protection needs during the temporary construction activities. Moreover, short-term construction activities would be limited to the project site and would not significantly impact the ability of emergency response vehicles traveling through streets adjacent to the project site. Therefore, construction of the proposed project would result in less than significant impacts related to the provision of fire services.

As mentioned before, OCFA Fire Station No. 84, which is approximately 1.8 miles southwest of the project site is designated as the "first in" station to serve the project site in the event of an emergency. In addition, OCFA operates three additional fire stations within two miles of the project site. Therefore, the proposed project's potential impact on fire protection services with respect to construction activities would be less than significant.

4.12.6.2 Operation

Less Than Significant with Mitigation Incorporated. The proposed project would incrementally increase demand for fire protection and emergency service calls. The proposed project would adhere to the development standards described in the City's Municipal Code related to public safety. The proposed project would also be designed to comply with all OCFA requirements, including providing adequate fire flow/structure protection to the project site and providing adequate access for emergency vehicles. Additionally, the proposed project would comply with current editions of the California Building Code, California Fire Code, and related codes.

The proposed project is not expected to induce any substantial population growth within the City of Cypress and as such, would be able to be adequately be served by existing OCFA fire stations in the area. The proposed project would be designed to comply with all OCFA requirements, including providing adequate fire flow/structure protection to the project site and providing adequate access for emergency vehicles. Written correspondence with the OCFA indicated that all development projects submitted for review by OCFA must use a fair share approach to mitigate fire service response impacts and facility/equipment needs. To further address any potential impacts to fire services, Mitigation Measure 4.12-1, which requires the Applicant/Developer to enter into a Secured

Fire Protection Agreement prior to the issuance of any building permits, would have to be implemented. The Secured Fire Protection Agreement with the OCFA would ensure adequate service to the project site. The OCFA would review and comment on the site plan prior to project approval. As part of the review, the OCFA would impose standard conditions of approval, which would ensure all impacts regarding fire protection would be less than significant. Therefore, the proposed project would not require the construction of new fire protection facilities or the upgrade of existing facilities, which could cause significant environmental impacts, in order to maintain acceptable service ratio, response times, or other performance objectives for fire protection. Impacts would be less than significant with the implementation of Mitigation Measure 4.12-1.

Threshold 4.13.1(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?**

4.12.6.3 Construction

Less than Significant Impact. The proposed project's short-term construction activities are not expected to substantially change the existing police protection needs in the area. There would be minimal police protection needs beyond the existing conditions during construction activities. Therefore, construction of the proposed project would result in less than significant impacts related to the provision of police services; no mitigation is required.

4.12.6.4 Operation

Less Than Significant Impact. There would be little to no impact on the population growth of the City as a result of the proposed project. Although there may be an incremental increase in calls for service, correspondence with the CPD has indicated that the CPD believes the proposed project can be adequately served by existing police facilities.[1] Therefore, the proposed project would not require the construction of new police protection facilities or the upgrade of existing facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response items, or other performance objective for police protection. Potential impacts related to the provision services for operation of the proposed project would be less than significant, and no mitigation is required.

Threshold 4.13.1(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*?**

[1] Cypress Police Department. 2020. Response to Police Services Questionnaire. Received July 9, 2020.

Less Than Significant Impact. The proposed project is not expected to cause an increase in students as a result of project implementation would not result in any incremental increases in the demand for school facilities. 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. Because the proposed project would reduce the building square footage on the project site by demolishing several of the existing on-site buildings and would not result in the construction of any new covered and enclosed structures on the project site, the Applicant/Developer would not be required to pay such fees.

Therefore, potential impacts to school services and facilities associated with implementation of the proposed project would be less than significant. No mitigation is required.

Threshold 4.13.1(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 is not expected to result in any incremental increase in the demand for park facilities or existing recreation facilities in the project vicinity. Therefore, the proposed project would not result in additional physical impacts associated with the provision of new or physically altered park facilities. Impacts to parks and recreation facilities would be less than significant, and no mitigation is required.

4.12.7 Level of Significance Prior to Mitigation

Impacts related to police services, schools, and parks would be less than significant prior to mitigation. The proposed project may potentially result in significant impacts to fire protection services, and mitigation is required.

4.12.8 Project Mitigation Measures

4.12.8.1 Regulatory Compliance Measures

There are no regulatory compliance measures pertaining to public services that are applicable to the proposed project.

4.12.8.2 Mitigation Measures

Mitigation Measure 4.12-1 **Secured Fire Protection Agreement.** Prior to the issuance of any building permits, the Applicant/Developer shall enter into a Secured Fire Protection Agreement with the Orange County Fire Authority (OCFA). This Agreement shall specify the Applicant/Developer's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or

personnel. Said agreement shall be reached as early as possible in the planning process.

4.12.9 Level of Significance after Mitigation

With the implementation of Mitigation Measure 4.12-1, any potentially significant impacts would be reduced below a level of significance.

4.12.10 Cumulative Impacts

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 for public services. The project would repurpose an existing warehouse facility located in an urban area with existing services provided by public service providers in the vicinity. The cumulative area for public services is listed below for each individual public service provider.

4.12.10.1 Fire Protection

The proposed project's cumulative analysis of fire protection services is defined within the service territory of Fire Station No. 84 The proposed project is not expected to substantially increase calls for service, and its warehouse operations are not anticipated to result in an excessive increase in calls for service. Therefore, the proposed project would not have a cumulatively significant impact on the provision of fire services.

Although the proposed project would reduce the building square footage on the project site and would not result in any direct or indirect population growth, some of the related projects would construct new building space or include new residential development and, therefore, would result in new population growth and calls for service. None of this development is expected to result in substantial unplanned growth. Therefore, the new building square footage and population increase associated with the related projects would be accommodated as part of OCFA's long-term growth planning for fire and other public facilities. Additional demands for fire protection services would be funded by existing funding sources (i.e., property tax and government funding), to which the proposed project and related projects would contribute. The 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. Therefore, the proposed project's contribution to fire protection impacts would not be cumulatively considerable, and no mitigation is required.

4.12.10.2 Police Protection

The proposed project's cumulative analysis of police protection services is defined within the service area for the Cypress Police Department. The proposed project is not expected to result in any substantial increase in calls for service, and it would not result in the need for additional or physically altered police facilities.

As described above, the proposed project would reduce the building square footage on the project site and would not result in any direct or indirect population growth; however, some of the related projects would construct new building space or include new residential development and, therefore, would result in new population growth and calls for service. None of this development is expected to result in substantial unplanned growth. As such, the proposed project and the related projects' demand for police services would be adequately accommodated by the City and the CPD's long-term growth planning for police protection services and facilities. Additionally, additional demands for CPD services would be funded by existing funding sources (i.e., property taxes and government funding), to which the proposed project and related projects would contribute. Therefore, the proposed project's contribution to police protection impacts would not be cumulatively considerable, and no mitigation is required.

4.12.10.3 Schools

The geographic area for cumulative analysis of school services includes the school districts that serve the proposed project (CSD and AUHSD). As described above, the proposed project would not result in significant impacts to school facilities.

As discussed above, the proposed project is not expected to generate any substantial population growth in the City and as such, would not result in any new students within the local public schools that would warrant an increased demand on school services. As described above, all projects that would construct new commercial and residential square footage are required to pay full payment of requisite development fees pursuant to California Government Code Section 65995. The proposed project would not be required to pay school fees, several of the other related project would be required to pay those fees. Therefore, cumulative impacts that the proposed project may have on school services would be less than significant. Therefore, the proposed project's contribution to school impacts would not be cumulatively considerable, and no mitigation is required.

4.12.10.4 Parks

The proposed project and the applicable related projects are not expected to result in any significant cumulative impact to the City's size of park and recreational facilities and the incremental contribution of the proposed project to a potentially significant impact would not be cumulatively considerable.

4.13 TRANSPORTATION

This section analyzes the existing and planned transportation and circulation conditions for the proposed Amazon Facility project (proposed project) and the surrounding area, and identifies circulation impacts that may result subsequent to the development of the proposed project. The analysis contained in this section is based on the *Traffic Impact Analysis for the Katella Avenue Amazon Facility Project, Cypress, Orange County, California* (TIA) (Urban Crossroads, June 30, 2020b) and the *Katella Avenue Amazon Facility Vehicle Miles Travelled (VMT) Assessment* (VMT Assessment) (Urban Crossroads, July 1, 2020a), which is provided in Appendix L to this Environmental Impact Report (EIR).

4.13.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. A total of 15 comment letters included comments related to transportation. The letter from Caltrans District 12 received on July 3, 2020, suggested the inclusion of specific road segments, intersections, ramps, and mainlines in the Traffic Analysis; suggested including a Transportation Demand Management (TDM) analysis; suggested the inclusion of design features such as zero emissions infrastructure, ensuring adequate parking exists onsite, segregated spaces for loading/unloading or ingress/egress, establishing off-hour deliveries; and the inclusion of a discussion relating to the City's multimodal mobility strategies. The letter from the City of Los Alamitos received on June 29, 2020 requests the identification of the proposed hours of operation and the anticipated vehicle trips, analysis of cumulative traffic impacts, quantification of Amazon delivery trucks, inclusion of delivery paths, and analysis of cumulative traffic impacts. The letter from OCTA received on July 6, 2020 states that level of service analysis is required to monitor Congestion Management Program (CMP) Highway System performance and that Katella Avenue and Valley View Street and their intersection should be analyzed consistent with the Orange County CMP and also states that the proposed project should not preclude the buildout of Holder Street as it relates to potential future right-of-way needs. Additionally, eight members of the public also expressed concerns regarding truck traffic and cumulative traffic impacts, the opening of Holder Street between Katella Avenue and Orange Avenue, and suggestions to include specific road segments in the analysis. The proposed project's potential to result in transportation impacts is discussed under Thresholds 4.13.1 through 4.13.4 below.

4.13.2 Methodology

The TIA prepared for the project is consistent with the objectives and requirements of the City of Cypress, the City of Stanton, and the *Orange County Congestion Management Program* (CMP) (County of Orange 2019), as well as applicable provisions of the California Environmental Quality Act (CEQA), including disclosure of project impacts in both existing and cumulative horizon years.

The scope of work for the TIA, including the project study area, was reviewed and approved by the City's Traffic Engineer prior to the preparation of the TIA. Study area locations were selected in consultation with City staff. The study area analyzed in the project TIA includes the following eight intersections (six intersections in Cypress, one intersection in both Cypress and Stanton, and one intersection in Stanton):

1. Valley View Street/Katella Avenue (signalized) (Cypress)
2. Driveway 1/Katella Avenue (future unsignalized intersection) (Cypress)
3. Holder Street/Katella Avenue (signalized) (Cypress)
4. Holder Street/Driveway 2 (unsignalized) (Cypress)
5. Holder Street/Driveway 3 (unsignalized) (Cypress)
6. Holder Street/Driveway 4 (unsignalized) (Cypress)
7. Knott Avenue/Katella Avenue (signalized) (Cypress/Stanton)
8. Western Avenue/Katella Avenue (signalized) (Stanton)

4.13.2.1 Intersection Level of Service Methodologies

In accordance with the requirements of the City of Cypress, the City of Stanton, and the Orange County CMP, signalized intersection operation is analyzed using the Intersection Capacity Utilization (ICU) methodology. The ICU methodology compares the volume-to-capacity (v/c) ratios of conflicting turn movements at an intersection, sums up these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. Lane capacities of 1,600 vehicles per hour of green time is assumed for the ICU calculations. The Traffix software is utilized to evaluate the signalized intersections based on the ICU methodology. The resulting ICU is expressed in terms of level of service (LOS), where LOS A represents free-flow operation and LOS F represents over capacity operation.

The relationship between LOS and the ICU value (i.e., v/c ratio) is as follows.

Level of Service	Volume-to-Capacity (ICU Methodology)
A	≤0.60
B	>0.60 and ≤0.70
C	>0.70 and ≤0.80
D	>0.80 and ≤0.90
E	>0.90 and ≤1.00
F	>1.00

ICU = intersection capacity utilization

In addition to the ICU methodology of calculating signalized intersection LOS, the *Highway Capacity Manual* (HCM), 6th Edition (Transportation Resources Board 2017) methodology is used to determine the LOS of the unsignalized intersections. The Synchro (Version 10) is utilized for evaluation of the unsignalized study area intersections based on the HCM 6th Edition methodology. The following table illustrates the relationship of delay to LOS for unsignalized intersections.

Level of Service	Intersection Delay (seconds) per Vehicle (HCM Methodology)
	Unsignalized
A	≤10.0
B	>10.0 and ≤15.0
C	>15.0 and ≤25.0
D	>25.0 and ≤35.0
E	>35.0 and ≤50.0
F	>50.0

Source: *Highway Capacity Manual* (Transportation Research Board 2017)

4.13.2.2 Traffic Signal Warrant Analysis Methodology

The term "signal warrants" refers to the list of established criteria used by the California Department of Transportation (Caltrans) and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. An evaluation of the signal warrant criteria presented in the Caltrans 2014 California Manual on Uniform Traffic Control Devices (CAMUTCD) is conducted for the unsignalized study area intersections.

The signal warrant criteria for Existing conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The 2014 CAMUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. Specifically, the Peak Hour Volume-based Warrant 3 is used as the appropriate representative traffic signal warrant analysis for Existing traffic conditions. Warrant 3 provides specialized warrant criteria for intersections with Urban or Rural characteristics (e.g., Rural characteristics include communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour). The speed limit is the basis for determining whether Urban or Rural warrants are used for a given intersection. Because Holder Street has a posted speed limit of 35 miles per hour, the Urban (as opposed to Rural) criteria are utilized.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

4.13.2.3 Vehicle Miles Traveled Analysis

As discussed in further detail in Section 4.13.4.2, State Regulations, according to *State CEQA Guidelines* Section 15064.3(a), project-related transportation impacts are generally best measured by evaluating the project's vehicle miles traveled (VMT). VMT refers to the amount and distance of automobile travel attributable to a project. *State CEQA Guidelines* Section 15064.3(b) sets forth criteria for analyzing transportation impacts, breaking down the methodology based on project type and specifying other criteria for conducting VMT analysis.

For land use projects, VMT exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects located within 0.5 mile of an existing high-quality transit corridor should be considered to have a less than significant impact. *State CEQA Guidelines* Section 15064.3(b)(2) addresses VMT associated with transportation projects and states that projects that reduce VMT, such as pedestrian, bicycle, and transit projects, should be presumed to have a less than significant impact. Subdivision (b)(3) of the *State CEQA Guidelines*, Section 15064.3, acknowledges that Lead Agencies may not be able to quantitatively estimate VMT for every project type; in these cases, a qualitative analysis may be used. The regulation goes on to state that Lead Agencies have the discretion to formulate a methodology that would appropriately analyze a project's VMT (*State CEQA Guidelines* Section 15064.3(b)(4)).

At this time, the City has not adopted a methodology to analyze VMT impacts within its jurisdiction. In addition, the City does not currently have thresholds or standards in place for assessing potential VMT impacts. However, a VMT analysis was prepared based on guidance provided in the OPR Technical Advisory using information in the Orange County Transportation Analysis Model (OCTAM).The OPR Technical Advisory notes that VMT is most heavily influenced by three land use types: residential, office, and retail, and provides recommended VMT thresholds for each. Industrial uses, like office uses, are typically places of employment without residential or traditional brick and mortar retail components. Therefore, for purposes of this evaluation the thresholds identified by the Technical Advisory for office use has been utilized.

The Technical Advisory recommends the following numeric threshold for office uses…*"Office projects that would generate vehicle travel exceeding 15 percent below existing VMT per employee for the region may indicate a significant transportation impact. In cases where the region is substantially larger than the geography over which most workers would be expected to live, it might be appropriate to refer to a smaller geography, such as the county, that includes the area over which nearly all workers would be expected to live."*

Consistent with OPR recommendations, the appropriate geographic region selected for this analysis is Orange County, where most workers for the project are anticipated to live.

OCTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment. OCTAM is widely used as an appropriate trip-based modeling tool for conducting VMT analysis for land use projects in Orange County.

The VMT analysis for the project has been calculated using the most current version of OCTAM (version 5.0), which was released by the Orange County Transportation Authority (OCTA) in 2020. Consistent with recommendations in the OPR Technical Advisory, when trip-based assessments of project VMT are conducted such as that performed using OCTAM, the focus can be on home-based work trips.[1] Home-based work (HBW) VMT includes all auto vehicle trips between home and work for a given traffic analysis zone (TAZ) or group of zones and is then normalized by dividing be the number of employees present in the zone or group of zones.

4.13.2.4 Significance Criteria

The City of Cypress considers LOS D as the upper limit of satisfactory operations for intersections, except at intersections along Valley View Street, Lincoln Avenue, and Katella Avenue. The City has adopted LOS E as the standard for intersections along these three arterials, as they carry a significant amount of traffic. In addition, Valley View Street and Katella Avenue are designated in the Orange County CMP as CMP facilities, and intersections along these roadways must not operate below LOS E.

Based on the City of Cypress standards, a project traffic impact occurs at an intersection if the project causes an intersection operating at an acceptable LOS to deteriorate to an unacceptable

[1] Page 6 of the OPR's Technical Advisory.

LOS, or if an intersection is already operating at an unacceptable LOS and the project adds 0.01 or more to the peak-hour ICU.

Based on the City of Stanton standards, a project traffic impact occurs at an intersection if the project causes an intersection operating at an acceptable LOS to deteriorate to an unacceptable LOS, or if the addition of project traffic increases the peak hour ICU by 0.03.

For the purpose of this analysis, a project impact would occur at an unsignalized intersection if the project adds traffic to a deficient intersection, project traffic results in a deficient intersection, or a traffic signal warrant is met.

Based on the significance threshold recommended in the OPR Technical Advisory, the proposed project would have a significant VMT impact if its VMT per employee would not be less than 15 percent below the existing VMT per employee in the region (in this case, Orange County).

4.13.3 Existing Environmental Setting

4.13.3.1 Existing Circulation System

The project site is generally bounded by Katella Avenue to the north, the Stanton Storm Channel to the south, Holder Street to the east, and existing office/industrial uses to the west. Access to the project site would be provided via a new right-in/right-out (RIRO) driveway on Katella Avenue (Driveway 1) and three existing full-access driveways on Holder Street (Driveways 2–4).

Key roadways in the vicinity of the project site are as follows:

- **Katella Avenue** is an east-west six-lane divided roadway located directly north of the project site. According to the City of Cypress General Plan Circulation Element (City of Cypress 2001), Katella Avenue is designated as a Major Arterial. Katella Avenue is designated on the Orange County CMP as a CMP facility. The posted speed limit is 40 to 45 miles per hour (mph). Sidewalks are provided on both sides of the street. On-street parking is permitted in select locations.

- **Valley View Street** is a north-south six-lane divided roadway located west of the project site. Valley View Street designated as a Major Arterial in the City of Cypress General Plan Circulation Element. Valley View Street is designated in the Orange County CMP as a CMP facility. The posted speed limit is 45 mph. Sidewalks are provided on both sides of the street. On-street parking is not permitted.

- **Holder Street** is a north-south four-lane divided roadway located directly east of the project site. According to the City's General Plan Circulation Element, Holder Street is classified as a Secondary Arterial. The posted speed limit is 35 mph. On-street parking is permitted in select locations. There are two disconnected segments of Holder Street in Cypress that are separated by the Stanton Storm Channel located immediately southeast of the project site. This incomplete segment of Holder Street is identified an Incomplete Secondary Link in the City's General Plan Circulation Element.

- **Knott Avenue** is a north-south four-lane divided roadway located east of the project site. According to City of Stanton General Plan Infrastructure and Community Services Element (2008), Knott Avenue is a designated as a Primary Arterial. The posted speed limit is 40 mph. Sidewalks are provided on both sides of the street. On-street parking is permitted in select locations.

- **Western Avenue** is a north-south four-lane undivided roadway located southeast of the project site. Western Avenue is designated as a Secondary Arterial in the City of Stanton General Plan Infrastructure and Community Services Element. The posted speed limit is 40 mph. Sidewalks and Class II bicycle lanes are provided on both sides of the street. On-street parking is not permitted.

Pedestrian Circulation. Sidewalks currently exist on both sides of Katella Avenue, Valley View Street, Holder Street, Knott Avenue, and Western Avenue in the vicinity of the project site. There are pedestrian crosswalks for all approaches of the signalized intersections of Valley View Street, Holder Street, Knott Avenue, and Western Avenue along Katella Avenue. These facilities provide for pedestrian circulation between the project site and the surrounding areas.

Bicycle Circulation. Holder Street is proposed as a future local bikeway. There is an existing Class I off-road bike path on the south side of the project along the Stanton Storm Channel. Knott Avenue is proposed to include Class II striped bike lanes, while Western Avenue currently is striped with Class II bike lanes. There are no bicycle lanes on Katella Avenue.

Transit Facilities. Orange County Transportation Authority (OCTA) bus stops are provided at the northwest and southeast corners of Holder Street/Katella Avenue (OCTA Route 50). OCTA Route 50 provides transportation to/from the Cities of Orange and Long Beach via Katella Avenue. OCTA Route 50 runs at an approximately 30-minute headway during weekday peak hours. OCTA bus stops are also provided at Valley View Street/Katella Avenue within 1 mile of the project site (OCTA Route 123) and Knott Avenue/Katella Avenue (OCTA Route 25). OCTA Route 123 provides transportation to/from Buena Park and Sunset Beach via Valley View Street. OCTA Route 25 provides transportation to/from Buena Park and Huntington Beach via Knott Avenue–Goldenwest Street.

4.13.3.2 Existing Traffic Volumes and LOS Analysis

Existing turn movement counts were conducted for the study area intersections in March 2020 around the time when uses began to close due to the currently on-going Coronavirus (COVID-19) pandemic. The March 2020 traffic counts were adjusted in order to take into account the effects to local traffic associated with the on-going pandemic. Historic traffic counts were obtained from 2018 for the intersections of Valley View Street, Holder Street, and Knott Avenue along Katella Avenue. The historic counts were then compared to the March 2020 traffic counts. The adjusted 2020 traffic volumes utilized for traffic analysis purposes were developed by utilizing the higher volume between the March 2020 traffic count or the 2018 historic count plus two years of growth (at 2 percent per year, compounded over 2 years): Maximum (March 2020 or [2018 x 1.0404]).

In other words, on a movement by movement basis, the 2018 count plus growth was compared to the 2020 traffic counts to utilize the higher of the two numbers. Through volumes along Holder

Street were then flow conserved and distributed proportionally to the driveways for the user on the east. More specifically, the traffic volumes were adjusted (balanced) so that all through, right-turn, and left-turn volumes are accounted for at each driveway along Holder Street.

The existing Mitsubishi buildings were not currently in use at the time of the counts, therefore, trips generated by the existing buildings are not captured in the baseline traffic counts conducted in 2020. However, in order to account for the potential occupancy of the buildings (by right), the site could be occupied with a warehouse use at any time (without additional environmental review). As such, conservatively, 50 percent of trips associated with warehousing use (consistent with the existing trip credit applied to the project trip generation) was added to the baseline volumes in order to represent traffic that could potentially be generated by the site if occupied. The trips associated with the warehousing use have been allocated to study area intersections using trip distribution patterns that are similar to the proposed project.

Table 4.13.A summarizes the results of the existing peak-hour LOS analysis for the study area intersections. As discussed above, the ICU methodology for signalized intersections compares the v/c ratios of conflicting turn movements at an intersection, sums up these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. The HCM intersection methodology presents LOS in terms of delay (in seconds per vehicle). The resulting delay is expressed in terms of LOS, as in the ICU methodology. As shown in Table 4.13.A, all study area intersections currently operate at satisfactory LOS during both peak hours.

Table 4.13.A: Existing Intersection Level of Service Summary

Intersection		Control	Peak Hour	Existing	
				ICU/Delay	LOS
1	Valley View Street/Katella Avenue	Signal	AM	0.829	D
			PM	0.859	D
2	Driveway 1/Katella Avenue (future intersection)	CSS (Delay)	AM	N/A	N/A
			PM	N/A	N/A
3	Holder Street/Katella Avenue	Signal	AM	0.589	A
			PM	0.634	B
4	Holder Street/Driveway 2	CSS (Delay)	AM	12.1	B
			PM	11.9	B
5	Holder Street/Driveway 3	CSS (Delay)	AM	13.3	B
			PM	10.9	B
6	Holder Street/Driveway 4	CSS (Delay)	AM	0.0	A
			PM	0.0	A
7	Knott Avenue/Katella Avenue	Signal	AM	0.836	D
			PM	0.935	E
8	Western Avenue/Katella Avenue	Signal	AM	0.886	D
			PM	0.798	C

Source: *Traffic Impact Analysis* (Urban Crossroads, June 2020).
Note: Delay is reported in seconds.
CSS = cross-street stop
ICU = Intersection Capacity Utilization
LOS = level of service
N/A = not applicable

4.13.3.3 Existing Traffic Signal Warrant Analysis

Traffic signal warrants for existing traffic conditions are based on existing peak hour intersection turning volumes. For existing traffic conditions, there are no study area intersections that currently warrant a traffic signal based on the peak hour traffic volumes.

4.13.3.4 Existing VMT

Regional HBW VMT for Orange County was calculated for the base (2016) and future (2045) scenarios based on OCTAM output files. The socio-economic data and VMT per employee for the region was calculated as a collection of TAZs (all TAZs located in Orange County) rather than a single TAZ. Baseline (2020) HBW VMT for Orange County was developed by interpolating (using linear interpolation) between base (2016) and future (2045) VMT. Orange County baseline (2020) VMT per employee is summarized in Table 4.13.B:

Table 4.13.B: Baseline 2020 Orange County VMT per Employee

Description	Orange County[1]
Employment	1,747,428
VMT	43,349,947
VMT/Employee	24.81

Source: *VMT Assessment* (Urban Crossroads, July 2020).
[1] Derived using the outputs from the OCTAM 5.0 model.
OCTAM = Orange County Transportation Analysis Model
VMT = vehicle miles traveled

4.13.4 Regulatory Setting

4.13.4.1 Federal Regulations

No federal policies or regulations pertaining to transportation are applicable to the proposed project.

4.13.4.2 State Regulations

Senate Bill 743. On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law and started a process that changes the methodology of a transportation impact analysis as part of CEQA requirements. SB 743 directed the California Office of Planning and Research (OPR) to establish new CEQA guidance for jurisdictions that removes the LOS method, which focuses on automobile vehicle delay and other similar measures of vehicular capacity or traffic congestion, from CEQA transportation analysis. Rather, vehicle miles traveled (VMT), or other measures that promote "the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses," are now to be used as the basis for determining significant transportation impacts in the State.

***State CEQA Guidelines* Section 15064.3, Subdivision (b).** In January 2018, the State of California Office of Planning and Research (OPR) submitted a proposal for comprehensive updates to the *State CEQA Guidelines* to the California Natural Resources Agency. The submittal included proposed updates related to the analysis of greenhouse gas (GHG) emissions, energy, transportation impacts pursuant to SB 743, and wildfires, as well as revisions to Section 15126.2(a) in response to the California Supreme Court's decision in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369. On December 28, 2018, the updated *State CEQA Guidelines* went into effect.

As part of the update to the *State CEQA Guidelines*, Section 15064.3 was added and codifies that project-related transportation impacts are typically best measured by evaluating the project's VMT. Specifically, subdivision (b) focuses on specific criteria related to transportation analysis and is divided into four subdivisions: (1) land use projects, (2) transportation projects, (3), qualitative analysis, and (4) methodology. Subdivision (b)(1) provides guidance on determining the significance of transportation impacts of land use projects using VMT; projects located within 0.5 mile of high quality transit should be considered to have a less than significant impact. Subdivision (b)(2) addresses VMT associated with transportation projects and states that projects that reduce VMT, such as pedestrian, bicycle, and transit projects, should be presumed to have a less than significant impact. Subdivision (b)(3) acknowledges that Lead Agencies may not be able to quantitatively estimate VMT for every project type; in these cases, a qualitative analysis may be used. Subdivision (b)(4) stipulates that Lead Agencies have the discretion to formulate a methodology that would appropriately analyze a project's VMT. The provisions of this section were required to be implemented on July 1, 2020.

As discussed above, the City has not adopted a methodology to analyze VMT impacts within its jurisdiction. In addition, the City does not currently have thresholds or standards in place for assessing potential VMT impacts. Absent formal guidelines from the City, a VMT analysis was conducted based on information prepared by the Governor's Office of Planning and Research (OPR) as part of their *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) (Technical Advisory), which provides guidance for evaluating transportation impacts based on VMT.

Therefore, traffic impacts in this Draft EIR are based on the City's LOS thresholds as defined in the City's General Plan (consistency with a policy addressing the circulation system) and the OPR Technical Advisory (VMT analysis consistent with *State CEQA Guidelines* Section 15064.3, subdivision (b)).

4.13.4.3 Regional Regulations

Orange County Congestion Management Program. The Orange County Transportation Authority (OCTA) is a multimodal transportation agency that began in 1991 with the consolidation of seven separate agencies. OCTA serves Orange County residents and travelers by providing the following: 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.

OCTA adopted the CMP in 1991 to reduce traffic congestion and to provide a mechanism for coordinating land use and development decisions in Orange County. Compliance with the CMP requirements ensures a city's eligibility to compete for State gas tax funds for local transportation projects.

4.13.4.4 Local Regulations

City of Cypress General Plan. The Cypress General Plan is the primary source of long-range planning and policy direction that guides growth and preserves the quality of life within the community. The 2001 General Plan is based upon the community's vision for Cypress and expresses the community's long-term goals. The Cypress General Plan is intended to ensure that future projects and improvements are consistent with the community's goals, policies, and objectives.

Circulation Element. The Circulation Element is a general guide for the planning, development, and enhancement of the City of Cypress circulation system, based on existing and anticipated land uses. Most transportation-related plans and programs are established with the goal of maintaining acceptable operating LOS on the City's transportation system. The City of Cypress has adopted LOS D or better as the desired citywide operating standard for most City streets. However, given the influence of regional traffic on Valley View Street, Lincoln Avenue, and Katella Avenue, which are beyond the control of the City of Cypress, LOS E or better has been adopted as the minimum operating Level of Service for street segments and intersections on these arterials. The Circulation Element goals and policies define the City's vision for a balanced, efficient circulation system which incorporate many modes of travel and which allows for the safe movement of people and goods in and around Cypress. Based on the Circulation Element, the local and regional street network is built out in Cypress. Similarly, the bikeway system is generally built out in the project vicinity, with the exception of a planned bike lane on Walker Street south of Cerritos Avenue. This proposed bike lane would connect to the existing bike lane on Walker Street north of Cerritos Avenue.

City of Stanton General Plan. The Stanton General Plan is a policy document designed to guide the City of Stanton in achieving its economic and community development goals. It outlines specific steps to be taken to direct the City of Stanton's land use planning, economic development, image, and overall quality of life. The 2008 General Plan supersedes the 1992 General Plan and has been tailored to meet the issues and needs of the City of Stanton in the present time and foreseeable future. Implementation of the Stanton General Plan will ensure that future projects and improvements are consistent with the community's goals, policies, and objectives.

Infrastructure and Community Services Element. The Infrastructure and Community Services Element is a policy guide for the planning and development of the City of Stanton, including parameters for the transportation system (roadway network, public transportation, and bicycle facilities), circulation improvements, traffic levels of service, and pedestrian safety. The City of Stanton analyzes the operation of the roadway system in terms of LOS. Similar to the City of Cypress, the City of Stanton considers LOS D as the upper limit of satisfactory operations for intersections, except at intersections along Katella Avenue, where LOS E is acceptable.

4.13.5 Thresholds of Significance

The thresholds for transportation impacts used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to transportation if it would:

Threshold 4.13.1: **Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities**

Threshold 4.13.2: **Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)**

Threshold 4.13.3: **Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)**

Threshold 4.13.4: **Result in inadequate emergency access**

4.13.6 Project Impacts

Threshold 4.13.1: **Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?**

Less Than Significant Impact. The proposed project would be required to comply with General Plan policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The proposed project would also be required to comply with the City's transportation-related goals, policies, and metrics for determining traffic impacts, as well as the *Orange County Congestion Management Program* (CMP) (2019). The project's consistency with these plans is described in detail below.

Table 4.10.B in Section 4.10, Land Use and Planning, of this EIR, provides an evaluation of the proposed project's consistency with relevant goals and policies from the City's General Plan, including those related to transit, roadway, bicycle, and pedestrian facilities. As described in Table 4.10.B, the project would improve the existing concrete sidewalk on the northern edge of the project site along Katella Avenue. Additionally, the proposed project would preserve the grass lawn adjacent to the sidewalk and office building for aesthetic purposes. Therefore, the proposed project would be consistent with General Plan Circulation Element Policy CIR-2.8, which encourages the enhancement of the sidewalk environment to encourage pedestrian activities.

A trip generation analysis was conducted to determine the number of trips that would occur following implementation of the proposed project. This was completed in support of an evaluation of the project's consistency with Orange County CMP requirements and the City's General Plan policies with respect to traffic congestion.

The project site is currently occupied by the former Mitsubishi Motors Corporation headquarters campus, which includes a 150,000 square-foot (sf) warehouse, 180,000 sf corporate headquarters office building, and 70,000 sf of research and development buildings. The proposed project would demolish the existing buildings on the project site, except for the 150,000 sf warehouse building and the 180,000 sf office building. Approximately 5,000 sf of second-floor office/mezzanine space in the existing warehouse would be removed. The remaining portion of the site would provide parking for sprinter cargo vans/flex vehicles and employees of the facility as well as access to the truck docks on the north side of the warehouse building. It should be noted that the existing northern office building (180,000 sf) that fronts Katella Avenue would not be occupied, and therefore would not generate any traffic.

The Institute of Transportation Engineers (ITE) *Trip Generation Manual* is a nationally recognized source for estimating site-specific trip generation. The trip generation rates used for the project are based upon data collected by ITE in its *Trip Generation Manual*, 10th Edition, 2017. The ITE trip generation rates for Land Use 150 (Warehousing) have been applied to the existing warehousing use. The ITE trip generation rates for Land Use 714 (Corporate Headquarters) have been utilized for the existing corporate headquarters office building.

The vehicle mix for the warehouse use was obtained from the ITE's Trip Generation Manual Supplement (dated February 2020). This supplement provides the following vehicle mix: AM Peak Hour: 87.0 percent passenger cars and 13.0 percent trucks, PM Peak Hour: 85.0 percent passenger cars and 15.0 percent trucks, and Weekday Daily: 73.0 percent passenger cars and 27.0 percent trucks. The truck percentages were further broken down by axle type per the following South Coast Air Quality Management District's (SCAQMD) Warehouse Truck Trip Study Data Results and Usage (2014) recommended truck mix: 2-Axle = 16.7 percent, 3-Axle = 20.7 percent, and 4+-Axle = 62.6 percent.

To represent the effects of large vehicles on traffic flow; all trucks were converted into passenger car equivalents (PCEs). By their size alone, these trucks occupy more space than a passenger car. In addition, the time it takes for these trucks to accelerate and slow-down is also much longer than a passenger car and varies depending on the type of truck and number of axles. A PCE factor of 1.5 has been applied to 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks. It should be noted that Orange County and the Southern California Association of Governments (SCAG) do not have readily available PCE factor recommendations. As such, the PCE factors are based on recommendations from San Bernardino County Transportation Authority (SBCTA), which is consistent with standard engineering practice throughout the southern California region and approved by the City of Cypress.

Table 4.13.C summarizes the trip generation rates used to estimate traffic generated by the existing use in terms of vehicles and PCEs.

Table 4.13.C: Project Trip Generation Rates

Land Use[1]	ITE LU Code	Units[2]	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Actual Vehicles									
Warehousing	150	TSF	1.740	0.131	0.039	0.170	0.051	0.139	0.190
Passenger Cars (Daily: 73.00%, AM: 87.00%, PM: 5.00%)			1.270	0.114	1.270	0.114	0.034	0.148	0.044
2-Axle Trucks (Daily: 4.51%, AM: 2.17%, PM: 2.51%)			0.078	0.003	0.078	0.003	0.001	0.004	0.001
3-Axle Trucks (Daily: 5.59%, AM: 2.69%, PM: 3.11%)			0.097	0.004	0.097	0.004	0.001	0.005	0.002
4-Axle Trucks (Daily: 16.90%, AM: 8.14%, PM: 9.39%)			0.294	0.011	0.294	0.011	0.003	0.014	0.005
Corporate Headquarters	714	TSF	7.950	0.684	0.036	0.720	0.018	0.582	0.600
Passenger Car Equivalent (PCE)									
Warehousing	714	TSF	1.740	0.131	0.039	0.170	0.051	0.139	0.190
Passenger Cars			1.270	0.114	0.034	0.148	0.044	0.118	0.162
2-Axle Trucks (PCE = 1.5)			0.118	0.004	0.001	0.006	0.002	0.005	0.007
3-Axle Trucks (PCE =2.0)			0.194	0.007	0.002	0.009	0.003	0.009	0.012
4-Axle Trucks (PCE = 3.0)			0.882	0.032	0.010	0.042	0.014	0.039	0.054

Source: *Traffic Impact Analysis* (Urban Crossroads, June 2020).

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

[2] TSF = thousand square feet

[3] Vehicle Mix Source: ITE Trip Generation Handbook Supplement (2020), Appendix C.
Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

[4] PCE factors: 2-axle = 1.5; 3-axle = 2.0; 4+-axle = 3.

Since there are existing buildings (Mitsubishi Motors Corporation) that were previously occupied, credit has been taken for the previous uses in the trip generation. Field observations indicate the existing uses were not fully occupied. Given this condition, pursuant to discussions with City staff, the trip generation has applied a 50 percent credit to account for existing uses on the site that would be replaced by the proposed project (50 percent was also manually added to the existing baseline) for the purposes of this analysis.

Table 4.13.D summarizes the trip generation for the existing uses and shows the 50 percent reduction, in terms of actual vehicles and PCEs. As shown in Table 4.13.D, 50 percent of the existing uses currently generate a total of 1,182 average daily trips (ADT), including 107 trips (98 inbound and nine outbound) in the a.m. peak hour and 95 trips (nine inbound and 87 outbound) in the p.m. peak hour, in PCE.

The trip generation for the proposed project is based upon operational data provided by the Applicant/Developer for this particular facility during both the peak and off-peak seasons. Pursuant to discussions with Amazon, the peak season typically occurs between Thanksgiving and Christmas (approximately 6 weeks) and a few days around Amazon Prime Day (July). Amazon Prime Day and peak seasonal activity coincide with times when local schools may be out on break (i.e., less baseline traffic). Based on discussions with the City, 85 percent of the peak seasonal data is used for the purposes of this traffic analysis in an effort to conduct a conservative analysis.

Table 4.13.D: Existing Trip Generation Summary

Existing Use	Quantity	Units[1]	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Actual Vehicles									
Warehousing	150.000	TSF							
Passenger Car Trips			192	17	5	22	7	18	25
Truck Trips									
2-Axle Trucks			12	1	1	2	1	1	2
3-Axle Trucks			16	1	1	2	1	1	2
4-Axle Trucks			46	2	1	3	1	2	3
Total Truck Trips (Actual)			74	4	3	7	3	4	7
Corporate Headquarters	250.000	TSF	1,988	171	9	180	5	146	151
Existing Trips (Actual)[2]			***2,254***	***192***	***17***	***209***	***15***	***168***	***183***
50% of Existing Trips (Actual)			***1,128***	***96***	***9***	***105***	***8***	***84***	***92***
Passenger Car Equivalent (PCE)									
Warehousing	150.000	TSF							
Passenger Car Trips			192	17	5	22	7	18	25
Truck Trips									
2-Axle Trucks			18	1	1	2	1	1	2
3-Axle Trucks			30	2	1	3	1	2	3
4-Axle Trucks			134	5	2	7	3	6	9
Truck Trips (PCE)			182	8	4	12	5	9	14
Corporate Headquarters	250.000	TSF	1,988	171	9	180	5	146	151
Existing Trips (PCE)[2]			***2,362***	***196***	***18***	***214***	***17***	***173***	***190***
50% of Existing Trips (PCE)			***1,182***	***98***	***9***	***107***	***9***	***87***	***95***

Source: *Traffic Impact Analysis* (Urban Crossroads, June 2020).

[1] TSF = thousand square feet

[2] Total Trips = Passenger Car Trips + Truck Trips

Table 4.13.E provides a summary of the project trip generation, including the existing uses and trips to be removed, in terms of actual vehicles and PCE. As shown in Table 4.13.E, the project has the potential to generate approximately 2,606 ADT, including 278 trips (125 inbound and 153 outbound) in the a.m. peak hour and 360 trips (228 inbound and 133 outbound) in the p.m. peak hour, in PCE. With reduction of the trip generation for 50 percent of the existing uses, the net change in trips is 1,424 ADT, including 171 trips (27 inbound and 144 outbound) in the a.m. peak hour and 265 trips (219 inbound and 46 outbound) in the p.m. peak hour, in PCE.

In order to determine impacts at intersections associated with implementation of the project (i.e., the existing plus project condition), the proposed project trips were added to existing baseline traffic volumes at the study area intersections. Table 4.13.F summarizes the results of the existing plus project peak-hour LOS analysis. As shown in Table 4.13.F, with the addition of the project, all study area intersections would continue to operate at satisfactory LOS during both peak hours. Project impacts are based on conflicts with policies for the LOS significance criteria of the City of Cypress (for Cypress intersections) and/or the City of Stanton (for Stanton intersections). As previously stated, vehicle access to the project site would be provided via a new RIRO driveway on Katella Avenue (Driveway 1) and three full-access driveways on Holder Street (Driveways 2-4).

Table 4.13.E: Project Trip Generation Summary

Proposed Use	Quantity	Units[1]	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Actual Vehicles									
Amazon Building (85% of Peak)[2]	145.004	TSF							
Passenger Car Trips									
Warehouse Employees			666	0	0	0	129	0	129
Flex/DSP Drivers			1,766	99	102	201	88	122	211
Total Passenger Car Trips			***2,432***	***99***	***102***	***201***	***218***	***122***	***340***
Truck (Line Haul) Trips									
Total 4-Axle Truck Trips (Actual)			***58***	***9***	***17***	***26***	***3***	***3***	***7***
Total Project Trips (Actual)[3]			**2,490**	**108**	**119**	**227**	**221**	**126**	**347**
50% of Existing Trips (Actual)			***1,128***	***96***	***9***	***105***	***8***	***84***	***92***
Change in Trips			***1,362***	***12***	***11***	***122***	***214***	***42***	***255***
Passenger Car Equivalent (PCE)									
Amazon Building (85% of Peak)[2]	145.004	TSF							
Passenger Car Trips									
Warehouse Employees			666	0	0	0	129	0	129
Flex/DSP Drivers			1,766	99	102	201	88	122	211
Total Passenger Car Trips			***2,432***	***99***	***102***	***201***	***218***	***122***	***340***
Truck (Line Haul) Trips									
Total 4-Axle Truck Trips (PCE)			***58***	***9***	***17***	***26***	***3***	***3***	***7***
Total Project Trips (PCE)[3]			**2,606**	**125**	**153**	**278**	**228**	**133**	**360**
50% of Existing Trips (PCE) from Table 4.13.C			***1,182***	***98***	***9***	***107***	***9***	***87***	***95***
Change in Trips			***1,424***	***27***	***144***	***171***	***219***	***46***	***265***

Source: *Traffic Impact Analysis* (Urban Crossroads, June 2020).

[1] TSF = thousand square feet

[2] Operational data provided by Amazon. Data shown reflects 85% of the peak operations

[3] Total Trips = Passenger Car Trips + Truck Trips

Table 4.13.F: Existing Plus Project Intersection Level of Service Summary

Intersection		Control	Peak Hour	Existing		Existing Plus Project		Project Impact	
				ICU/ Delay	LOS	ICU/ Delay	LOS	Δ ICU/ Delay	Yes/No
1	Valley View Street/Katella Avenue	Signal	AM	0.829	D	0.844	D	0.015	No
			PM	0.859	D	0.874	D	0.015	No
2	Driveway 1/Katella Avenue (future intersection)	CSS (Delay)	AM	N/A	N/A	16.6	C	16.6	No
			PM	N/A	N/A	24.2	C	24.2	No
3	Holder Street/Katella Avenue	Signal	AM	0.589	A	0.637	B	0.048	No
			PM	0.634	B	0.746	C	0.112	No
4	Holder Street/Driveway 2	CSS (Delay)	AM	12.1	B	15.6	C	3.5	No
			PM	11.9	B	15.5	C	3.6	No
5	Holder Street/Driveway 3	CSS (Delay)	AM	13.3	B	18.3	C	5.0	No
			PM	10.9	B	13.1	C	2.2	No
6	Holder Street/Driveway 4	CSS (Delay)	AM	0.0	A	9.6	A	9.6	No
			PM	0.0	A	8.6	A	8.6	No
7	Knott Avenue/Katella Avenue	Signal	AM	0.836	D	0.855	D	0.019	No
			PM	0.935	E	0.942	E	0.007	No
8	Western Avenue/Katella Avenue	Signal	AM	0.886	D	0.897	D	0.011	No
			PM	0.798	C	0.804	C	0.006	No

Source: *Traffic Impact Analysis* (Urban Crossroads, June 2020).
Note: Delay is reported in seconds.
CSS = cross-street stop control
N/A = not applicable
ICU = Intersection Capacity Utilization
LOS = level of service

For existing plus project traffic conditions, there are no study area intersections anticipated to meet peak hour volume-based traffic signal warrants.

Threshold 4.13.2: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact.

To calculate VMT for the proposed project, OCTAM was run for both base (2016) and future (2045) scenarios, and calculations from the relevant OCTAM output files were performed to calculate HBW VMT for the project's TAZ. The project's HBW VMT was then normalized by dividing by the number of employees to determine the project's VMT per employee. Existing/baseline VMT per employee was developed by interpolating (using linear interpolation) between the base (2016) and future (2045) VMT. As shown in Table 4.13.G, the project VMT per employee for project baseline (2020) conditions is 18.68.

Table 4.13.G: Baseline 2020 Project VMT per Employee

Description	Project[1]
Employment	370
HBW VMT	6,911
HBW VMT/Employee	18.68

Source: *VMT Assessment* (Urban Crossroads, July 2020).
[1] Employment data are based on information provided by the building tenant and represent employment anticipated during peak operational activity for the proposed development.
VMT = vehicle miles traveled

As shown in Table 4.13.H, the proposed project's VMT per employee does not exceed the 15.0 percent below VMT per employee for the region threshold recommended in the Technical Advisory.

Table 4.13.H: Baseline (2020) Regional and Project VMT per Employee Comparison

Recommended Regional Threshold	Countywide VMT/Employee (2020)	Project VMT/Employee (2020)	Project's % below Countywide VMT/Employee	Compared to Threshold (15% below Countywide VMT/Employee)	Potentially Significant?
HBW VMT/Employee	24.81	18.68	-24.7%	-9.7%	No

Source: *VMT Assessment* (Urban Crossroads, July 2020).
VMT = vehicle miles traveled

Metrics such as VMT per capita or VMT per employee are efficiency metrics that allow absolute VMT (or total VMT) to be converted for purposes of comparison. As stated in the OPR Technical Advisory, "a project that falls below an efficiency based metric threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the project impact. Accordingly, a finding of a less than significant project impact would imply a less than significant cumulative impact, and vice versa." This approach is similar to the analysis typically conducted for greenhouse gas emissions or air quality emissions.

The proposed project is consistent with the City's General Plan land use. Therefore, the vehicle trips associated with a commercial/industrial use on the project site have already been incorporated into the land use and growth assumptions included in the 2020–2045 RTP/SCS. In addition, as described in Table 4.10.A under Threshold 4.10.2 in Section 4.10, Land Use and Planning, the proposed project would be consistent with applicable goals in the 2020–2045 RTP/SCS. Therefore, the proposed project is consistent with the Southern California Association of Governments (SCAG) RTP/SCS. Therefore, a cumulative analysis that makes a comparison of areawide daily total VMT without and with the project was not performed.

Threshold 4.13.3: 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. As discussed in Chapter 3.0, Project Description, the proposed project does not propose any major traffic infrastructure improvements. In addition, as described in Section 4.10, Land Use and Planning, the project would not include any land uses that would be incompatible with surrounding uses. As shown in Table 4.13.B above, 73 percent of the weekday daily traffic generated by the proposed project would consist of passenger cars, while the remaining 27 percent would consist of 2-, 3-, and 4-axle trucks. Based on the ITE *Trip Generation Manual Supplement*, the proposed project would generate a similar vehicle mix to the other surrounding warehouse land uses in the Cypress Corporate Center Amended Specific Plan and the Katella Avenue Corridor. Thus, the project would not introduce truck traffic to an area where such traffic does not currently exist. Additionally, all new driveways at the project site would be subject to the provisions of the City of Cypress design standards to alleviate design feature and safety hazards, which would reduce any potential impacts to less than significant levels. Therefore, the proposed project's impacts with respect to design feature hazards would be less than significant. No mitigation is required.

The proposed project would implement the following site access and site adjacent improvements that would be in place prior to project building occupancy:

- Both Katella Avenue and Holder Street are currently constructed to their ultimate cross-sections. However, the proposed project would modify curb and gutter, sidewalk, and landscaping improvements to accommodate the proposed driveways.

- The median for the westbound left turn pocket on Katella Avenue at Holder Street would be modified to accommodate a minimum of 360 feet of storage. Similarly, the median would be modified to accommodate 265 feet of storage for the eastbound left-turn pocket on Katella Avenue at Holder Street.

- Driveway 1 on Katella Avenue is proposed to be controlled by a stop sign on the northbound approach and a single egress and ingress lane on the driveway. The driveway would be restricted to RIRO access only to be controlled by the existing raised median. This driveway will serve passenger cars only.

- Driveway 2 on Holder Street is proposed to be controlled by a stop sign on the eastbound approach and a single egress and ingress lane on the driveway. The existing painted median (two-way-left-turn-lane) will be utilized for accommodating left turns into and out of Driveway 2. This driveway will serve passenger cars only. It should be noted that this driveway will align with the existing driveway to the east.

- Driveway 3 on Holder Street is proposed to be controlled by a stop sign on the eastbound approach and a single egress and ingress lane on the driveway. The existing painted median (two-way-left-turn-lane) will be utilized for accommodating left turns into and out of

Driveway 3. This driveway will serve passenger cars and all heavy trucks. It should be noted that this driveway will align with the existing driveway to the east.

- Driveway 4 on Holder Street is proposed to be controlled by a stop sign on the eastbound approach and a single egress and ingress lane on the driveway. This driveway will serve passenger cars only. It should be noted that this driveway will align with the existing driveway to the east.

Threshold 4.13.4: Would the project result in inadequate emergency access?

Less Than Significant Impact. The project site would be accessed via a new RIRO driveway on Katella Avenue and three full-access driveways on Holder Street. As discussed above under Threshold 4.13.3, the project driveways would be designed and improved to conform to the City's standards. In addition, the final site plans would be reviewed by the Orange County Fire Authority to confirm that adequate emergency access would be provided. Therefore, the project's impacts associated with emergency access would be less than significant. No mitigation is required.

4.13.7 Level of Significance Prior to Mitigation

The proposed project would have less than significant impacts related to conflicts with a program, plan, ordinance, or policy addressing the circulation system, hazards due to geometric design features and emergency access. Although the City has not yet adopted VMT metrics or thresholds of significant related to VMT, a VMT analysis was conducted using the recommendations and guidance of the OPR Technical Advisory to address *State CEQA Guidelines* Section 15064.3 subdivision (b). Based on the VMT analysis, the proposed project would have a less than significant impact. Therefore, no mitigation is required.

4.13.8 Regulatory Compliance Measures and Mitigation Measures

No regulatory compliance measures are applicable to the proposed project, and no mitigation measures are required.

4.13.9 Level of Significance after Mitigation

The proposed project's impacts related to traffic/transportation would be less than significant. No mitigation is required.

4.13.10 Cumulative Impacts

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. The cumulative impact area for traffic/transportation is the traffic study area outlined in the TIA, which includes 8 intersections in the Cities of Cypress and Stanton. A list of approved/ pending projects provided by the Cities of Cypress, Stanton, Los Alamitos, and Garden Grove were reviewed to determine whether projects in the vicinity of the project site (if any) should be included in the cumulative condition. With concurrence from the City of Cypress, 27 related projects listed in Table 4.A, Summary of Related Projects, in Chapter 4.0, Existing Setting, Environmental Analysis, Impacts, and Mitigation Measures, were included in the cumulative (Opening Year 2021) condition.

4.13.10.1 Opening Year Cumulative 2021 Condition

Less Than Significant Impact. According to the Applicant/Developer, the project would open in 2021. To develop an opening year cumulative 2021 condition, an ambient growth rate of 2 percent was applied to the existing traffic counts, and trips for the cumulative projects were then added. Application of a 2 percent growth to the existing traffic volumes is considered conservative and would account for any additional (unknown) future development in the project vicinity that is not included in the list of cumulative projects.

The proposed project trips were then included to represent opening year cumulative 2021 plus project conditions.

Table 4.13.I summarizes the results of the opening year cumulative 2021 (baseline and plus project) peak-hour LOS analysis for the study area intersections. As shown in Table 4.13.I, with the addition of the proposed project, all study area intersections are forecast to operate at satisfactory LOS during both peak hours. Therefore, a significant project impact is not expected to occur at any study area intersection in the opening year cumulative 2021 condition.

Table 4.13.I: Opening Year Plus Project Intersection Level of Service Summary

Intersection		Control	Peak Hour	Opening Year		Opening Year Plus Project		Project Impact	
				ICU/ Delay	LOS	ICU/ Delay	LOS	Δ ICU/ Delay	Yes/No
1	Valley View Street/Katella Avenue	Signal	AM	0.875	D	0.884	D	0.009	No
			PM	0.896	D	0.911	E	0.015	No
2	Driveway 1/Katella Avenue (future intersection)	CSS (Delay)	AM	N/A	N/A	17.2	C	17.2	No
			PM	N/A	N/A	25.75	D	25.7	No
3	Holder Street/Katella Avenue	Signal	AM	0.607	B	0.654	B	0.047	No
			PM	0.658	B	0.765	C	0.107	No
4	Holder Street/Driveway 2	CSS (Delay)	AM	12.2	B	15.8	C	3.6	No
			PM	12.0	B	15.6	C	3.6	No
5	Holder Street/Driveway 3	CSS (Delay)	AM	13.5	B	18.6	C	5.1	No
			PM	11.0	B	13.1	C	2.1	No
6	Holder Street/Driveway 4	CSS (Delay)	AM	0.0	A	9.6	A	9.6	No
			PM	0.0	A	8.6	A	8.6	No
7	Knott Avenue/Katella Avenue	Signal	AM	0.858	D	0.876	D	0.018	No
			PM	0.961	E	0.968	E	0.007	No
8	Western Avenue/Katella Avenue	Signal	AM	0.913	E	0.925	E	0.012	No
			PM	0.823	D	0.828	D	0.005	No

Source: *Traffic Impact Analysis* (Urban Crossroads, June 2020).
Note: Delay is reported in seconds.
CSS = cross-street stop control
N/A = not applicable
ICU = Intersection Capacity Utilization
LOS = level of service

There are no study area intersections that are anticipated to meet peak hour volume-based traffic signal warrants for opening year cumulative 2021 conditions without or with the project.

4.14 TRIBAL CULTURAL RESOURCES

This section provides a discussion of the existing tribal cultural resource environment and an analysis of potential impacts to tribal cultural resources from implementation of the Amazon Facility project (proposed project). According to California Public Resources Code (PRC) Section 21080.3.1 and Chapter 532, Statutes 2014 (i.e., Assembly Bill 52), "tribal cultural resources" are defined as the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either: (A) included or determined to be eligible for inclusion in the California Register of Historical Resources; or (B) included in a local register of historical resources as defined in subdivision (k) of Section 5020.1

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1

This section summarizes information obtained from Assembly Bill (AB) 52 Native American consultation efforts. The record of these consultation efforts is contained in Appendix M of this Environmental Impact Report (EIR).

4.14.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. One comment letter included comments related to tribal cultural resources. The letter from the Native American Heritage Commission (NAHC) received on June 5, 2020, outlined the City's tribal consultation requirements under AB 52.

4.14.2 Methodology

The NAHC was contacted on June 1, 2020, to conduct a Sacred Lands File (SLF) search and provide a Native American Contact List for the project site pursuant to AB 52. The NAHC responded on June 2, 2020, stating that an SLF search was completed for the project site with negative results. The NAHC recommended that 15 Native American individuals representing the Diegueño, Gabrielino, Juaneño, Cahuilla Luiseño, and Kumeyaay groups be contacted for information regarding cultural resources that could be affected by the proposed project. Letters were also sent to two additional individuals who had requested to be notified of projects during AB 52 consultation (and were not listed by the NAHC), representing the Luiseño and Gabrielino groups. All 17 individuals were contacted through letters sent via Certified Mail on June 12, 2020. With the exception of the Gabrieleno Band of Mission Indians – Kizh Nation, no responses were received.

4.14.3 Existing Environmental Setting

The area that is now the City of Cypress was prehistorically occupied by Native Americans. This area is within the traditional boundaries of the Gabrielino.

4.14.4 Regulatory Setting

4.14.4.1 Federal Regulations

There are no federal regulations that are applicable to tribal cultural resources relevant to the proposed project.

4.14.4.2 State Regulations

Assembly Bill 52 (AB 52) Tribal Consultation. California PRC Section 21080.3.1 and Chapter 532, Statutes 2014 (i.e., AB 52), require that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project that may have a significant effect on the environment. The bill requires a lead agency to begin consultation with each California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation, prior to determining whether a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report is required for a project. The bill specifies examples of mitigation measures that may be considered to avoid or minimize impacts on tribal cultural resources. The bill makes the above provisions applicable to projects that have a Notice of Preparation or a notice of Negative Declaration or Mitigated Negative Declaration filed on or after July 1, 2015. By requiring the lead agency to consider these effects relative to tribal cultural resources and to conduct consultation with California Native American tribes, this bill imposes a State-mandated local program.

4.14.4.3 Regional Regulations

There are no regional regulations that are applicable to tribal cultural resources relevant to the proposed project.

4.14.4.4 Local Regulations

There are no local regulations that are applicable to tribal cultural resources relevant to the proposed project.

4.14.5 Thresholds of Significance

The thresholds for impacts to tribal cultural resources used in this analysis are consistent with Appendix G of the *State CEQA Guidelines* and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to tribal cultural resources if it would:

Threshold 4.16.1: **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: 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).**

Threshold 4.16.2: **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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

4.14.6 Project Impacts

Threshold 4.16.1: **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

No Impact. A cultural resources record search was completed on May 21, 2020, at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) at California State University, Fullerton. It included a review of all prehistoric and historic archaeological sites within a 0.25-mile radius of the project site, as well as a review of known cultural resource survey and excavation reports in that area. The California State Historic Resources Inventory (HRI), National Register of Historic Places (National Register), California Historical Landmarks (SHL), California Points of Historical Interest (SPHI), and various local historical registers were examined. The SCCIC record search included the project site and the areas within 0.25-mile of the project site. No archaeological resources have been previously recorded within the project site or within 0.25-mile of the project site. One previous cultural resources study (an archaeological pedestrian field survey) included the project site.

Native American consultation was conducted in compliance with AB 52. As part of the consultation process, a review of the SLF by the NAHC yielded negative results. Subsequently Native American representatives were contacted by the City to determine their desire to consult on the proposed project. During that process, the Gabrieleno Band of Mission Indians – Kizh Nation (Tribe) stated that the project site is within its tribal territory and requested consultation with the City.

An AB 52 consultation call regarding the proposed project was held on August 20, 2020. Call attendees included members from the Tribe, a planner from the City of Cypress, the Applicant/Developer's representative, and a planner and an archaeologist from LSA, the City's environmental consultant. The City planner summarized the proposed development plans, and the archaeological environmental consultant presented a summary of the archaeological study and

management recommendations. Andrew Salas, the Tribe's Chairperson, and Matt Teutimez, Tribal biologist, presented a background of the Tribe's history in Cypress, Los Alamitos, Long Beach, and other areas in the proposed project vicinity and explained why the project site is sensitive for tribal cultural resources. Although the top few feet of sediments on the project site have been documented to consist of fill materials, Mr. Salas and Mr. Teutimez expressed concern that the fill may not be engineered and could contain sensitive tribal cultural resources. During the consultation call, Mr. Salas indicated that the Tribe would provide the City with recommendations with respect to mitigation for potential impacts to unknown tribal cultural resources on the project site; however, as of the date of publication of this EIR, the Tribe's mitigation recommendations had not yet been received by the City. Therefore, the AB 52 tribal consultation process should be considered ongoing.

No information regarding specific known tribal cultural resources on the project site was provided by the Tribe. Therefore, no 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 area, and there are no known tribal cultural resources on the project site. The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource defined as a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is 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), and no mitigation is required.

Threshold 4.16.2: **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource 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. Native American consultation was conducted in compliance with AB 52. As part of the consultation process, a review of the SLF by the NAHC yielded negative results. Subsequently Native American representatives were contacted by the City to determine their desire to consult on the proposed project. During that process, the Tribe stated that the project site is within its tribal territory and requested consultation with the City. As described above, an AB 52 consultation call regarding the proposed project was held on August 20, 2020. Although the Tribe indicated during the consultation call that it would provide the City with recommendations with respect to mitigation for potential impacts to unknown tribal cultural resources on the project site, the Tribe's mitigation recommendations have not yet been received by the City. Therefore, the AB 52 tribal consultation process should be considered ongoing.

Regulatory Compliance Measure 4.4-1, provided in Section 4.4, Cultural Resources, requires compliance with the State's Health and Safety Code for the treatment of human remains. Adherence

to regulatory standards included in Regulatory Compliance Measure 4.4-1 would reduce the impact of the proposed project on human remains to less than significant and addresses tribal concerns regarding the treatment of human remains.

The project site is not likely to contain any human remains due to the fact that soils on the site have been previously disturbed from past grading activities on the project site and surrounding area. Nevertheless, the City is recommending the inclusion of Mitigation Measure 4.14-1 provided below to protect any potentially unknown tribal cultural resources on the project site. Mitigation Measure 4.14-1 requires the retention of a Gabrieleno Native American Tribal representative to monitor all ground-disturbing construction activities on the project site. In the unlikely event that ground-disturbing construction activities uncover a yet-to-be-discovered tribal cultural resource, implementation of Mitigation Measure 4.14-1 would reduce any potential impacts to previously undiscovered tribal cultural resources to a less than significant level. No additional mitigation is required.

4.14.7 Level of Significance Prior to Mitigation

No impacts to known tribal cultural resources listed or eligible for listing in the California Register or in a local register would occur. Prior to mitigation, the proposed project has the potential to result in significant impacts to previously undiscovered tribal cultural resources.

4.14.8 Regulatory Compliance Measures and Mitigation Measures

4.14.8.1 Regulatory Compliance Measures

Refer to Regulatory Compliance Measure 4.4-1 in Section 4.4, Cultural Resources.

4.14.8.2 Mitigation Measures

Mitigation Measure 4.14-1 **Tribal Cultural Resources.** Prior to the issuance of a grading permit, the Applicant/Developer shall retain one Gabrieleno Native American Tribal group to provide a tribal monitor for all ground-disturbing construction activities on the project site. Evidence that a tribal monitor has been retained shall be provided to the City of Cypress (City) Community Development Director, or designee, prior to the issuance of a grading permit. If tribal cultural resources (as defined in Public Resources Code (PRC) Section 21074) are discovered during construction activities, ground-disturbing activities in the immediate vicinity of the find shall be halted until the find is assessed by the tribal monitor. Ground-disturbing construction activities shall be allowed to continue in other portions of the project while the find is being assessed. If the find is determined to be a tribal cultural resource, the Gabrieleno Native American Tribe whose representative is responsible for tribal monitoring shall coordinate with the Applicant/Developer to determine appropriate treatment of the resource.

The Native American tribal monitor shall complete monitoring logs on a daily basis that provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The tribal monitor shall also provide appropriate insurance certificates. Tribal monitoring shall not be conducted after initial excavation of native (previously undisturbed) soil has occurred (i.e., no tribal monitoring shall be required for landscaping activities occurring after completion of project grading and trenching, as this soil will have been previously monitored). On-site tribal monitoring shall be considered complete after project grading and trenching are completed, and no disturbance to native (previously undisturbed) soils is anticipated.

4.14.9 Level of Significance after Mitigation

No impacts to known tribal cultural resources listed or eligible for listing in the California Register or in a local register would occur. Mitigation Measure 4.14-1 would reduce potential impacts to newly discovered tribal cultural resources to a less than significant level.

4.14.10 Cumulative Impacts

Potential impacts of the proposed project to unknown tribal cultural resources, when combined with the impacts of past, present, and reasonably foreseeable projects in the City of Cypress, could contribute to a cumulatively significant impact due to the overall loss of tribal cultural resources in the region. However, each development proposal received by the City is required to undergo environmental review pursuant to the California Environmental Quality Act (CEQA). 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 that would reduce or avoid significant impacts.

When resources are assessed and/or protected as they are discovered, impacts to these resources are less than significant. As such, adherence to the regulatory standards in Regulatory Compliance Measure 4.4-1 and implementation of Mitigation Measure 4.14-1 would ensure that the proposed project, together with the related projects, would not result in significant cumulative impacts to tribal cultural resources.

4.15 UTILITIES AND SERVICE SYSTEMS

This section describes the utility providers within whose jurisdiction the project site is located and evaluates the potential impacts of the Amazon Facility (proposed project) on utilities and service systems. This section is based on multiple data sources, including: written correspondence and coordination with utility providers (Appendix K) and the California Emissions Estimator Model (CalEEMod) outputs generated for the proposed project (Appendix B). This section addresses the following utilities and service systems (service providers are noted in parentheses).

- Electricity (Southern California Edison [SCE])
- Natural Gas (Southern California Gas Company [SoCalGas])
- Solid Waste (Valley Vista Services; Orange County Waste and Recycling [OCWR])
- Wastewater (Orange County Sanitation District [OCSD])
- Potable Domestic Water (Golden State Water Company [GSWC])
- Storm Drainage (Orange County Flood Control District [OCFCD]).

4.15.1 Scoping Process

The City of Cypress (City) received 21 comment letters during the public review period of the Notice of Preparation (NOP). For copies of the NOP comment letters, refer to Appendix A of this EIR. One comment letter included comments related to Utilities. The letter from Allyssa J. Holcomb (on behalf of Warland Investments Company) received on July 6, 2020, expresses general concern regarding impacts to City infrastructure requiring upgrades that would lead to secondary impacts. Impacts related to the proposed project's potential to result in the relocation or construction of new or expanded utilities infrastructure is discussed under Threshold 4.15.1 below.

4.15.2 Methodology

Utility providers were sent a questionnaire requesting information regarding current service provided to the project site and possible constraints or impacts to this service associated with project buildout, which is anticipated to occur in 2021. The impact analyses are based on data obtained through websites, and adopted planning documents of the service and utility providers. This analysis also includes CalEEMod outputs generated for the proposed project, which are included in Appendix B of this Environmental Impact Report (EIR). Correspondence with utility providers is included in Appendix K.

4.15.3 Existing Environmental Setting

4.15.3.1 Electricity

In 2017, California's electricity was generated primarily by natural gas (33.67 percent), coal (4.13 percent), large hydroelectric (14.72 percent), nuclear (9.08 percent), and renewable sources (29 percent). Total electric generation in California in 2017 was 292,039 gigawatt-hours (GWh), up

0.5 percent from the 2016 total generation of 290,567 GWh. In 2017, California produced approximately 70.7 percent and imported 29.3 percent of the electricity it used.[1]

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 (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 2018 was 85,000 GWh.[3] Total electricity consumption in Orange County in 2018 was 20,197 GWh (7,036 GWh for the residential sector and 13,161 GWh for the non-residential sector).[4]

4.15.3.2 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 upon out-of-state imports for nearly 90 percent of its natural gas supply.[5] SoCalGas, the service provider for the project site, serves approximately 21.8 million customers in a 24,000 sq mi service territory.[6] SoCalGas has four storage fields—Aliso Canyon, Honor Rancho, La Goleta, and Playa del Rey—and has a combined storage capacity of 72 billion cubic feet as of September 19, 2019.[7]

According to the CEC, total natural gas consumption in the SoCalGas service area in 2018 was 5,156.1 million therms (2,147.4 million therms for the residential sector and 987.5 million therms for the commercial sector).[8] Total natural gas consumption in Orange County in 2018 was 575.1 million therms (339.0 million therms for the residential sector and 236.1 therms for the non-residential sector).[9]

1 California Energy Commission (CEC). 2020e. Notice of Request for Public Comments on the Draft Scoping Order for the 2019 Integrated Energy Policy Report. Docket No. 19-IEPR-01.

2 Southern California Edison (SCE). 2020. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed July 8, 2020).

3 CEC. 2020b. Electricity Consumption by Entity. Website: http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed July 8, 2020)

4 CEC. 2020a. Electricity Consumption by County. Website: http://www.ecdmsenergy.ca.gov/elecby county.aspx (accessed July 8, 2020).

5 CEC. 2020f. Supply and Demand of Natural Gas in California. Website: https://ww2.energy.ca.gov/ almanac/naturalgas_data/overview.html (accessed July 8, 2020).

6 SoCalGas. Company Profile: About SoCalGas Webpage. Website: https://www.socalgas.com/about-us/ company-profile (accessed July 8, 2020)

7 U.S. Energy Information Administration (EIA). 2019. Southern California Daily Energy Report. Website: https://www.eia.gov/special/disruptions/socal/winter/#commentary (accessed July 8, 2020)

8 CEC. 2020d. Natural Gas Consumption by Entity. Website: https://ecdms.energy.ca.gov/gasbyutil.aspx (accessed July 8, 2020)

9 CEC. 2020c. Gas Consumption by County. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx (accessed July 8, 2020).

4.15.3.3 Solid Waste

The City of Cypress (City) currently contracts with Valley Vista, a private solid waste hauler, to collect and dispose of the solid waste/refuse generated by the City. Solid waste/refuse collected in the City by Valley Vista would be transported to one of the Class III landfills operated and maintained by OCWR. Class III landfills only accept non-hazardous municipal solid waste for disposal; no hazardous or liquid waste is accepted. County residents are able to dispose of their household hazardous waste items at any of OCWR's four household hazardous waste collection centers. Currently, OCWR maintains and operates three Class III sanitary landfills, identified below in Table 4.15.A.

Table 4.15.A: Orange County Class III Landfills

Landfill	Location	Approximate Distance from Project Site (miles)	Service
Frank R. Bowerman	11002 Bee Canyon Access Road Irvine, CA 92602	20	Commercial dumping No public dumping
Olinda Alpha	1942 North Valencia Avenue Brea, CA 92823	14	Commercial dumping Public dumping allowed
Prima Deshecha	32250 La Pata Avenue San Juan Capistrano, CA 92675	31	Commercial dumping Public dumping allowed

Source: Orange County Waste and Recycling.

Of the three Class III landfills currently operated by OCWR, the closest active landfill to the project site is the Olinda Alpha Landfill.

The Olinda Alpha Landfill is scheduled to close in approximately 2030, at which time it will be landscaped to become a County Regional Park.[1] The Olinda Alpha Landfill is currently permitted by the California Department of Resources, Recycling, and Recovery (CalRecycle) to receive a maximum of 8,000 tons per day (tpd) of waste, but currently receives an average of approximately 7,000 tpd.[2] Therefore, the Olinda Alpha Landfill currently operates at approximately 87.5 percent of its daily capacity. As of November 2014, the Olinda Alpha Landfill had an estimated remaining disposal capacity of 34,200,000 cubic yards.[3]

4.15.3.4 Wastewater

The project site is in the sewer service area of the Orange County Sanitation District (OCSD). The OCSD provides wastewater collection, treatment, and recycling for approximately 2.6 million people living within a 479 sq mi area of central and northwestern Orange County.[4] The OCSD's facilities include 396 miles of sewer pipes and 15 pump stations located throughout the county. The OCSD

1 Orange County Waste & Recycling. 2020. Landfill Information. Website: http://www.oclandfills.com/landfill (accessed July 8, 2020).

2 Ibid.

3 California Department of Resources, Recycling, and Recovery (CalRecycle). SWIS Facility Detail, Olinda Alpha Landfill (30-AB-0035). Website: https://www2.calrecycle.ca.gov/swfacilities/Directory/30-AB-0035 (accessed July 8, 2020).

4 Orange County Sanitation District (OCSD). 2018. *2018-2019 Annual Report.* https://www.ocsd.com/Home/ShowDocument?id=29415 (accessed July 8, 2020).

treats approximately 185 million gallons of wastewater from residential, commercial, and industrial sources per day that is sent to two treatment plants: Plant No. 1 and Plant No. 2. Treatment Plant No. 1, at 10844 Ellis Avenue in Fountain Valley, is located approximately 9 miles southeast of the project site. Treatment Plant No. 2, at 22212 Brookhurst Street in Huntington Beach, is located approximately 12 miles southeast of the project site.

The OCSD is responsible for the provision of wastewater treatment facilities that serve the project site. Sewage from the City of Cypress is diverted to either Reclamation Plant No. 1 or Reclamation Plant No. 2. Excess wastewater from any of six trunk sewers tributary to Plant No. 1 is diverted to Plant No. 2 to not overload the capacity of Plant No. 1 and to provide for maintenance or construction activities.[1] Reclamation Plant No. 1 has a primary treatment capacity of 208 million gallons per day (mgd), and is running under capacity at approximately 120 mgd.[2] Reclamation Plant No. 2 has a primary treatment capacity of 168[3] mgd and currently receives 65 mgd. [4] Additionally, through its Capital Improvement Program, the OCSD strives to continue maintaining its facilities at optimal levels by planning, designing, and preparing for future demand by developing Facilities and Biosolids Master Plans that address 20-year planning horizons.[5]

4.15.3.5 Potable Domestic Water Service

GSWC provides domestic water service to the project site. GSWC's Los Alamitos service area includes Cypress, Los Alamitos, and Stanton; additionally, small portions of Buena Park, Garden Grove, La Palma, Seal Beach, and the unincorporated community of Rossmoor are included in the Los Alamitos service area. There are approximately 27,200 customers within GSWC's Los Alamitos service area.[6]

The 2015 West Orange Urban Water Management Plan (UWMP) demonstrates that GSWC has adequate domestic water supply for future water demands through 2040. GSWC obtains its water supply for the West Orange System from two primary sources: imported groundwater and GSWC-operated groundwater wells. Imported water is purchased from the Municipal Water District of Orange County (MWDOC). MWDOC is largely a pass-through provider of imported water, obtaining its water supply from the Metropolitan Water District of Southern California (MWD).[7] According to the UWMP, MWD intends to provide 100-percent supply reliability to MWDOC, which in turn provides 100-percent supply reliability to the West Orange System. Groundwater is extracted from 17 active, GSWC-owned wells in the Orange County Groundwater Basin.[8] The UWMP includes a

1 OCSD. 2019a. 2018–2019 Annual Report Resource Protection Division Pretreatment Program. Website: https://www.ocsd.com/Home/ShowDocument?id=29255 (accessed July 8, 2020).
2 Ibid.
3 Ibid.
4 OCSD. 2020a. Facts and Key Statistics Webpage. Website: https://www.ocsd.com/services/regional-sewer-service (accessed July 8, 2020).
5 OCSD. 2020b. Capital Improvement Program Fiscal Year 2018/2019. Website: https://www.ocsd.com/Home/ShowDocument?id=29208 (accessed July 8, 2020).
6 Golden State Water Company (GSWC). 2020. Los Alamitos Customer Service Area. Website: http://www.gswater.com/los-alamitos/ (accessed July 8, 2020).
7 GSWC. 2016. *2015 Urban Water Management Plan, West Orange.* Section 6.1. July.
8 GSWC. 2016. *2015 Urban Water Management Plan, West Orange.* Section 6.2. July.

water supply and demand assessment that demonstrates that adequate water supply, including both imported groundwater and groundwater from GSWC-owned wells, will be available to GSWC through 2040.[1]

As of 2015, recycled water was not used within the West Orange System. However, an existing agreement would allow GSWC to purchase recycled water from the Los Angeles County Sanitation District and provide the recycled water to Forest Lawn Memorial-Park in Cypress.[2] Therefore, projected water supply information in the UWMP includes recycled water as a source.

The total projected water demand for customers served by GSWC is approximately 16,722 acre-feet per year (afy) in 2020; the projected water demand increases every 5-year period, totaling 17,701 afy by 2040.[3] GSWC's planned water supplies for 2020 total 16,722 afy, which consists of 1,644 afy (9.8 percent) of imported water, 14,798 afy (88.5 percent) of groundwater from GSWC-owned wells, and 280 afy (1.7 percent) of recycled water.[4] Imported water from MWDOC is provided to the GSWC West Orange System through three connections, which have supply capacities of 4,500 gallons per minute (gpm), 11,200 gpm, and 9,000 gpm. These three connections together account for a total supply capacity of 24,700 gpm.[5] Over the next 20 years, imported water supplies are anticipated to comprise the same proportion of GSWC's water supply as under current conditions.

4.15.3.6 Storm Drain

The City's stormwater drainage system flows into facilities that are owned, operated, and maintained by the Orange County Flood Control District. The City is responsible for regulating inflows to and discharges from its municipal storm drainage system. Specifically, the Public Works Maintenance Division is responsible for maintaining approximately 60 miles of storm drains within the City.[6] As discussed in Section 4.9, Hydrology and Water Quality, in its existing condition, in its existing condition, In the existing condition, stormwater runoff sheet flows to inlet drains on-site and drains to a 45-inch diameter storm drain located on the west side of the site. Runoff flows from the 45-inch storm drain from south of Katella Avenue to the Stanton Channel, which continues to the Bolsa Chica Channel, and is ultimately discharged into the Anaheim Bay.

4.15.3.7 Telecommunications Facilities

Telephone, television, and internet services are offered by a variety of providers in the City of Cypress, including AT&T, Frontier Communications, Spectrum, HughesNet, and ViaSat. Non-satellite providers include Frontier, DirectTV, Spectrum Cable, and DishTV. Satellite internet providers include ViaSat. These services are privately operated and offered to each location in the City for a fee defined by the provider.

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1 GSWC. 2016. *2015 Urban Water Management Plan, West Orange*. Section 7.3.
2 Ibid.
3 GSWC. 2016. *2015 Urban Water Management Plan, West Orange*. Section 4.2.1.
4 Ibid. 2016. Section 6.9.
5 Ibid. 2016. Section 6.1.
6 City of Cypress. Maintenance. Website: http://www.cypressca.org/government/departments/public-works/maintenance (accessed July 15, 2020).

4.15.4 Regulatory Setting

4.15.4.1 Federal Regulations

There are no federal policies or regulation applicable to the proposed project.

4.15.4.2 State Regulations

Water Supply Assessment. California Public Resources Code (PRC) Section 21151.9 requires that any proposed "project," as defined in Section 10912 of the Water Code, prepare a Water Supply Assessment in compliance with Water Code Section 10910, et seq. Water Code Section 10910 et seq. outlines the necessary information and analysis that must be included in an EIR to ensure that a proposed land development has a sufficient water supply to meet existing and planned water demand over a 20-year horizon.

According to Water Supply Assessment requirements, a "project" is defined as any of the following:

- A residential development of more than 500 dwelling units;
- A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (sf) of floor space;
- A commercial office building employing more than 1,000 persons or having more than 250,000 sf of floor space;
- A hotel or motel, or both, having more than 500 rooms;
- An industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor area;
- A mixed-use project that includes one or more of the projects specified above; and
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

If a public water system has fewer than 5,000 service connections, a "project" means any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

The proposed project proposes the development of a last mile logistics facility on the project site. The proposed project would demolish existing buildings on the project site except for the existing 150,000 sf warehouse building on the southwest portion of the project site and the existing 180,000 sf office building along the northern edge of the project site. Although the existing warehouse

building on the project site would be reoccupied, the office building would remain unoccupied. The proposed project does not meet any of criteria listed above. Additionally, GSWC has more than 5,000 service connections. Therefore, the proposed project does not meet the definition of a "project" pursuant to Water Code Section 10912, and a Water Supply Assessment is not required for the proposed project.

Assembly Bill 341. Assembly Bill (AB) 341 extends the waste diversion requirements established under the California Integrated Waste Management Act of 1989 to the year 2020. In 1989, the California Legislature adopted the California Integrated Waste Management Act of 1989, which is administered by CalRecycle (formerly known as the California Integrated Waste Management Board) and requires each city, county, and regional agency to develop a source reduction and recycling element of an integrated waste management plan. Each adopted source reduction and recycling element was required to demonstrate the diversion of 50 percent of all solid waste from landfill disposal or transformation by January 1, 2000. Annual progress reports were required to be filed with the State Legislature that included specified information regarding the act. AB 341 further establishes the policy goal of the State that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by the year 2020. AB 341 requires CalRecycle, by January 1, 2014, to provide a report to the Legislature that provides strategies to achieve that policy goal and also includes other specified information and recommendations in addition to the annual progress report.

Title 24, California Building Code. Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CEC first adopted the Building Energy Efficiency Standards for Residential and Nonresidential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The CBC is updated every 3 years. The 2019 Building Energy Efficiency Standards became effective on January 1, 2020. The efficiency standards apply to both new construction and rehabilitation of both residential and non-residential 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 CCR Title 24.

4.15.4.3 Regional Regulations

Metropolitan Water District 2015 Regional Urban Water Management Plan. MWD's 2015 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 18.7 million people in Southern California. The 2015 Regional UWMP found that under the current supply demands for a multiple-dry-year scenario (i.e., drought conditions), MWD would have sufficient supply to meet the projected growing demand for water from 2020 to 2040 while still meeting statewide reduction targets of 20 percent of 2009 levels by 2020. 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. With demands projected to be around 2.3 million acre-feet in

2040 during multiple-dry-year scenarios, MWD would have a surplus of 2,000 acre-feet with current capabilities and 288,000 acre-feet with the implementation of the programs under development.

Municipal Water District of Orange County 2015 Urban Water Management Plan. The region served by MWDOC is located in Orange County, California, and includes 26 cities (including the City of Cypress) and water districts, referred to as MWDOC member agencies. MWDOC's 2015 UWMP documents information on all sources of water supplies for the region—imported water, groundwater, surface water, recycled water, and wastewater—as a summary of information for regional planning. The plan concludes that the MWDOC service area will have sufficient existing and planned supplies to meet full service demands under every water-year hydrologic scenario from 2015 through 2040. The plan also evaluates each source of water in the region. The resource mix for meeting total demand includes local groundwater, recycled water, surface water, and imported water from MWD. The plan documents MWDOC's cooperative efforts with its member agencies in developing local supplies and finds that in the region the percentage of its supply from each source will remain approximately the same for the next 25 years, with 30 percent of its supplies from imported water and 70 percent of its supplies from local sources in 2040, even with projected growth occurring.

4.15.4.4 Local Regulations

Golden State Water Company 2015 Urban Water Management Plan (West Orange). GSWC published its 2015 West Orange UWMP, which outlines how GSWC will provide customers with a reliable supply of drinking water for the next 30 years. The 2015 UWMP provides the California Department of Water Resources with information regarding present and future water resources and demands and provides an assessment of GSWC's water resource needs. The 2015 UWMP utilizes factors that were evaluated in ensuring supply reliability in the MWDOC's 2015 UWMP and the MWD's 2015 Regional UWMP.

The UWMP conducts a supply assessment to meet the projected growing demand in its West Orange service area. The UWMP analyzes water supply during multiple-dry-year scenarios to ensure that water demands will still be addressed during emergency drought situations. The UWMP includes these multiple-dry-year scenarios in its analysis of future water demand.

City of Cypress Municipal Code. The Cypress Municipal Code includes the following requirements that would apply to the proposed project related to the provision of utilities:

- **Section 12-31 (Required Diversion Rates)** of the City's Municipal Code requires that the applicant for a covered project shall divert, at a minimum, the percentage of construction and demolition debris as specified by the California Green Building Standards.

- **Section 5-1 (California Building Codes—Adopted)** adopts the 2019 California Green Building Standards Code, 2019 Edition (Title 24). Generally, the intent of Title 24 is to provide 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. Title 24 is included as Regulatory Compliance Measure 4.5-1, provided in Section 4.5, Energy.

4.15.5 Thresholds of Significance

The thresholds for impacts to utilities and service systems used in this analysis are consistent with Appendix G of the State CEQA Guidelines and the City's *Initial Study/Environmental Checklist*. The proposed project may be deemed to have a significant impact with respect to utilities and service systems if it would:

Threshold 4.15.1: **Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Threshold 4.15.2: **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

Threshold 4.15.3: **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Threshold 4.15.4: **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?**

Threshold 4.15.5: **Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

4.15.6 Project Impacts

Threshold 4.15.1: **Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

4.15.6.1 Water

Construction.

Less Than Significant Impact. Short-term demand for water may occur during excavation, grading, and construction activities on site. Construction activities would require water primarily for dust mitigation purposes. Water from the existing potable water lines in the vicinity of the project site would be used. Overall, short-term construction activities would require minimal water and are not expected to have any adverse impacts on the existing water system or available water supplies. The

proposed project would not require the construction of new or expanded water conveyance, treatment, or collection facilities with respect to construction activities. Therefore, the impacts on water facilities during construction would be less than significant, and no mitigation is required**.**

Operation.

Less Than Significant Impact. The existing on-site system would be reconfigured to serve to the proposed project due to the removal of several of the existing buildings. The on-site system would be constructed in compliance with the City's building and plumbing codes in the Municipal Code. The proposed on-site distribution system would connect to the existing GSWC water facilities located within Katella Avenue adjacent to the northern border of the project site. Extension of the water infrastructure from the adjacent streets into the project site would be a routine part of the construction process analyzed in this EIR and would not have a material environmental impact. The water facility improvements would be limited to the project site and connection points to the adjacent, existing GSWC facilities. Therefore, the proposed project would not require or result in the construction of new water facilities, or the expansion of existing facilities, which could cause a significant environmental impact, and the impact would be less than significant. No mitigation is required.

4.15.6.2 Wastewater

Construction.

Less Than Significant Impact. 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 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 would be required.

Operation.

Less Than Significant Impact. The proposed project would use the existing on-site sewer infrastructure, with some reconfigurations due to the removal of several of the existing buildings. The City's sewer network connects to the Orange County Sanitation District (OCSD) network of sewer trunks and eventually discharges to an OCSD's Reclamation Plant No. 1 or Reclamation Plant No. 2. Any sewer improvements associated with the proposed project would be designed and constructed to City and OCSD standards. The proposed project's site plans would be accompanied by adequate plans for sewer improvements prepared by a registered professional engineer and facilities would be dedicated to the City and/or OCSD at the completion of construction. Regulatory Compliance Measure 4.15-1 requires all sewer improvements to comply with City and OCSD sewage standards. With the implementation of Regulatory Compliance Measure 4.15-1, the proposed project would result in less than significant impacts related to the construction or expansion of wastewater treatment facilities. Therefore, the proposed project would not require or result in the construction of new water treatment or collection facilities, or the expansion of existing facilities, which could cause a significant environmental impact, and the impact would be less than significant. No mitigation is required.

4.15.6.3 Stormwater/Drainage

Construction.

Less Than Significant Impact. Grading and construction activities would disturb soils and temporarily modify the stormwater flow patterns on the construction site. As described under the analysis of Thresholds 4.9.1, 4.9.6, 4.9.11, 4.9.12, and 4.9.18 in Section 4.9, Hydrology and Water Quality, the proposed project would be subject to the requirements of the Construction General Permit (Regulatory Compliance Measure 4.9-1), which requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) and identification of construction Best Management Practices (BMPs) that must be implemented during project construction to address potential impacts to hydrology and stormwater drainage, including soil erosion, siltation, spills, and runoff. Adherence to the regulatory standards described in Regulatory Compliance Measure 4.9-1 would ensure that any changes in stormwater drainage from the project site are controlled during construction. Therefore, the proposed project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts, and the impact would be less than significant. No mitigation is required.

Operation.

Less Than Significant Impact. Refer to Section 4.9, Hydrology and Water Quality, for additional information regarding the proposed project's impacts related to hydrology during operation. As discussed in Section 4.9, in its existing condition, In the existing condition, stormwater runoff sheet flows to inlet drains on-site and drains to a 45-inch diameter storm drain located on the west side of the site. Runoff flows from the 45-inch storm drain from south of Katella Avenue to the Stanton Channel, which continues to the Bolsa Chica Channel, and is ultimately discharged into the Anaheim Bay.

Although the project would increase the amount of impervious surface at the project site by approximately 0.77 acres, the proposed project would generally conform to existing on-site drainage patterns. However, the increase in impervious surface area would increase stormwater runoff compared to existing conditions. In the proposed condition, stormwater runoff will sheet flow to proposed BMPs (Filterra Bioscape Vaults and bioretention basins with underdrains) to treat runoff prior to entering the existing 45-inch storm drain on-site. Stormwater runoff would then be discharged to the Katella Avenue stormdrain system via the existing stormdrain connection on-site.

As demonstrated by the hydraulic modeling conducted as part of the *Preliminary Hydrology and Hydraulics Study* (2020), the BMPs would reduce stormwater flows so that flows do not increase by more than 5 percent for the 2-year storm. In addition, as specified in Regulatory Compliance Measure 4.9-4, a Final Hydrology Study would be prepared based on final project plans and would be approved by the City. The Hydrology Study would confirm that the project drainage facilities comply with City and County requirements to ensure that sufficient capacity in the downstream drain systems is available to accommodate any increase in storm runoff from the project site so that on- and off-site flooding does not occur

With the adherence to Regulatory Compliance Measure 4.9-4, the proposed project would result in less than significant impacts related to the construction or expansion of stormwater drainage facilities. No mitigation is required.

4.15.6.4 Electric Power

Construction.

Less Than Significant Impact. 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. The heavy equipment used for construction is primarily powered by diesel fuel. Temporary electric power would be provided via existing utility boxes and lines on the project site. Given the limited nature of potential demand for electricity during construction and the availability of existing power lines on the site, there would not be a need to construct new or alter existing electric transmission facilities. Impacts to local regional supplies of electricity would be less than significant, and no mitigation is required.

Operation.

Less Than Significant Impact. Operation of the proposed project would increase on-site electricity demand compared to existing conditions. CalEEMod 2016.3.2 was used to calculate the approximate annual electricity demand of the proposed project. As discussed in Section 4.5, Energy, based on the CalEEMod outputs (Appendix B of this EIR) the proposed project is estimated to consume a total of 600,624 kilowatt-hours (kWh) of electricity per year, approximately 3,520,876 kWh less than existing conditions (4,121,500 kWh). Additionally the proposed project would be required to comply with Title 24 energy efficiency measures and sustainability features of the California Building Code as described under Regulatory Compliance Measure 4.5-1, provided in Section 4.5, Energy.

Total electricity consumption in Orange County in 2018 was approximately 20,197,000,000 kWh. The electricity demanded from the proposed project would be less than the existing uses. Service providers utilize projected demand forecasts in order to provide an adequate supply or plan for surplus in their service areas. As discussed in Section 4.5, 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 result in decreased demand for electricity on the project site, the project would meet Title 24 requirements and incorporate additional energy conservation measures, and there would be sufficient electricity supplies available, energy demand for the proposed project would be less than significant.

The supply and distribution network within the area surrounding the project site would remain essentially the same as exists currently, with the exception of on-site improvements to reconfigure existing infrastructure to serve to the proposed project due to the removal of several of the existing buildings. These on-site improvements would connect to the existing infrastructure and provide electrical service to the proposed last mile logistics facility. 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. No mitigation is required.

4.15.6.5 Natural Gas

Construction.

Less Than Significant Impact. Short-term construction activities would not result in demand for natural gas since construction activities/equipment would not require accessing existing adjacent natural gas facilities. Therefore, construction activities would not impact natural gas services, and the proposed project would not require new or physically altered gas transmission facilities.

Operation.

Less Than Significant Impact. Operation of the proposed project would decrease on-site natural demand compared to existing conditions. CalEEMod 2016.3.2 was used to calculate the approximate annual natural gas demand of the proposed project. As discussed in Section 4.5 Energy, the estimated potential increase in natural gas demand associated with the proposed project is 401,661 kilo-British thermal unit (kBTU) per year, approximately 2,472,839 kBTU per year less than existing conditions (2,874,500 kBTU). Total natural gas consumption in Orange County in 2018 was 575,100,000 therms. Natural gas demanded from the proposed project would be less than the existing uses. Additionally, the proposed project would be required to comply with Title 24 requirements as described under Regulatory Compliance Measure 4.5-1 in Section 4.5, Energy, and would reduce natural gas consumption by incorporating the energy efficiency measures listed above in the design of the proposed structures.

As noted above, service providers utilize projected demand forecasts in order to provide an adequate supply or plan for surplus in their service areas. As discussed in Section 4.5, it is anticipated that SoCalGas would be able to meet the natural gas demand in its service area through 2035. Because the proposed project would result in decreased demand for electricity on the project site, the project would meet Title 24 requirements and incorporate additional energy conservation measures, and there would be sufficient natural gas supplies available, natural gas demand for the proposed project would be less than significant. No mitigation is required.

The supply and distribution network within the area surrounding the project site would remain essentially the same as exists today except for standard on-site improvements to reconfigure existing infrastructure to serve to the proposed project due to the removal of several of the existing buildings. Levels of service to off-site users would not be adversely affected. Existing gas transmission and distribution services maintained by SoCalGas would provide natural gas service to the proposed project. The proposed project would not increase natural gas demand beyond existing projections from the local natural gas 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 natural gas service that would result in significant environmental impacts and the proposed project's potential impacts would be less than significant. No mitigation would be required.

4.15.6.6 Telecommunication Facilities

Less Than Significant Impact. Existing telephone, cable, and internet service lines in the vicinity would continue to serve the project site. Internal to the project site, the project Applicant/Developer will be responsible for constructing adequate telecommunication facility extensions for the proposed project. The reconfiguration of these facilities would occur on site during the site preparation and earthwork phase and are not expected to impact any telephone, cable, or internet services off site that serve the surrounding areas. Additionally, telecommunication facilities are generally installed concurrently with utility expansions and impacts associated with the expansion of telecommunications facilities are already considered in the air quality, noise, and construction traffic analysis. Therefore, the project impacts associated with the relocation or construction of new or expanded telecommunication facilities and impacts would be less than significant. No mitigation is required.

Threshold 4.15.2: 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 discussed previously, the Golden State Water Company (GSWC) would provide water services to the project site and would connect the proposed project to the existing 10-inch water main in Katella Avenue.

According to water demand factors included in the CalEEMod emissions model, the proposed project is estimated to demand approximately 91,867 gallons per day (gpd) or 102.9 acre-feet per year (afy) of potable water, approximately 199,515 gpd or 223.5 afy less than the existing uses on the project site (291,382 gpd or 326.39 afy). Additionally, the proposed project would be required to implement Regulatory Compliance Measure 4.15-2, which requires the project to comply with all State laws for water conservation measures, including the use of low-flow fixtures.

The proposed project does not require the preparation of a Water Supply Assessment pursuant to California Public Resources Code Section 21151.9, as discussed previously, because the proposed project does not meet the definition of a "project" as set forth in Section 10912 of the Water Code.

Because the proposed project would decrease water use onsite, the proposed project would not necessitate new or expanded water entitlements, and the GSWC would be able to accommodate the proposed project's demand for potable water. Therefore, with implementation of Regulatory Compliance Measure 4.15-2, impacts to water supplies would be less than significant. No mitigation is required.

Threshold 4.15.3: 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. As discussed above, sewage from Cypress is diverted to either Reclamation Plant No. 1 in Fountain Valley or Reclamation Plant No. 2 in Huntington Beach.

Reclamation Plant No. 1 has a primary treatment capacity of 208 mgd,[1] and is running under capacity at approximately 120 mgd.[2] Reclamation Plant No. 2 has a primary treatment capacity of 168[3] mgd and is running under capacity at approximately 65 mgd. [4]

According to wastewater generation factors included in the CalEEMod emissions model, the proposed project is anticipated to generate approximately 91,867 gpd of wastewater, approximately 124,903 gpd less than the existing uses on the project site (216,770 gpd). Additionally, through its Capital Improvement Program, the OCSD strives to continue maintaining its facilities at optimal levels by planning, designing, and preparing for future demand by developing Facilities and Biosolids Master Plans that address 20-year planning horizons.[5] Through these long-range planning activities, the OCSD would be able to accommodate the demand for wastewater treatment generated by the proposed project and other projects in its service area. Therefore, the proposed project would not result in a significant contribution to the capacity of Reclamation Plant No. 1 or Reclamation Plant No. 2. Additionally, fees required by the OCSD would sufficiently offset potential impacts generated by the proposed project. Therefore, the proposed project would result in less than significant impacts related to the wastewater treatment capacity, and no mitigation measures are required.

Threshold 4.15.4: 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. As discussed above, the closest active landfill to the proposed project is the Olinda Alpha Landfill. The Olinda Alpha Landfill currently operates at approximately 87.5 percent of its daily capacity. As of November 2014, the Olinda Alpha Landfill had an estimated remaining disposal capacity of 34,200,000 cubic yards.[6]

Based on the CalEEMod outputs, the proposed project is estimated to generate approximately 25 pounds of solid waste per day during operation, which is approximately 43 pounds less than existing conditions (68 pounds per day). Therefore, solid waste generated by the proposed project would not cause the capacity at the Olinda Alpha 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 result in less than significant impacts related to solid waste and landfill facilities, and no mitigation is required.

1 OCSD. 2019b. Budget Update Fiscal Year 2019–2020. Website: https://www.ocsd.com/Home/ShowDocument?id=28411 (accessed July 8, 2020).
2 Ibid.
3 Ibid.
4 OCSD. 2020a. Facts and Key Statistics Webpage. Website: https://www.ocsd.com/services/regional-sewer-service (accessed July 8, 2020).
5 OCSD. 2020b. Capital Improvement Program Fiscal Year 2018/2019. Website: https://www.ocsd.com/Home/ShowDocument?id=29208 (accessed July 8, 2020).
6 California Department of Resources, Recycling, and Recovery (CalRecycle). SWIS Facility Detail, Olinda Alpha Landfill (30-AB-0035). Website: https://www2.calrecycle.ca.gov/swfacilities/Directory/30-AB-0035 (accessed July 8, 2020).

Threshold 4.15.5: 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 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 Regional Water Quality Control Board (RWQCB) enforce landfill regulations related 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.

The proposed project would comply with the City's Construction and Demolition Ordinance (Regulatory Compliance Measure 4.15-3). The Applicant/Developer would also be required to submit a Materials Questionnaire should the contractor haul away its own demolition waste. Additionally, the proposed project would comply with AB 341, which went into effect on July 1, 2012. AB 341 requires businesses and multifamily residential dwelling units of five units or more that generate four or more cubic yards of commercial solid waste per week to implement recycling programs.[1] With adherence to Regulatory Compliance Measure 4.15-3, the proposed project would comply with federal, State, and local statutes and regulations related to solid waste. Therefore, impacts would be less than significant, and no mitigation is required.

4.15.7 Level of Significance Prior to Mitigation

With adherence to Regulatory Compliance Measures 4.15-1 through 4.15-3; Regulatory Compliance Measure 4.5-1, provided in Section 4.5, Energy; and Regulatory Compliance Measures 4.9-1 and 4.9-3, provided in Section 4.9, Hydrology and Water Quality, the proposed project would result in less than significant impacts related to utilities and service systems.

4.15.8 Regulatory Compliance Measures and Mitigation Measures

4.15.8.1 Regulatory Compliance Measures

The following regulatory compliance measures are existing regulations that are applicable to the proposed project and are considered in the analysis of potential impacts related to utilities and service systems. The City of Cypress considers these requirements to be mandatory; therefore, they are not considered mitigation measures.

[1] City of Cypress. AB 341 Mandatory Commercial Recycling. Website: https://www.cypressca.org/work/trash-recycling/ab-341-mandatory-commercial-recycling (accessed July 8, 2020).

Regulatory Compliance Measure 4.15-1 **Sewer Improvement Standards.** All required sewer improvements shall be designed and constructed to City of Cypress (City) and Orange County Sanitation District (OCSD) standards and shall be approved by the City of Cypress Engineer prior to development. These improvements may be constructed in a phased sequence depending upon the development process. Facilities shall be dedicated to the City and/or OCSD at the completion of construction.

Regulatory Compliance Measure 4.15-2 **Water Conservation.** The Applicant/Developer shall comply with all State laws for water conservation measures. Voluntary water conservation strategies shall be encouraged. The Building Division shall determine compliance prior to issuance of building permits.

Regulatory Compliance Measure 4.15-3 **Construction and Demolition Ordinance**. The Construction Contractor shall comply with the provisions of City Ordinance No. 1166 and the 2019 California Green Building Standards Code, which would reduce construction and demolition waste. Ordinance No. 1166 is codified in Article VIII, Materials Questionnaire for Certain Construction and Demolition Project within the City of Cypress in the City of Cypress Municipal Code.

Additionally, refer to Regulatory Compliance Measure 4.5-1 in Section 4.5, Energy, and Regulatory Compliance Measures 4.9-1 and 4.9-3 in Section 4.9, Hydrology and Water Quality.

4.15.8.2 Mitigation Measures

No mitigation measures are required for the proposed project.

4.15.9 Level of Significance after Mitigation

The proposed project would not result in any significant impacts to utilities or service systems. No mitigation is required.

4.15.10 Cumulative Impacts

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 for public services and utilities. The project site includes a recently vacated Mitsubishi Motors of America corporate headquarters located in an urban area with existing services provided by utility providers in the vicinity. The cumulative area for utilities is listed below for each individual utility provider.

4.15.10.1 Wastewater

The geographic area for the cumulative analysis for wastewater treatment is defined as the City and the OCSD service area. Within its service area, the OCSD uses United States Census Bureau population data, as well as information regarding existing and zoned land uses, to project current and future wastewater flows. For this reason, the projected demand for wastewater treatment is cumulative in nature.

The wastewater capacities of OCSD Reclamation Plants No. 1 and 2 are designed to accommodate the growth forecast within the OCSD service area and development outlined in the General Plans for jurisdictions within its service area. The proposed project would not result in direct population growth because it does not include residential units. Therefore, the proposed project would not contribute to substantial unplanned population growth in conjunction with related projects. Additionally, as described above, the proposed project would result in a decrease in wastewater generation on the project site compared to previous uses. Additionally, through its Capital Improvement Program, the OCSD strives to continue maintaining its facilities at optimal levels by planning, designing, and preparing for future demand by developing Facilities and Biosolids Master Plans that address 20-year planning horizons.[1] Because OCSD prepares for future demand over long planning horizons, adequate facilities would be planned for to account for population growth.

Furthermore, OCSD is starting construction on the Western Regional Sewers project as early as Spring 2020, which would further improve OCSD sewer facilities in the vicinity of the project site.[2] Individual projects in the OCSD service area, including the related projects, would address the localized capacity of OCSD facilities and identify whether new or upgraded facilities are required.

For these reasons, the proposed project and related projects would not result in a cumulatively significant impact to wastewater generation.

4.15.10.2 Potable Water

The geographic area for the cumulative analysis of water infrastructure is the West Orange service area of GSWC. The projections for potable water demand in the GSWC West Orange service area are based on regional population and economic growth forecasts, and account for potential future development within its service area, including the additional demand for water generated by the related projects. According to the GSWC 2015 UWMP, by 2035, the West Orange service area's population is estimated to increase at a 0.3 percent growth rate per year, and households and employment in the service area are both expected to grow at an annual growth rate of 0.2 percent over the same period. For this reason, the projected demand for water supply in the GSWC West Orange service area is inherently cumulative in nature. As discussed previously, the proposed project would not result in direct population growth because it does not include residential units. Therefore, the proposed project would not contribute to substantial unplanned population growth in conjunction with related projects. Additionally, as described above, the proposed project would

1 OCSD. 2020b. Capital Improvement Program Fiscal Year 2018/2019. Website: https://www.ocsd.com/Home/ShowDocument?id=29208 (accessed July 8, 2020).

2 OCSD. 2020c. Western Regional Sewers Program Webpage. Website: https://www.ocsd.com/residents/future-projects/western-regional-sewers (accessed July 8, 2020).

result in a decrease in water demand on the project site compared to previous uses. Therefore, GSWC would have adequate capacity for the increased demand for potable water associated with the development of the proposed project and the related projects within its service area. Therefore, the proposed project and the related projects would not have a cumulatively significant impact on water supply or facilities.

4.15.10.3 Electricity

The geographic area for the cumulative analysis of impacts to the provision of electricity is the service territory of SCE. SCE's service area covers approximately 50,000 sq mi in Southern and Central California, with the provision of energy service to approximately 15 million across the service territory.[1] The projections of statewide electricity supply capacity demand rates are cumulative in nature. They are based on population and economic growth in addition to such physical variables as average temperature and water supplies (important to hydroelectric generation) in a given year. The total annual electricity consumption in the SCE service area in 2017 was 84,291.6 GWh and by 2030, consumption is anticipated to increase by approximately 12,000 GWh for the low-demand scenario and by 22,000 GWh for the high-demand scenario.[2] While this forecast represents a large increase in electricity consumption, the proposed project's percent of cumulative consumption of electricity in the SCE service area would be negligible. Therefore, any increase in electrical demand resulting from the proposed project would be incremental compared to an increase in regional demand. Sufficient electricity supplies and infrastructure capacity are available, or have already been planned, to serve past, present, and reasonably foreseeable projects.

Additionally, Title 24 of the California Administrative Code regulates energy and water consumption in new construction and regulates building energy consumption for heating, cooling, ventilation, water heating, and lighting. Therefore, in relation to the cumulative study area, the proposed project would not generate a significant cumulative increase in demand for electricity or a significant disruption in service or service level. Therefore, the proposed project's contribution to electricity impacts would not be cumulatively considerable, and no mitigation is required.

4.15.10.4 Natural Gas

The geographic area for the cumulative analysis of impacts to the provision of natural gas is the service territory for SoCalGas. 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. Total natural gas consumption in the SoCalGas service area in 2018 was 5,156.1 million therms. [3] Between 2018 and 2035, 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

1 Southern California Edison. 2020. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed July 8, 2020).

2 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 December 12, 2019).

3 CEC. 2020e. Natural Gas Consumption by Entity. Website: https://ecdms.energy.ca.gov/gasbyutil.aspx (accessed July 8, 2020).

650 million therms in the high-demand scenario due to intense energy efficiency efforts.[1] The proposed project's percent of cumulative consumption of natural gas in the SoCalGas service area would be negligible. Therefore, any increase in natural gas demand resulting from the proposed project would be incremental compared to an increase in regional demand. Furthermore, like the proposed project, all future projects would be subject to Title 24 requirements and would be evaluated on a case-by-case basis to determine the need for specific distribution improvements. Therefore, the proposed project's contribution to natural gas impacts would not be cumulatively considerable, and no mitigation is required.

4.15.10.5 Solid Waste

The geographic area for the cumulative analysis of solid waste infrastructure is OCWR's service territory. Development associated with the proposed project would contribute to an increased demand for landfill capacity for solid waste. As stated previously, the landfill serving the project site would be the Olinda Alpha Landfill, which is not scheduled to close until 2030. As discussed under Threshold 4.15.4 above, the proposed project would result in a decrease in solid waste compared to existing uses. Additionally the Olinda Alpha Landfill is currently only receiving 87.5 percent of the 8,000 tons it is permitted to receive. Therefore, the Olinda Alpha Landfill has sufficient permitted capacity to provide adequate capacity for Orange County's solid waste needs and with compliance with federal, State, and local statues and regulations related to solid waste, which require reductions in solid waste generation.

Furthermore, based on their current daily maximum permitted disposal capacities and current average daily tonnage, the Alpha Olinda Landfill will reach capacity in 2030, the Frank R. Bowerman Landfill will reach capacity in 2053, and the Prima Deshecha Landfill will reach capacity in 2102.[2] Therefore, there is currently sufficient permitted capacity within the existing OCWR system serving Orange County to provide adequate future capacity for the County's solid waste needs. Therefore, the proposed project's contribution to solid waste impacts would not be cumulatively considerable, and no mitigation is required.

4.15.10.6 Telecommunication Facilities

The geographic area for the cumulative analysis of impacts to the provision of telecommunication facilities is the City. Telephone, cable, and internet services are provided to residents through private providers of these services. The reconfiguration of telecommunication facilities for the proposed project would occur on site and is not expected to impact any telephone, cable, or internet services offsite that serve the surrounding areas. Likewise, construction and expansion of telecommunication facilities would generally occur on site to extend through proposed related developments. Therefore, cumulative impacts associated with the relocation or construction of new or expanded telecommunication facilities would be less than significant. No mitigation is required.

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1 CEC. 2020e. Natural Gas Consumption by Entity. Website: https://ecdms.energy.ca.gov/gasbyutil.aspx (accessed July 8, 2020).

2 Orange County Waste & Recycling. 2020. Landfill Information Webpage. Website: http://www.oclandfills.com/landfill (accessed July 8, 2020).

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 Amazon Facility 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.

All impacts of the proposed project can be mitigated to below a level of significance; therefore, the proposed project does not have any significant unavoidable impacts. A lead agency is only required to prepare findings rejecting alternatives if one or more significant environmental effect will not be avoided or substantially lessened by mitigation measures. (*See Laurel Hills Homeowners Ass'n v. City Council* (1978) 83 Cal. App. 3rd 515 [if mitigation measures substantially lessen a project's significant environmental effects, the lead agency may approve the project without making findings on the feasibility of the EIR's project alternatives].)

If the City finds that the proposed project's significant adverse effects will be avoided or substantially lessened by mitigation measures, it need not make findings that environmentally superior alternatives are infeasible. (*See Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal. App. 4th 477; *Protect Our Water v. County of Merced* (2003) 110 Cal. App. 4th 362, 373; *Kings County Farm Bureau v City of Hanford* (1990) 221 Cal. App. 3rd 692.).

Accordingly, analysis of the three alternatives to the proposed project discussed in this section are provided for informational purposes and to allow the decision makers to consider the proposed project in light of hypothetical alternative development scenarios, thereby promoting CEQA's purpose as an information disclosure statute.

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 environmental impacts of the proposed project (the purpose of this analysis is to determine whether alternatives are capable of further 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 potentially significant 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

5.2.1 Project Objectives

As discussed in Section 3.4.1, Project Objectives, in Chapter 3.0, Project Description, 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:

The following provides the objectives established for the proposed project, which include implementation of goals and policies from the City of Cypress (City) General Plan:

1. Provide a new development consistent with the intent of the Cypress Corporate Center Amended Specific Plan on a recently vacated parcel.

2. Provide new jobs in an area of the City that has experienced the loss of two major employers in recent years.

3. Provide for the development of a last mile logistics facility located directly adjacent to Katella Avenue, which is one of the City's major travel corridors.

4. Ensure a sensitive transition between commercial or business park uses and residential uses by implementing precise development standards with such techniques as buffering, landscaping, and setbacks (General Plan Policy LU-2.1).

5. Maintain the streetscape along Katella Avenue in a manner that is consistent with the goals and objectives of the Cypress Corporate Center Specific Plan.

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 Cypress (City).

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.

It should be noted that the Applicant/Developer has submitted a separate development application for a 486,088-square-foot (sf) warehouse project on the project site. A separate environmental review process is being undertaken by the City for that development application, which is being processed as the "6400 Katella Avenue Warehouse Project." For purposes of this alternatives analysis, the 6400 Katella Avenue Warehouse Project is not considered an alternative to the proposed project.

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/Developer 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. As discussed further below, there is no other property in the City that would support a development similar to the proposed project. The surrounding area is highly urbanized, and there is no land currently available for development that is large enough (approximately 20 acres[1]) to develop the proposed project in an area that has the proper zoning and General Plan land use designation and that would be in a suitable area from a land use compatibility standpoint. In addition, the Applicant/Developer does not own or control any other property within the City or in the vicinity of the project site that would be suitable for development of the proposed project. Moreover, the Applicant/Developer cannot reasonably acquire or control an alternative site in a timely fashion that would allow for the implementation of a project with similar uses and square footage.

The following alternative sites were considered as potential alternatives to the project site, but eliminated for the reasons discussed above and below:

1) **Cypress Town Center and Commons Specific Plan 2.0**: The Cypress Town Center and Commons Specific Plan 2.0, approved by voters in 2018 as part of a ballot initiative (Measure A), covers an approximately 154.4-acre area located approximately 1.1 mile west of the project site and generally bound by Cerritos Avenue, Katella Avenue, and Lexington Drive. The Cypress Town Center and Commons Specific Plan 2.0 established a comprehensive master plan and regulatory framework to develop a town center, housing, and public park space in parts of the Los Alamitos Race Course, the former Cypress Golf Club, and adjacent property. Although some of the property included in the Cypress Town Center and Commons Specific Plan 2.0 may be currently available for development (several surface parking lots southeast of the Los Alamitos Race Course grandstand are identified as an initial development phase that could move forward while the race track is still operating), the use of this potential alternative site for the proposed project is infeasible for several reasons. First, it is not large enough for the proposed project, which requires a 20-acre site.

[1] The project site is 22.3 acres; however, as noted in the Project Description, the 180,000 sf office building on the site would remain unoccupied. Therefore, the 2.3-acre area in which the office building is located and the landscaped frontage along Katella Avenue are not included for purposes of this analysis.

Second, the Applicant/Developer does not own or control this land. Third, that area is within the Cypress Town Center and Commons Specific Plan 2.0's Town Center District, which is planned for a variety of retail, entertainment, commercial, and residential uses to create a gathering place and "main street" for the community. Despite the fact that the last-mile logistics facility included in the proposed project would not be an expressly prohibited use, it is reasonable to conclude that the last-mile logistics facility would not be permitted within the Town Center District because it shares some key characteristics (a warehouse, loading docks, and large volumes of goods entering the site via trucks) with other land uses (warehousing, wholesaling, and distribution facilities) that are expressly prohibited within the Town Center District. In addition, the proposed project's uses would not be permitted in any of the other land use districts in the Cypress Town Center and Commons Specific Plan 2.0. As noted above, the Cypress Town Center and Commons Specific Plan 2.0 was approved by the voters of the City of Cypress; therefore, with the exception of certain minor adjustments, it may only be amended or repealed by a vote of the people. Therefore, development of the proposed project within the Cypress Town Center and Commons Specific Plan 2.0 is not a feasible option.

2) **Cypress School District Property**. In July 2019, the Cypress School District (District) released a Request for Proposal (RFP) seeking proposals from qualified parties who were interested in purchasing or leasing approximately 6.2 acres of real estate at the northeast corner of Moody Street and Orange Avenue that is owned by the District and is currently used as the District's main business office and maintenance and operations facility.[1] The District has purchased an office building elsewhere in the City where it will relocate its central office and is developing plans to relocate its maintenance facilities to another site.[2] This site is also infeasible for several reasons. First, the 6.2-acre District property is too small to accommodate the proposed project, which would require approximately 20 acres. Second, the Applicant/Developer did not participate in the District's RFP process (proposals were due on October 1, 2019) and does not own or control the District's property. Finally, the current zoning classification and General Plan land use designation for the District property would not allow for the proposed project's uses. Thus, a General Plan Amendment and Zone Change would be required to accommodate the proposed project's uses. The District's property is also subject to Measure D, a land use ordinance ratified in November 1987 that requires the approval of a majority of the voters to change the zoning of the property. In summary, development of the proposed project on the District's property is not a feasible option.

Development of the proposed project at an alternative site (assuming one was available) could potentially result in some environmental impacts that would be similar to or greater than those of

[1] Cypress School District. 2019. Request for Proposals for the Purchase or Lease of School District Surplus Real District Property. July 17. Website: https://4.files.edl.io/6f81/07/29/19/142046-cad7a329-2195-4051-8685-a73209f28dbd.pdf (accessed August 7, 2020).

[2] Orange County Department of Education. 2019. Cypress School District Looks to Acquire New Administrative Headquarters. September 17. Website: https://newsroom.ocde.us/cypress-school-district-moves-to-acquire-new-administrative-headquarters/#:~:text=The%20Cypress%20School%20District%20has,more% 20than%2050%20years%20ago (accessed August 7, 2020).

the proposed project's environmental impacts, depending on the proximity of the alternate site to sensitive uses. Conversely, given that the project site is located in a highly urbanized area, it is unlikely that relocating the proposed project to another site would substantially lessen any of its impacts.

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. Each of the potentially significant impacts of the proposed project are capable of being mitigated to below a level of significance.

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 the 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. The No Project Alternative assumes that a new user would occupy the existing buildings on the project site and operate them as a corporate headquarters, which is permitted by right under the Cypress Corporate Center Specific Plan. The project site would remain in generally the same condition as it was at the time the Notice of Preparation (NOP) was published. Although it is assumed that the new occupant would complete minor renovations to the interiors of the existing buildings to meet its needs, no building demolition or new development of any kind would occur on the project site. No discretionary approvals would be required.

- **Alternative 2: Reduced Project Alternative.** The Reduced Project Alternative includes the operation of a last-mile logistics facility on the project site similar to the proposed project; however, the Reduced Project Alternative would have a reduced capacity. The number of delivery vans operating from the project site would be reduced by 30 percent. Similar to the proposed project, the Reduced Project Alternative would demolish the existing on-site research and development buildings, retain the existing 150,000 sf warehouse and 180,000 sf office building, and enhance the landscaping along Katella Avenue, Holder Street and adjacent to the southern property line. The Reduced Project Alternative would provide the same number of trailer parking spaces and loading docks on the northern side of the warehouse building as the proposed project and would also provide a covered delivery van staging area on the eastern side of the warehouse building. However, due to the reduced number of delivery vans operating out of the project site, the Reduced Project Alternative would construct a smaller driveway loop and

delivery van holding area that would accommodate 30 percent fewer delivery vans than the proposed project. Similar to the proposed project, the Reduced Project Alternative would provide a new fourth, right-in/right-out driveway on Katella Avenue and modify the westbound and eastbound left-turn pockets on Katella Avenue at Holder Street to provide additional left-turn storage.

- **Alternative 3: Office Alternative.** The Office Alternative assumes that all of the existing buildings on the project site would be demolished and replaced with 486,088 sf of space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. The office buildings would feature Class A-level tenant amenities, including a large plaza with outdoor dining space and work stations. Parking would be provided in a multi-story parking structure located near the center of the project site that would also screen the project from the residential uses to the south. The southern portion of the project site would feature a 4-acre landscaped open space that would serve as a buffer between the parking structure and the residential uses to the south. The Office Alternative would retain and reconfigure the existing driveways along Holder Street, but would not construct a new right-in/right-out driveway along eastbound Katella Avenue or modify the westbound and eastbound left-turn pockets on Katella Avenue at Holder Street to provide additional left-turn storage. Because general office uses are permitted under the Cypress Corporate Center Specific Plan, the Office Alternative would not require any discretionary approvals from the City.

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.

5.5 ALTERNATIVES ANALYSIS

5.5.1 Aesthetics

The City is almost entirely developed and neither the project site nor other properties in the project vicinity provide substantial views of any water bodies, mountains, hilltops, or any other significant visual resources. As such, the City has not designated any scenic corridors or scenic vistas within the City. The proposed project includes the protection-in-place of two existing buildings and does not propose the construction of any new buildings that would block the view of any natural features from the project site or surrounding areas. For these reasons, the development of the proposed project would not have a substantial adverse effect on a scenic vista. Therefore, there would be no impact, and no mitigation is required. The project site has a zoning designation of PC-2, Cypress Corporate Center, which is intended to provide for the development of uses as allowed by the Specific Plan. The proposed project is 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. Construction activities would occur only during daylight hours. Any construction-related illumination during evening and nighttime hours would be used for safety and security purposes only and would occur only for the duration required for the temporary construction process. Light resulting from construction activities would not substantially impact sensitive uses, substantially alter the character of surrounding uses, or interfere with the performance of off-site activities. Although the proposed project includes upgraded lighting, these

light sources would be comparable to lighting in the existing condition and would replace some of the lighting associated with the current uses on site. Due to the demolition of several on-site structures as part of the proposed project, project implementation would decrease the overall intensity of on-site land uses and associated lighting. As part of the project, the existing warehouse building would be repainted, but no new building materials would be added that could act as sources of glare. The existing three-story office building is comprised almost entirely of blue glass, which reduces glare from vantage points along Katella Avenue and Holder Street. Therefore, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the surrounding urban area, and project impacts would be less than significant. No mitigation is required.

5.5.1.1 Alternative 1: No Project Alternative

The No Project Alternative would not require any grading, site work, or removal of vegetation because no new development would occur on the project site. In addition, no demolition or construction of buildings would occur on the project site. As such, the proposed project would result in no impacts to scenic vistas or scenic highways. The project site is currently developed with several buildings that were recently vacated by Mitsubishi Motors of America, and a paved parking lot with existing light poles, which produce light and glare from the on-site wall-mounted lighting and light poles. The No Project Alternative would not include construction or demolition activities, which would result in light resulting from construction activities under the proposed project. However, the No Project Alternative would not result in the decrease in overall intensity of on-site land uses and associated lighting that would occur under the proposed project due to the demolition of several existing structures. Similar to the proposed project, the No Project Alternative would not result in significant impacts related to visual character or quality or light and glare. Therefore, aesthetic impacts would be similar to that of the proposed project.

5.5.1.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility on the project site similar to the proposed project; however, the Reduced Project Alternative would have a reduced capacity. There are no scenic corridors, scenic vistas, or scenic highways within the City; therefore, like the proposed project, the Reduced Project Alternative would not result in impacts to scenic vistas or scenic highways. Similar to the proposed project, the Reduced Project Alternative would demolish the existing on-site research and development buildings, retain the existing 150,000 sf warehouse and 180,000 sf office building, and enhance the landscaping along Katella Avenue, Holder Street and adjacent to the southern property line. Similar to the proposed project, the Reduced Project Alternative 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. Therefore, impacts related to degradation of existing visual character or quality would be less than significant and similar to the proposed project. Like the proposed project, construction-related illumination during evening and nighttime hours would be used for safety and security purposes only. In addition, similar to the proposed project, the Reduced Project Alternative would result in a decrease in overall intensity of on-site land uses and associated lighting. Additionally, similar to the proposed project, under the Reduced Project Alternative, no new building materials would be added to existing buildings. Therefore, impacts related to light and glare

would be less than significant. The Reduced Project Alternative would result in similar aesthetic impacts as the proposed project.

5.5.1.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. Parking would be provided in a multi-story parking structure located near the center of the project site that would also screen the project from the residential uses to the south, and the southern portion of the project site would feature a 4-acre landscaped open space that would serve as a buffer between the parking structure and the residential uses to the south. There are no scenic corridors, scenic vistas, or scenic highways within the City; therefore, like the proposed project, the Office Alternative would not result in impacts to scenic vistas or scenic highways. Similar to the proposed project, the Office Alternative would be consistent with the Specific Plan design guidelines for the project site. However, the Office Alternative would result in the demolition of additional buildings on the project site and the construction of new buildings on the project site, which would be larger in scale and massing than the existing buildings. However, the Office Alternative buildings would be similar to and compatible with the office, warehouse, and residential uses that surround the project site. Therefore, impacts related to degradation of existing visual character or quality would be less than significant and similar to the proposed project. Like the proposed project, construction-related illumination during evening and nighttime hours would be used for safety and security purposes only. In addition, although the Office Alternative would increase the overall intensity of on-site land uses and associated lighting, lighting would comply with all applicable lighting standards in the Cypress Zoning Ordinance and would not result in substantial increases in light intensity at off-site locations. The materials of the proposed buildings would primarily be non-reflective to minimize glare. Therefore, impacts related to light and glare would be less than significant. The Office Alternative would result in a larger scale project overall compared to the proposed project and would, therefore, result in aesthetic impacts that are greater than the proposed project.

5.5.2 Air Quality

Air quality emissions associated with construction and operation of the proposed project would not exceed South Coast Air Quality Management District (SCAQMD) significance thresholds. Therefore, impacts of the proposed project related to the cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under applicable National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS) would be less than significant. The proposed project would not exceed SCAQMD localized significance thresholds (LSTs); therefore, impacts related to exposure of sensitive receptors would be less than significant. The proposed project is consistent with the SCAQMD Final 2016 Air Quality Management Plan (AQMP) because (1) the construction and operation emissions of the proposed project would not exceed the regional significance thresholds or cause or contribute to NAAQS or CAAQS violations, and (2) the proposed project is consistent with the land use and growth intensities reflected in the adopted General Plan. Therefore, impacts related to conflict or obstruction of implementation of the applicable air quality plan would be less than significant. No mitigation is required. Construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon

completion of the respective phase of construction and are thus considered less than significant. The proposed project does not contain land uses typically associated with emitting objectionable odors. It is expected that project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, impacts related to odors would be less than significant. No mitigation is required.

5.5.2.1 Alternative 1: No Project Alternative

The No Project Alternative would not require demolition or construction other than potential minor renovations to the interiors of the existing buildings and would not change the existing on-site use. Although the operation of a corporate headquarters under the No Project Alternative, as permitted under the Specific Plan, is expected to generate a larger number of vehicle trips to and from the project site compared to existing conditions, the No Project Alternative would result in fewer vehicle trips than the proposed project. No additional air pollutant emissions related to demolition and construction would occur, and fewer construction vehicle trips would be generated under this alternative, resulting in reduced construction air quality impacts. During operation, fewer emissions would be generated (primarily from the reduced vehicle trips) compared to the proposed project. As such, the No Project Alternative's impacts on air quality would be less than the air quality impacts associated with the proposed project.

5.5.2.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility on the project site similar to the proposed project; however, the Reduced Project Alternative would have a reduced capacity. The number of delivery vans operating from the project site would be reduced by 30 percent. Similar to the proposed project, the Reduced Project Alternative would demolish the existing on-site research and development buildings and retain the existing 150,000 sf warehouse and 180,000 sf office building; therefore, construction emissions would be similar to that of the proposed project and less than significant. The Reduced Project Alternative would generate fewer vehicle trips than the proposed project because the number of delivery vans operating from the project site would be reduced by 30 percent and the Reduced Project Alternative would construct a smaller driveway loop and delivery van holding area that would accommodate 30 percent fewer delivery vans than the proposed project. As a result, emissions generated during operation of the Reduced Project Alternative would be less than the proposed project and would not exceed the SCAQMD thresholds. As such, air quality impacts of the Reduced Project Alternative would be less than significant and less than the proposed project.

5.5.2.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. In addition, a parking structure would be constructed to accommodate more than 2,000 vehicles parking on site. Because the Office Alternative would result in additional demolition and building construction activities compared to the proposed project, the Office Alternative would have higher peak VOCs, SO_x, $PM_{2.5}$, and PM_{10}, NO_x and CO emissions than the proposed project. The Office Alternative would generate similar area

source emissions compared to the proposed project. However, the Office Alternative would generate 2,128 more daily vehicle trips than the proposed project and would, therefore, generate more vehicle emissions and more total emissions than the proposed project. Therefore, emissions generated during operation of the Office Alternative would be greater than the proposed project. However, construction and operational emissions of the Office Alternative would not exceed the SCAQMD thresholds. As such, air quality impacts of the Office Alternative would be less than significant and greater than the proposed project.

5.5.3 Biological Resources

The project site is highly disturbed and developed with several buildings, a paved parking lot, and landscaping. In its existing condition, the project site contains only a small amount of ornamental vegetation near the center of the site, along Katella Avenue, Holder Street, and along the southern edge of the project site adjacent to the Stanton Storm Channel. The project site does not support special-status species, riparian habitat, or wetlands and is not located within a Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP). Therefore, the proposed project would not result in impacts to special-status species, riparian habitat, wetlands, or NCCP/HCPs. The proposed project has the potential to impact active migratory bird nests if and to the extent that any trees are removed during the avian nesting season and they contain nests. Regulatory compliance measures would address any impacts to nesting resident and/or migratory birds should it be necessary to conduct vegetation removal during the nesting season and nests are present. With implementation of Regulatory Compliance Measure 4.3-1, the proposed project's potential impacts on nesting migratory birds would be less than significant. With implementation of Regulatory Compliance Measure 4.3-1, the proposed project exhibits no potential to disrupt a wildlife corridor or in any way disrupt movement of native wildlife. No trees on the project site are designated as Landmark Trees. In addition, work on street trees would be done in accordance with the City Council's adopted Parkway Tree Policy; therefore, impacts to local street trees would be less than significant. No mitigation is required.

5.5.3.1 Alternative 1: No Project Alternative

The No Project Alternative would not require any grading, site work, or removal of vegetation because no demolition or construction activities would occur on the project site. Because the No Project Alternative would not involve construction activities or removal of the on-site vegetation, no impacts to biological resources would occur. Therefore, impacts to biological resources would be less than significant and less than that of the proposed project.

5.5.3.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility on the project site similar to the proposed project. As stated above, the project site is highly disturbed and developed with several buildings, a paved parking lot, and landscaping. In its existing condition, the project site contains only a small amount of ornamental vegetation near the center of the site, along Katella Avenue, Holder Street, and along the southern edge of the project site adjacent to the Stanton Storm Channel. The project site does not support special-status species, riparian habitat, or wetlands and is not located within an NCCP/HCP. Therefore, the Reduced Project Alternative would not result in impacts to special-status species, riparian habitat, wetlands, or NCCP/HCPs. Similar to

the proposed project, the Reduced Project Alternative has the potential to impact active migratory bird nests if and to the extent that any trees are removed during the avian nesting season and they contain nests. Similar to the proposed project, the Reduced Project Alternative would be required to adhere to Regulatory Compliance Measure 4.3-1, which would address any impacts to nesting resident and/or migratory birds should it be necessary to conduct vegetation removal during the nesting season and nests are present. With implementation of Regulatory Compliance Measure 4.3-1, the Reduced Project Alternative's potential impacts on nesting migratory birds would be less than significant. Therefore, impacts to wildlife movement and wildlife corridors would be less than significant. No trees on the project site are designated as Landmark Trees. In addition, work on street trees would be done in accordance with the City Council's adopted Parkway Tree Policy; therefore, impacts to local street trees would be less than significant. Because the same grading footprint would be required compared to the proposed project, and construction would occur on the same project site, impacts to biological resources would be the same as the proposed project.

5.5.3.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. A larger grading footprint would be required compared to the proposed project. However, as stated above, the project site is highly disturbed and developed with existing structures and a paved parking lot. It does not support special-status species, riparian habitat, or wetlands and is not located within an NCCP/HCP. Therefore, the Office Alternative would not result in impacts to special-status species, riparian habitat, wetlands, or NCCP/HCPs. Similar to the proposed project, only a small amount of ornamental vegetation near the center of the site, along Katella Avenue, Holder Street, and along the southern edge of the project site adjacent to the Stanton Storm Channel would be potentially removed outside of the nesting season to reduce impacts to nesting raptors and migratory birds. The Office Alternative would also be required to implement regulatory compliance measures to address any impacts to nesting resident and/or migratory birds should it be necessary to conduct vegetation removal during the nesting season and nests are present. Therefore, impacts to wildlife movement and wildlife corridors would be less than significant. No trees on the project site are designated as Landmark Trees. In addition, work on street trees would be done in accordance with the City Council's adopted Parkway Tree Policy; therefore, impacts to local street trees would be less than significant. Because a larger grading footprint would be required compared to the proposed project, and additional construction and demolition activities would occur on the same project site, impacts to biological resources would be greater than the proposed project.

5.5.4 Cultural Resources

The South Central Coastal Information Center (SCCIC) record search results and archaeological pedestrian field survey identified no previously recorded cultural resources on or in soils on the project site. The proposed project would not cause a substantial adverse change in the significance of a historical resource. Because the project site is located in close proximity to the historic-period natural alignment of a freshwater source and native sediments at the project site date to a timeframe that includes precontact human occupation in the region, there is a potential to encounter subsurface archaeological resources from either the precontact or historic periods.

However, implementation of mitigation would reduce any potential impacts of the proposed project on the significance of archaeological resources to a less than significant level by requiring monitoring by a qualified archaeologist and procedures for recovering any significant or unique archaeological resource and the preparation of a report that documents any cultural resource recovery at the project site. No previously identified human remains are present on the project site or are anticipated to be discovered during project construction. However, undiscovered human remains may be present below the ground surface on any property. Compliance with the State's Health and Safety Code for the treatment of human remains would reduce the impact of the proposed project on human remains to less than significant.

5.5.4.1 Alternative 1: No Project Alternative

The No Project Alternative would not require any excavation, grading or site work because no demolition or construction activities would occur on the project site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource. Further, the No Project Alternative would not have the potential to disrupt human remains or result in the discovery of previously unknown archaeological resources. No impacts related to cultural resources would occur; therefore, the impacts of the No Project Alternative would be less than that of the proposed project.

5.5.4.2 Alternative 2: Reduced Project Alternative

Similar to the proposed project, the Reduced Project Alternative would not cause a substantial adverse change in the significance of a historical resource as defined by CEQA because no previously recorded historical resources were identified in the project site. The Reduced Project Alternative would develop the project site with a last-mile logistics facility similar to the proposed project, but at a reduced capacity, and would require similar ground-disturbing construction activities for the development. Similar to the proposed project, the Reduced Project Alternative would have a low likelihood of encountering intact buried archaeological deposits and buried human remains during ground-disturbing construction activities. The Reduced Project Alternative would also be required to incorporate mitigation measures to reduce potentially significant impacts to archaeological resources by requiring monitoring by a qualified archaeologist and procedures for recovering any significant or unique archaeological resource and the preparation of a report that documents any cultural resource recovery at the project site. The Reduced Project Alternative would also be required to comply with Health and Safety Code Section 7050.5, which would reduce potentially significant impacts to buried human remains. Implementation of this mitigation and adherence to regulatory standards would reduce potential impacts related to cultural resources to a less than significant level.

In summary, similar to the proposed project, the Reduced Project Alternative would result in no impacts to historical resources and less than significant impacts with mitigation for archaeological resources, and less than significant impacts on human remains after complying with regulatory standards. The Reduced Project Alternative would result in similar ground-disturbing construction activities as the proposed project and would therefore, result in similar impacts to unknown cultural resources compared to the proposed project.

5.5.4.3 Alternative 3: Office Alternative

Similar to the proposed project, the Office Alternative would not cause a substantial adverse change in the significance of a historical resource as defined by CEQA because no previously recorded historical resources were identified in the project site. The Office Alternative would develop the same project site with office uses. However, the Office Alternative would require additional ground-disturbing construction activities for the development because it would require the demolition of additional structures and would require additional excavation under the new office structures. Similar to the proposed project, the Office Alternative would have a low likelihood of encountering intact buried archaeological deposits and previously discovered buried human remains during ground-disturbing construction activities; however, the Office Alternative would require deeper excavation and, therefore, would be more likely to disturb archaeological resources and human remains. The Office Alternative would be required to incorporate mitigation measures to reduce potentially significant impacts to archaeological resources by requiring monitoring by a qualified archaeologist and procedures for recovering any significant or unique archaeological resource and the preparation of a report that documents any cultural resource recovery at the project site. The Office Alternative would also be required to comply with Health and Safety Code Section 7050.5, which would reduce potentially significant impacts to previously undiscovered buried human remains. Implementation of this mitigation and adherence to regulatory standards would reduce potential impacts related to cultural resources to a less than significant level.

In summary, similar to the proposed project, the Office Alternative would result in no impacts to historical resources, less than significant impacts with mitigation for archaeological resources, and less than significant impacts on human remains after complying with regulatory standards. However, because the Office Alternative would require additional excavation, the Office Alternative would result in greater impacts to unknown cultural resources compared to the proposed project.

5.5.5 Energy

Project construction would consume electricity, diesel fuel, and gasoline. Additionally, project operation would increase electricity and natural gas demand. Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and delivery vehicles accessing the project site) and facilities energy demands (energy consumed by building operations and site maintenance activities). Although project construction and operation would require using energy, the proposed project would comply with applicable conservation and efficient energy use regulations, including the Title 24 building energy efficiency standards. The proposed project 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, energy impacts would be less than significant, and no mitigation is required.

5.5.5.1 Alternative 1: No Project Alternative

The No Project Alternative would not require any grading or site work and no demolition or construction activities would occur on the project site other than potential minor renovations to the interiors of the existing buildings. Therefore, the No Project Alternative would not increase energy demand on the project site during construction. However, the operation of a corporate

headquarters under the No Project Alternative, as permitted under the Specific Plan, is expected to increase vehicle trips to and from the project site compared to existing conditions. However, the No Project Alternative would result in fewer vehicle trips than the proposed project. Therefore, energy impacts would be less than significant, and energy impacts of the No Project Alternative would be less than that of the proposed project.

5.5.5.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility on the project site similar to the proposed project. A similar grading footprint and similar construction activities would be required for the Reduced Project Alternative as the proposed project; therefore, energy use during construction would be similar to that of the proposed project. Like the proposed project, the building construction as part of the Reduced Project Alternative would meet the Title 24 building energy efficiency standards. The Reduced Project Alternative would generate fewer vehicle trips than the proposed project because the number of delivery vans operating from the project site would be reduced by 30 percent. Therefore, the Reduced Project Alternative would result in a reduction in the consumption of petroleum fuel (diesel or gasoline) compared to the proposed project. Like the proposed project, the Reduced Project Alternative 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, impacts related to energy use would be less than significant. However, because the Reduced Project Alternative would result in a reduced capacity compared to the proposed project, consumption of fuel during operation would be less than the proposed project. Therefore, energy impacts would be less than significant and less than the proposed project.

5.5.5.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. A larger grading footprint would be required in comparison to the proposed project. The Office Alternative would result in the demolition of additional buildings and the construction of 486,088 sf of office space in two four-story buildings. Therefore, construction energy use would be greater than the proposed project. Similar to the proposed project, the buildings constructed as part of the Office Alternative would meet the Title 24 building energy efficiency standards. However, the Office Alternative would result in the construction of 486,088 sf of office space and would result in greater electricity and natural gas demand compared to the proposed project. Additionally, the Office Alternative would generate 2,128 more daily vehicle trips than the proposed project and would therefore consume more fuel than the proposed project from vehicle trips during operation. Like the proposed project, the Office Alternative 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, impacts related to energy use would be less than significant. However, the Office Alternative would consume more fuel from vehicle trips during operation than the proposed project and would consume more fuel and energy overall than the proposed project considering both vehicular and stationary source demands. Therefore, the Office Alternative would result in greater energy impacts compared to the proposed project.

5.5.6 Geology and Soils

The proposed project would not result in any impacts related to rupture of a known earthquake fault, landslides, and septic tanks and alternative wastewater disposal systems. Potential impacts related to landslides and unstable slopes, lateral spreading, subsidence, and expansive soils would be less than significant, and no mitigation is required. Impacts related to strong seismic ground shaking, liquefaction, compressible/collapsible soils, and wet soils are considered potentially significant, and mitigation is required. Project construction would comply with the requirements of the California Building Code and the City's Building Code. In addition, the mitigation measures require compliance with the recommendations in the project's Geotechnical Assessment. With implementation of mitigation, the proposed buildings would be designed and constructed to current safety standards, and all potentially significant impacts related to soils and geology would be less than significant. Project construction would increase erosion and loss of topsoil during construction; however, Erosion Control Best Management Practices (BMPs) and Sediment Control BMPs would be implemented during construction in compliance with the requirements of the Construction General Permit to ensure that impacts related to erosion would be less than significant. Soils on the project site have a low paleontological sensitivity from the surface to a depth of 10 feet (ft) and high sensitivity below a depth of 10 ft; with a maximum depth of 10 ft, excavation, the proposed project is expected to remain in deposits with no or low paleontological sensitivity. However, in the event that paleontological resources are encountered during construction, Mitigation Measure 4.6-2 would require work in the immediate area of the discovery to be halted and a qualified paleontologist to assess the discovery. These procedures would mitigate potential impacts to scientifically significant nonrenewable paleontological resources. These measures would reduce potentially significant impacts to paleontological resources to less than significant.

5.5.6.1 Alternative 1: No Project Alternative

The No Project Alternative would not require any grading, excavation, or site work because no demolition or construction activities would occur on the project site. Therefore, the No Project Alternative would have no impacts related to geology and soils, and this alternative would have less geology and soils impacts than the proposed project.

5.5.6.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility similar to the proposed project on the project site; however, the Reduced Project Alternative would have a reduced capacity. The same grading footprint and similar construction and demolition activities to those of the proposed project would be required. The required grading and construction activities would result in similar impacts related to geology and soils as the proposed project because the Reduced Project Alternative would also demolish the existing on-site research and development buildings and retain the existing 150,000 sf warehouse and 180,000 sf office building. As with the proposed project, the Reduced Project Alternative would be designed and constructed to conform to the current seismic design provisions of the California Building Code and the City Building Code. In addition, this alternative would implement the same mitigation measure as the proposed project, which requires implementation of the measures contained in a final design-level geotechnical analysis and procedures in the event that paleontological resources are encountered. Therefore, like the proposed project, the Reduced Project Alternative would have less than significant impacts

related to geology and soils with implementation of mitigation. Given the similar footprint and construction activities, the geology-related impacts of the Reduced Project Alternative would be similar to that of the proposed project.

5.5.6.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. A larger grading footprint would be required compared to the proposed project because the Office Alternative would result in the demolition of additional buildings and the construction of 486,088 sf of office space in two four-story buildings. The required grading and construction of new structures would result in increased impacts related to geology and soils as the proposed project because the Office Alternative would result in new structures that are not proposed under the proposed project. As with the proposed project, the Office Alternative would be designed and constructed to conform to the current seismic design provisions of the California Building Code and the City's Building Code. Soils on the project site have a low paleontological sensitivity from the surface to a depth of 10 ft and high sensitivity below a depth of 10 ft. Given the larger size of its structures, the Office Alternative would likely require deeper excavation than the maximum depth of 10 ft under the proposed project. Therefore, the Office Alternative would have a higher likelihood of encountering paleontological resources than the proposed project. This alternative would implement the same mitigation measures as the proposed project, which requires implementation of the measures contained in a final design-level geotechnical analysis and procedures in the event that paleontological resources are encountered. Therefore, like the proposed project, the Office Alternative would have less than significant impacts related to geology and soils with implementation of mitigation. However, given the larger footprint and additional excavation, demolition, and construction activities of the Office Alternative, the geology-related impacts of the Office Alternative would be greater than that of the proposed project.

5.5.7 Greenhouse Gas Emissions

The project-related greenhouse gas (GHG) emissions derive primarily from vehicle trips generated by the project. Per the Traffic Impact Analysis, the proposed project is expected to generate approximately 2,490 vehicle trips per day (1,245 inbound and 1,245 outbound). The proposed project would be designed in compliance with adopted regulations aimed at reducing GHG emissions. Specifically, the project would meet the 2019 Building Energy Efficiency Standards (California Code of Regulations [CCR] Title 24). The overall emissions attributable to construction and operation of the proposed project of 6,356.94 metric tons (MT) CO_2e/yr. By subtracting out the existing GHG emissions of 4,921.79 MT CO_2e/yr, the project's net GHG emissions would be 1,435.15 MT CO_2e/yr. As such, the proposed project would not exceed the SCAQMD's recommended numeric threshold of 3,000 MT CO_2e if it were applied. Thus, the proposed project does not have the potential to result in a cumulatively considerable impact with respect to GHG emissions. The project would not conflict with any of the provisions of the 2017 Scoping Plan, as any regulations adopted would apply directly or indirectly to the project. In addition, the project supports five of the action categories in the 2017 Scoping Plan. Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions levels to 40 percent

below 1990 levels by 2030. Therefore, the proposed project would be consistent with the CARB Scoping Plan, and impacts are considered less than significant.

5.5.7.1 Alternative 1: No Project Alternative

The No Project Alternative would not require any demolition or construction activities other than potential minor renovations to the interiors of the existing buildings. Therefore, the No Project Alternative would not increase GHG emissions from construction emissions. Although the operation of a corporate headquarters under the No Project Alternative, as permitted under the Specific Plan, is expected to increase vehicle trips to and from the project site compared to existing conditions, the No Project Alternative would result in fewer vehicle trips compared to the proposed project. Therefore, impacts related to GHG emissions would be less than significant, and GHG emission impacts of the No Project Alternative would be less than that of the proposed project.

5.5.7.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility similar to the proposed project on the project site; however, the Reduced Project Alternative would have a reduced capacity. Similar to the proposed project, the Reduced Project Alternative would demolish the existing on-site research and development buildings and retain the existing 150,000 sf warehouse and 180,000 sf office building. Therefore, GHG emissions during construction would be similar to that of the proposed project. The number of delivery vans operating from the project site would be reduced by 30 percent. Because the Reduced Project Alternative would generate fewer vehicle trips than the proposed project, GHG emissions during operation would be less than the proposed project. Therefore, similar to the proposed project, the Reduced Project Alternative's GHG emissions would not exceed the SCAQMD's threshold of 3,000 MT CO_2e/yr. Similar to the proposed project, the Reduced Project Alternative would not conflict with any of the provisions of the 2017 Scoping Plan as any regulations adopted would apply directly or indirectly to the project and would support all five of the action categories in the 2017 Scoping Plan. Therefore, the Reduced Project Alternative would also be consistent with the CARB Scoping Plan. As such, GHG emissions of the proposed project would be less than significant and less than the proposed project.

5.5.7.3 Alternative 3: Office Alternative

The Office Alternative would demolish all existing structures on the project site and would replace existing buildings with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. A greater grading footprint would be required compared to the proposed project. The Office Alternative would result in the demolition of additional buildings and the construction of 486,088 sf of office space in two four-story buildings. Therefore, GHG emissions during construction would be greater than the proposed project. The buildings constructed as part of the Office Alternative would generate greater GHG emissions compared to the proposed project during operation because the Office Alternative would result in the development of 486,088 sf of office space and a parking structure. Additionally, the Office Alternative would generate 2,128 more daily vehicle trips than the proposed project and would therefore generate more GHG emissions during operation than the proposed project and would therefore generate approximately 8,410 MT of GHG emissions during operation than the 6,456 MT of the proposed project's GHG emissions. It should be noted that the existing

development emissions (i.e., 4,922 MT of GHG emissions) were subtracted from the Office Alternative emissions to determine the net emissions of 3,488 MT. Although the proposed project would not exceed the SCAQMD's threshold of 3,000 MT CO_2e/yr, the Office Alternative may result in exceedances to applicable SCAQMD thresholds. Therefore, the Office Alternative would result in greater impacts related to GHG emissions than the proposed project.

5.5.8 Hazards and Hazardous Materials

The proposed project would result in no impacts related to physical interference with an adopted emergency response plan or related to risk of loss, injury, or death involving wildland fires. Impacts related to the routine transport, use, or disposal of hazardous materials, upset of hazardous materials, emission or handling of hazardous materials in the vicinity of a school, and safety hazards within airport land use plans would be less than significant and no mitigation is required. Construction and operation activities on the project site would involve transport, use, and disposal of small quantities of hazardous materials or wastes. Adopted regulations and procedures are in place to minimize impacts related to use and disposal of household hazardous waste associated with project construction and operation. During construction, good housekeeping BMPs would be implemented to reduce risk of spills of hazardous materials. Conditions of approval specified by the Orange County Fire Authority (OCFA), which would review the project, would be applied to the proposed project to reduce operational hazardous material impacts and ensure that any hazardous waste that is generated on-site would be transported to an appropriate disposal facility by a licensed hauler in accordance with State and federal law. Adherence to regulatory standards would ensure that impacts related to the transport, use, and disposal of hazardous materials would be less than significant, and no mitigation is required. Implementation of the proposed project would not result in a safety hazard for people working in the project area because the project would reuse the existing warehouse, retain the existing office building along Katella Avenue, and demolish the remaining buildings on the project site. The proposed project does not include the construction of any new structures and, therefore, would not need to comply with FAA standards and requirements that require the FAA be notified of any proposed structure(s) that would penetrate the 100 to 1 imaginary surface that surrounds the runway at JFTB Los Alamitos. Operation of the proposed project would include the brief storage and transport of traditional consumer products that could contain minimal amounts of hazardous substances such as petroleum products, pesticides, fertilizer, paints, solvents, and cleaning products. The proposed project may also potentially store and transport car batteries and lithium batteries. These products and substances could create a potential for explosion or accidental release of hazardous materials into the environment. However, the proposed project is a last-mile logistics facility and would accept and sort packages and then send them out for delivery resulting in short storage times for these products at the facility. Additionally, for removal of hazardous waste from the site, hazardous waste generators are required to use a certified hazardous waste transportation company, which must ship hazardous waste to a permitted facility for treatment, storage, recycling, or disposal. Any hazardous materials on site would be handled in accordance with all applicable regulations, including containment, reporting, and remediation requirements, in the event of a spill or accidental release. Compliance with applicable regulations would ensure that potential hazardous material impacts associated with the operation of the proposed project would be less than significant; no mitigation is required. Database searches of the project site, including a GeoTracker search and a search of Superfund sites, determined that the project site is not included on a list of hazardous materials sites that could

create a significant hazard to the public or the environment and is not a recorded Superfund site. The Phase I ESA concluded that there is no evidence of RECs in connection with the project site; however, HRECs and environmental issues were identified. Although HRECs and environmental issues were identified, the Phase I ESA did not recommend any further investigation of the project site. However, upon redevelopment of the project site, the proper decommissioning of the hydraulic lift(s) and clarifiers, if remaining intact, may be required by local regulatory agencies. A lack of maintenance and proper decommissioning procedures could result in potentially significant impacts related to hazardous conditions on the project site. Therefore, the proposed project is required to implement mitigation measures, which require periodic inspection of hydraulic lift(s) and clarifiers during routine service and adherence to all local regulatory agency requirements related to the proper decommissioning of those facilities, which may include soil sampling. With implementation of mitigation measures, impacts related to hazardous materials sites would be reduced to less than significant.

5.5.8.1 Alternative 1: No Project Alternative

The No Project Alternative would not require any demolition or construction activities other than potential minor renovations to the interiors of the existing buildings. Because no construction activities would occur, no construction impacts related to hazardous materials would occur. The project site would operate as a corporate headquarters, as permitted under the Specific Plan. Small amounts of hazardous materials may be used on the project site; however, the No Project Alternative would not increase the use of hazardous materials because the on-site use would remain the same. In addition, hazardous materials would be handled in accordance with State and federal law. The No Project Alternative would not require transport or handling of hazardous materials during construction and operational use of hazardous materials would continue to be limited and handled in accordance with State and Federal law. Therefore, less than significant impacts related to hazardous materials would occur and impacts related to hazardous materials would be less than that of the proposed project.

5.5.8.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility similar to the proposed project on the project site but with a reduced capacity. The Reduced Project Alternative would demolish the existing on-site research and development buildings, retain the existing 150,000 sf warehouse and 180,000 sf office building, and would result in similar impacts related to hazardous waste and materials compared to the proposed project. Construction and operation activities on the project site would involve transport, use, and disposal of small quantities of hazardous materials or wastes. Adopted regulations and procedures are in place to minimize impacts related to use and disposal of household hazardous waste associated with construction and operational activities. During construction, good housekeeping BMPs would be implemented to reduce risk of spills of hazardous materials. Conditions of approval specified by OCFA would be applied, similar to the proposed project, to reduce operational hazardous material impacts and ensure that any hazardous waste that is generated on-site would be transported to an appropriate disposal facility by a licensed hauler in accordance with State and federal law. Similar to the proposed project, the Reduced Project Alternative would include the brief storage and transport of traditional consumer products that could contain minimal amounts of hazardous substances such as

petroleum products, pesticides, fertilizer, paints, solvents, cleaning products, and batteries. However, the Reduced Project Alternative would construct a smaller driveway loop and delivery van holding area that would accommodate 30 percent fewer delivery vans than the proposed project and would, therefore, result in the storage and transport of fewer potentially hazardous substances. Similar to the proposed project, for removal of hazardous waste from the site, hazardous waste generators are required to use a certified hazardous waste transportation company, which must ship hazardous waste to a permitted facility for treatment, storage, recycling, or disposal. Compliance with applicable regulations would ensure that potential hazardous material impacts associated with the operation of the proposed project would be less than significant; no mitigation is required. Similar to the proposed project, a lack of maintenance and proper decommissioning procedures of hydraulic lift(s) and clarifiers under the Reduced Project Alternative could result in potentially significant impacts related to hazardous conditions on the project site. Therefore, the Reduced Project Alternative is required to implement mitigation measures, which require periodic inspection of hydraulic lift(s) and clarifiers during routine service and adherence to all local regulatory agency requirements related to the proper decommissioning of those facilities, which may include soil sampling. With implementation of mitigation measures, impacts related to hazardous materials sites would be reduced to less than significant. Similar to the proposed project, the Reduced Project Alternative does not include the construction of any new structures and, therefore, would not need to comply with FAA standards and requirements that require the FAA be notified of any proposed structure(s) that would penetrate the 100 to 1 imaginary surface that surrounds the runway at JFTB Los Alamitos. Adherence to regulatory standards and implementation of mitigation measures would ensure that impacts related to the transport, use, and disposal of hazardous materials would be less than significant and less than that of the proposed project.

5.5.8.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. Construction and operation activities on the project site would involve transport, use, and disposal of small quantities of hazardous materials or wastes. Adopted regulations and procedures are in place to minimize impacts related to use and disposal of household hazardous waste associated with construction and operational activities. During construction, good housekeeping BMPs would be implemented to reduce risk of spills of hazardous materials. Conditions of approval specified by OCFA would be applied, similar to the proposed project, to reduce operational hazardous material impacts and ensure that any hazardous waste that is generated on-site would be transported to an appropriate disposal facility by a licensed hauler in accordance with State and federal law. The Office Alternative would result in the development of four-story office structures that would be taller than the existing structures on the project site. Therefore, the Office Alternative would be required to comply with all appropriate FAA standards and requirements and the FAA would review the height of the proposed buildings to ensure that no aviation hazards would occur. Adherence to regulatory standards would ensure that impacts related to the transport, use, and disposal of hazardous materials would be less than significant. Operation of the Office Alternative would not require the brief storage and transport of traditional consumer products that could contain minimal amounts of hazardous substances such as petroleum products, pesticides, fertilizer, paints, solvents, cleaning products, and batteries that would occur under the proposed project. However, the Office Alternative would include the use and

disposal of typical cleaning products along with limited use of pesticide and herbicides for landscape maintenance typical of an office use. Upon redevelopment of the project site, similar to the proposed project, the Office Alternative would require the proper decommissioning of the hydraulic lift(s) and clarifiers. A lack of proper decommissioning procedures could result in potentially significant impacts related to hazardous conditions on the project site. Therefore, the Office Alternative is also required to implement mitigation measures, which require the proper decommissioning of those facilities. With implementation of mitigation measures, the Office Alternative's impacts related to hazardous materials sites would be reduced to less than significant. Impacts related to hazards and hazardous materials would be similar to that of the proposed project.

5.5.9 Hydrology and Water Quality

Construction of the proposed project would disturb soil and potentially increase erosion and the risk of spills which would increase the potential for pollutants to be transported via stormwater runoff into receiving waters. The proposed project would comply with the Construction General Permit and implement a Stormwater Pollution Prevention Plan (SWPPP) and best management practices (BMPs) during construction to address pollutants of concern and to ensure protection of beneficial uses of receiving waters. The proposed project would change the use of the project site and would, therefore, change the pollutants of concern in stormwater runoff. A comprehensive Water Quality Management Plan (WQMP) and BMPs would be implemented during operation to address pollutants of concern and to ensure protection of beneficial uses of receiving waters. The water quality impacts of the proposed project would be less than significant upon compliance with existing plans, programs, and policies in place to ensure compliance with National Pollutant Discharge Elimination System (NPDES) regulations. No mitigation is required.

Although the project would increase the amount of impervious surface at the project site by approximately 0.77 acre, the proposed project would generally conform to existing on-site drainage patterns. However, the increase in impervious surface area would increase stormwater runoff compared to existing conditions. In the proposed condition, stormwater runoff would sheet flow to proposed BMPs dispersed throughout the project site (Filterra Bioscape Vaults and bioretention basins with underdrains) to treat runoff prior to entering the existing 45-inch storm drain on site. Stormwater runoff would then be discharged to the Katella Avenue stormdrain system via the existing stormdrain connection on- ite. The Filterra Bioscape Vaults and bioretention basins with underdrains would detain and reduce the stormwater runoff from the entire site. In addition, a Final Hydrology Report would be prepared based on final project plans and would be approved by the City. The Hydrology Report would confirm that the project drainage facilities comply with City and County requirements to ensure that stormwater runoff is reduced to meet the hydromodification requirements and the allowable City discharge requirements for the project site, as determined by the City Master Plan of Drainage. Furthermore, as runoff from the site would be reduced compared to the existing condition, the project would not contribute to the downstream capacity exceedences or existing flooding. With implementation of the proposed BMPs, operational impacts related to a substantial increase in the rate or amount of surface runoff, flow, and volume that would result in flooding would be less than significant, and no mitigation is required.

Because of the presence of shallow groundwater, it is likely that groundwater dewatering would be required during excavation activities. Groundwater dewatering during construction would be localized and temporary, and the volume of groundwater removed would not be substantial. Project operation would not require groundwater extraction and would not substantially change infiltration. The groundwater impacts of the proposed project would be less than significant, and no mitigation is required.

The proposed project would result in no impacts related to flood hazards, inundation, increases in impervious surface area, environmentally sensitive areas, or aquatic, wetland, or riparian habitat and no mitigation is required.

5.5.9.1 Alternative 1: No Project Alternative

The No Project Alternative would not require any grading or site work because no demolition or construction activities would occur on the project site. Therefore, no soil disturbance would occur under this alternative and there would be no construction impacts on water quality. The No Project Alternative would not change impervious surface areas, or change stormwater runoff on the project site compared to existing conditions. However, no operational BMPs would be implemented, and the reduction in runoff that would occur under the proposed project would not occur under the Reduced Project Alternative. The No Project Alternative would have no hydrology and water quality impacts compared to existing conditions and similar hydrology and water quality impacts compared to the proposed project.

5.5.9.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility similar to the proposed project on the project site but with a reduced capacity. Because the Reduced Project Alternative would be constructed on the same project site as the proposed project, a similar amount of soil disturbance would occur during construction. In addition, the impervious surface area on the project site would be similar to the proposed project. In addition, similar to the proposed project, the implementation of BMPs during the construction and operation phases would ensure that this alternative would not generate significant water quality impacts. The Reduced Project Alternative would also be required to implement drainage infrastructure and detention systems to reduce peak flow from the peak discharges from the project site in compliance with City discharge requirements for the project site. Similar to the proposed project, the Reduced Project Alternative would implement proposed BMPs dispersed throughout the project site (Filterra Bioscape Vaults and bioretention basins with underdrains) to treat runoff prior to entering the existing 45-inch storm drain on site. The Reduced Project Alternative would have less than significant impacts on hydrology and water quality, and this alternative would have similar impacts to those associated with the proposed project.

5.5.9.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. Because the Office Alternative would require additional demolition and construction activities on the project site, a greater amount of soil

disturbance would occur during construction. The impervious surface area on the project site would be similar to the proposed project. In addition, similar to the proposed project, the implementation of BMPs during the construction and operation phases would ensure that this alternative would not generate significant water quality impacts. The Office Alternative would also be required to implement drainage infrastructure and detention systems to reduce peak flow from the peak discharges from the project site in compliance with City discharge requirements for the project site. Similar to the proposed project, the Office Alternative would implement a stormdrain system and bioretention basins, which would reduce stormwater runoff from the entire site. The Office Alternative would have less than significant impacts on hydrology and water quality, and this alternative would have similar impacts to those associated with the proposed project.

5.5.10 Land Use and Planning

The proposed project would not divide an existing community. The Cypress General Plan Land Use Policy Map designates the project site as "Specific Plan Area" in recognition that the project site is subject to the Cypress Corporate Center Specific Plan (Specific Plan). Permitted uses in the Specific Plan area include all general administrative and professional uses, general research facilities, and laboratories, service industries, industries engaged in storage and warehousing, and construction industries. Since the proposed use is relatively new and does not clearly fit into any of the existing Specific Plan permitted uses, the City has determined that the appropriate entitlement would be a Conditional Use Permit. The proposed project would be consistent with development requirements as outlined in the Specific Plan. The Specific Plan does not include any applicable goals or policies. Therefore, upon its approval by the City Council, the proposed project would be consistent with the Specific Plan. The project site currently has the zoning designation Cypress Corporate Center (PC-2), which is consistent with the proposed project's intended warehouse storage uses. The project does not propose any amendments to the City's General Plan, the Specific Plan, or the City's Zoning Ordinance. Therefore, the proposed project is consistent with the City's Zoning Ordinance. The proposed project would be consistent with the 2020–2045 RTP/SCS, the City's General Plan, Zoning Ordinance, and the Specific Plan. Therefore, the proposed project would result in less than significant impacts related to potential conflicts with applicable land use plans, policies, and regulations, and no mitigation is required.

5.5.10.1 Alternative 1: No Project Alternative

No demolition or construction activities would occur on the project site under the No Project Alternative other than potential minor renovations to the interiors of the existing buildings. The project site would operate as a corporate headquarters, as permitted under the Specific Plan. The No Project Alternative would be consistent with the Specific Plan land use and zoning designation of Cypress Corporate Center (PC-2). Additionally, the No Project Alternative would be consistent with the Specific Plan, which permits all general administrative and professional uses, general research facilities, and laboratories, service industries, industries engaged in storage and warehousing, and construction industries. The No Project Alternative would not require a conditional use permit. Therefore, the No Project Alternative would result in no land use impacts, and impacts to land use would be less than the proposed project.

5.5.10.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility similar to the proposed project on the project site, but with a reduced capacity. Similar to the proposed project, the Reduced Project Alternative would not divide an existing community. Like the proposed project, the Reduced Project Alternative would require a conditional use permit since the proposed use is relatively new and does not clearly fit into any of the existing Specific Plan permitted uses. Upon its approval, the Reduced Project Alternative would be consistent with the Specific Plan. The Reduced Project Alternative includes the same use as the proposed project, but with reduced capacity. Therefore, the Reduced Project Alternative would also be consistent with the goals and policies of the 2020–2045 RTP/SCS, the City's General Plan, and the Specific Plan, as amended, for the same reasons as the proposed project. The Reduced Project Alternative would result in less than significant impacts related to potential conflicts with applicable land use plans, policies, and regulations. Land use impacts of the Reduced Project Alternative would be similar to the proposed project.

5.5.10.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. Similar to the proposed project, the Office Alternative would not divide an existing community because the project site is already developed. As discussed above, permitted uses in the Specific Plan area include all general administrative and professional uses, general research facilities, and laboratories, service industries, industries engaged in storage and warehousing, and construction industries. Therefore, the Office Alternative's office use is allowed by the Specific Plan, and the Office Alternative would be consistent with the development standards set forth in the Specific Plan. Additionally, unlike the proposed project, the Office Alternative would not require the approval of a Conditional Use Permit. The Specific Plan does not include any applicable goals or policies. Therefore, the Office Alternative would result in less than significant impacts related to potential conflicts with applicable land use plans, policies, and regulations. The land use impacts of the Office Alternative would be similar to the proposed project, except that it would not require a Conditional Use Permit.

5.5.11 Noise

The construction noise, construction vibration, or off-site operational traffic noise levels would not exceed City noise level standards or the Federal Transit Administration (FTA) community annoyance threshold for vibration. Noise generated by the project construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. Although temporary construction noise level impacts would be below the threshold of 80 dBA L_{eq}, the proposed project would comply with the permitted construction hours from 7:00 a.m. to 8:00 p.m. on weekdays and Saturdays specified in the Cypress Corporate Center Amended Specific Plan (Specific Plan). No construction shall be permitted outside of these hours or on Sundays or federal holidays. Therefore, the noise impacts due to project construction are considered less than significant at all receiver locations, and no mitigation is required. Operational noise consists of noise generated by vehicles accessing the project site as well as noise generated by on-site activities. The proposed project would generate daytime and nighttime operational noise

level increases ranging from 0.0 to 3.6 dBA L_{eq} at the nearby receiver locations. Project-related operational noise level increases would satisfy the noise level increase significance criteria. Therefore, the incremental project operational noise level increase is considered less than significant at all receiver locations, and no mitigation is required. Additionally, the project site is located approximately 0.6 mile northeast of the JFTB Los Alamitos. The noise contour boundaries of JFTB Los Alamitos show that the project site is located outside of the 65 dBA CNEL noise contour boundary. Therefore, since industrial land uses are considered normally acceptable with exterior noise levels of 50–70 dBA CNEL, the JFTB Los Alamitos noise impacts are considered less than significant, and no mitigation is required.

5.5.11.1 Alternative 1: No Project Alternative

The No Project Alternative would not involve any grading, demolition, or construction vehicle/truck trips. Therefore, the noise impacts that are typically associated with grading and construction would not occur under this alternative, because no demolition or construction activities would occur under the No Project Alternative. Although the operation of a corporate headquarters under the No Project Alternative, as permitted under the Specific Plan, is expected to increase the number of vehicle trips coming to and from the project site compared to existing conditions, the No Project Alternative would result in fewer vehicle trips compared to the proposed project. Therefore, the No Project Alternative would result in less than significant noise impacts, and this alternative would have less noise impacts than the proposed project.

5.5.11.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative would involve a grading footprint and construction and demolition activities similar to the proposed project. Therefore, this alternative would result in similar construction noise impacts associated with grading, demolition, and construction as the proposed project. Construction noise impacts would be less than significant with mitigation and similar to the proposed project.

Under this alternative, and similar to the proposed project, operational noise would include vehicular noise associated with traffic related to the operation of the last mile logistics facility. However, because the number of delivery vans operating from the project site would be reduced by 30 percent, the Reduced Project Alternative would result in fewer vehicle trips. Therefore, operational noise associated with vehicle trips would be reduced. Therefore, the Reduced Project Alternative would have less than significant noise impacts with implementation of mitigation, and this alternative would have less impacts than the proposed project.

5.5.11.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. The Office Alternative would involve a larger grading footprint than the proposed project. Additionally, the Office Alternative would require additional demolition and building construction activities compared to the proposed project. The level of noise generated during construction would likely be greater than the proposed project and would occur for a longer period of time. Similar to the proposed project, the Office Alternative

would comply with the permitted construction hours specified in the Specific Plan. Construction noise impacts would be less than significant. However, construction noise impacts would be greater than the proposed project.

Under this alternative, operational noise would include vehicular noise associated with traffic related to the occupancy and operation of the office uses. The Office Alternative would have more vehicle trips than then proposed project. Therefore, operational noise associated with vehicle trips would be greater than the proposed project. The Office Alternative would also include HVAC units on the buildings, which could impact sensitive receptors within the vicinity of the project site by exceeding the City's daytime and nighttime exterior noise standard. The Office Alternative would be expected to include mitigation, which requires the Applicant/Developer to demonstrate to the City that on-site stationary noise sources comply with City noise standards. Therefore, the Office Alternative would have less than significant noise impacts with implementation of mitigation, and this alternative would have greater operational impacts than the proposed project.

5.5.12 Public Services

The proposed project is not expected to induce any substantial population growth within the City of Cypress and as such, would be able to be adequately be served by Fire Station No. 84. The proposed project would be designed to comply with all OCFA requirements, including providing adequate fire flow/structure protection to the project site and providing adequate access for emergency vehicles. Written correspondence with the OCFA indicated that all development projects submitted for review by OCFA must use a fair share approach to mitigate fire service response impacts and facility/equipment needs. To further address any potential impacts to fire services, mitigation which requires the Applicant/Developer to enter into a Secured Fire Protection Agreement prior to the issuance of any building permits, would have to be implemented, which would reduce operational impacts to less than significant. Although there may be an incremental increase in calls for fire service, this increase would not be considered substantial. Potential impacts related to the provision of police services during operation of the proposed project would be less than significant, and no mitigation is required. The proposed project is not expected to cause an increase in students as a result of project implementation and would not result in any incremental increases in the demand for school facilities. 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. Because the proposed project would reduce the building square footage on the project site by demolishing several of the existing on-site buildings and would not result in the construction of any new covered and enclosed structures on the project site, the Applicant/Developer would not be required to pay such fees. Therefore, potential impacts to school services and facilities associated with implementation of the proposed project would be less than significant. No mitigation is required. The proposed project is not expected to result in any incremental increase in the demand for park facilities or existing recreation facilities in the project vicinity. Therefore, the proposed project would not result in additional physical impacts associated with the provision of new or physically altered park facilities. Impacts to parks and recreation facilities would be less than significant, and no mitigation is required.

5.5.12.1 Alternative 1: No Project Alternative

No demolition or construction would occur on the project site under the No Project Alternative. The No Project Alternative may also result in an incremental increase in demand for fire protection and emergency services or police protection services because a new user would occupy the existing buildings on the project site and operate them as a corporate headquarters, which is permitted by right under the Cypress Corporate Center Specific Plan. Similar to the proposed project, the No Project Alternative would not increase the demand for parks, libraries, school, or other public facilities. Therefore, the No Project Alternative would have less than significant impacts on public services, and this alternative would have similar impacts as the proposed project.

5.5.12.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility similar to the proposed project on the project site; however, the Reduced Project Alternative would have a reduced capacity. Compared to the proposed project, the demand for fire protection and emergency services and police protection services generated by the Reduced Project Alternative would be reduced slightly due to the decreased operational activities on the project site. Like the proposed project, the Applicant/Developer would be required to enter into a Secured Fire Protection Agreement with the OCFA to ensure adequate fire protection service are available for the project site. Therefore, the Reduced Project Alternative would have less than significant impacts on public services, and this alternative would have less impact than the proposed project.

5.5.12.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. The new office uses on the project site would incrementally increase demand for police, fire, and emergency medical services. Like the proposed project, the Applicant/Developer would be required to enter into a Secured Fire Protection Agreement with the OCFA to ensure adequate fire protection service is available for the project site. Similar to the proposed project, the Office Alternative would not increase the population within the City; however, it would attract additional employees to the project site. The increase in demand for fire and police services would be similar to the proposed project and would be less than significant. In addition, similar to the proposed project, because the Office Alternative would not increase the City's population, this alternative would not increase demand for library, park, or school services. Therefore, impacts to public services would be less than significant and similar to the proposed project.

5.5.13 Transportation

The proposed project would develop the project site with a last-mile logistics facility. The proposed project has the potential to generate approximately 2,606 average daily trips (ADT), including 278 trips (125 inbound and 153 outbound) in the a.m. peak hour and 360 trips (228 inbound and 133 outbound) in the p.m. peak hour, in passenger car equivalents (PCE). With the reduction of the trip generation associated with the existing uses, the proposed project would result in a net increase in trips of 1,424 ADT, including 171 trips (27 inbound and 144 outbound) in the a.m. peak hour and 265 trips (219 inbound and 46 outbound) in the p.m. peak hour, in PCE. With the addition of the project,

all study area intersections would continue to operate at satisfactory LOS during both peak hours. The proposed project would not conflict with the *Orange County Congestion Management Program* (CMP) or the City's General Plan Circulation Element, or the SCAG 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy. Impacts related to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would be less than significant. The proposed project would generate a similar vehicle mix to the other surrounding warehouse land uses in the Cypress Corporate Center Amended Specific Plan and the Katella Avenue Corridor. Thus, the project would not introduce truck traffic to an area where such traffic does not currently exist. Additionally, all new driveways at the project site would be subject to the provisions of the City of Cypress design standards to alleviate design feature and safety hazards, which would reduce any potential impacts to less than significant levels. Therefore, the proposed project's impacts with respect to design feature hazards would be less than significant. No mitigation is required.

5.5.13.1 Alternative 1: No Project Alternative

The No Project Alternative would not require any demolition or construction other than potential minor renovations to the interiors of the existing buildings because no new development would occur on the project site. Although the operation of a corporate headquarters under the No Project Alternative, as permitted under the Specific Plan, is expected to generate a larger number of vehicle trips (2,364 ADT[1]) than existing conditions (1,182 ADT), the number of vehicle trips generated under the No Project Alternative would be slightly less than the proposed project (a total of 2,606 ADT[2]). Therefore, traffic impacts under the No Project Alternative would be less than significant and less than the proposed project.

5.5.13.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the operation of a last-mile logistics facility similar to the proposed project on the project site; however, the Reduced Project Alternative would have a reduced capacity. The Reduced Project Alternative would result in less of an increase in vehicle trips to and from the project site because the number of delivery vans operating from the project site would be reduced by 30 percent. Like the proposed project, all study area intersections would continue to operate at satisfactory LOS during both peak hours under the Reduced Project Alternative. The Reduced Project Alternative would not conflict with the *Orange County Congestion Management Program* (CMP), City's General Plan Circulation Element, or the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy. Impacts related to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would be less than significant. Similar to the proposed project, the Reduced Project Alternative would generate a similar vehicle mix to the other surrounding warehouse land uses in the Cypress Corporate Center Amended Specific Plan and the Katella Avenue Corridor. Thus, the project would not introduce truck traffic to an area where such traffic does not currently exist. Additionally, all new driveways at the project site would be subject to the provisions of the City of Cypress design standards to alleviate design feature and safety hazards, which would reduce any potential impacts to less than significant levels. Therefore, the Reduced Project Alternative's impacts

1 Measured in passenger car equivalents (PCEs).
2 Ibid.

with respect to design feature hazards would be less than significant. No mitigation is required. Because the Reduced Project Alternative would result in less vehicle trips compared to the proposed project, traffic impacts would be less than the proposed project.

5.5.13.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. The Office Alternative would generate 2,128 more daily vehicle trips than the proposed project. Although the Office Alternative would result in more vehicle trips than the proposed project, all study area intersections would continue to operate at satisfactory LOS during both peak hours. The Office Alternative would not conflict with the *Orange County Congestion Management Program* (CMP), City's General Plan Circulation Element, or the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy. Impacts related to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would be less than significant. The Office Alternative would not include any land uses that would be incompatible with surrounding land uses and would generate a similar vehicle mix to other surrounding land uses, consisting primarily of warehouse and office uses. In addition, all new driveways would be subject to the provisions of the City of Cypress design standards to alleviate design feature and safety hazards. Therefore, impacts related to hazards due to a geometric feature or incompatible uses and inadequate emergency access would be less than significant and no mitigation is required. Because the Office Alternative would result in more vehicle trips compared to the proposed project, traffic impacts would be greater than the proposed project.

5.5.14 Tribal Cultural Resources

A cultural resources record search was completed on May 21, 2020, at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) at California State University, Fullerton. No archaeological resources have been previously recorded within the project site or within 0.25-mile of the project site. Additionally, no specific information regarding tribal cultural resources was received during the Native American consultation. Therefore, the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined by CEQA that is listed or eligible for listing in the California Register of Historical Resources (California Register) or a local register. The project site is not likely to contain any human remains due to the fact that soils on the site have been previously disturbed from past grading activities on the project site and surrounding area. Nevertheless, the City is recommending the inclusion of mitigation measures requiring the retention of a Gabrieleno Native American Tribal representative to monitor all ground-disturbing construction activities on the project site to protect any potentially unknown tribal cultural resources on the project site. Additionally the proposed project would also be required to comply with Health and Safety Code Section 7050.5 for the treatment of human remains. Implementation of mitigation would reduce any potential impacts to previously undiscovered tribal cultural resources to a less than significant level.

5.5.14.1 Alternative 1: No Project Alternative

The No Project Alternative would not require any excavation, grading or site work because no demolition or construction activities would occur on the project site. Therefore, the No Project Alternative would not cause a substantial adverse change in the significance of a tribal cultural resource as defined by CEQA that is listed or eligible for listing in the California Register or a local register. Further, the No Project Alternative would not have the potential to disrupt human remains or result in the discovery of previously unknown tribal cultural resources. No impacts related to tribal cultural resources would occur; therefore, the impacts of the No Project Alternative would be less than those of the proposed project.

5.5.14.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative would develop the project site with a last-mile logistics facility similar to the proposed project, but at a reduced capacity, and would require similar ground-disturbing construction activities for the development. Similar to the proposed project, the Reduced Project Alternative would not cause a substantial adverse change in the significance of a tribal cultural resource as defined by CEQA that is listed or eligible for listing in the California Register or a local register because no previously recorded cultural resources were identified in the project site during the records search or during the Native American consultation. The Reduced Project Alternative would be required to incorporate the same mitigation measure as the proposed project that requires Native American monitoring and would also be required to comply with Health and Safety Code Section 7050.5. Implementation of mitigation and adherence to regulatory standards would reduce potential impacts related to tribal cultural resources to a less than significant level.

The Reduced Project Alternative would result in no impacts to tribal cultural resources that are listed or eligible for listing in the California Register or a local register, and less than significant impacts with mitigation incorporated for previously undiscovered significant tribal cultural resources and Native American human remains. The Reduced Project Alternative would result in similar impacts to unknown tribal cultural resources compared to the proposed project because it would require similar ground-disturbing activities.

5.5.14.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. A larger grading footprint and additional excavation would be required compared to the proposed project because the Office Alternative would result in the demolition of additional buildings and the construction of 486,088 sf of office space in two four-story buildings. Similar to the proposed project, the Office Alternative would not cause a substantial adverse change in the significance of a tribal cultural resource as defined by CEQA that is listed or eligible for listing in the California Register or a local register because no previously recorded cultural resources were identified in the project site during the records search or during the Native American consultation. The Office Alternative would be required to incorporate the same mitigation measure as the proposed project that requires Native American monitoring and would also be required to comply with Health and Safety Code Section 7050.5. Implementation of

mitigation and adherence to regulatory standards would reduce potential impacts related to tribal cultural resources to a less than significant level.

The Office Alternative would result in no impacts to tribal cultural resources that are listed or eligible for listing in the California Register or a local register, and less than significant impacts with mitigation incorporated for previously undiscovered significant tribal cultural resources and Native American human remains. The Office Alternative would result in greater impacts to unknown tribal cultural resources compared to the proposed project because it would require a larger footprint and additional excavation.

5.5.15 Utilities and Service Systems

Utilities and service systems include water, wastewater, electricity, natural gas, telecommunication, solid waste, and storm drain facilities. The proposed project would include the reconfiguration of on-site water distribution, electrical lines, natural gas lines, and telecommunication lines due to the removal of several buildings on the project site. The proposed project would also include wastewater conveyance and stormdrain systems to serve the proposed project. Additionally, the proposed project would result in a reduction in electricity, natural gas, and water demand and wastewater generation compared to existing uses on the project site. Additionally, the proposed project would result in a reduction in solid waste disposal compared to existing uses on the project site. Therefore, impacts related to utilities and service systems would be less than significant, and no mitigation is required.

5.5.15.1 Alternative 1: No Project Alternative

The No Project Alternative would not require demolition or construction activities on the project site, so it would not require the reconfiguration of on-site water distribution, electrical lines, natural gas lines, and telecommunication lines or the construction of wastewater conveyance and stormdrain systems to serve the existing uses. However, the No Project Alternative would result in the reoccupation of existing structures and the operation of a corporate headquarters, as permitted under the Specific Plan, which is expected to result in a greater demand for electricity, natural gas, and water demand and wastewater and solid waste generation compared to existing uses on the project site. However, existing service providers are expected to be able to accommodate the increased demand for utility services due to existing infrastructure and similar previous uses on the project site. Therefore, the No Project Alternative would have less than significant impacts on utilities and service systems, and this alternative would have greater impacts than the proposed project.

5.5.15.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative includes the development of a last-mile logistics facility similar to the proposed project but at a reduced capacity. However, the Reduced Project Alternative would also require the reconfiguration of on-site water distribution, electrical lines, natural gas lines, and telecommunication lines due to the removal of several buildings on the project site. The Reduced Project Alternative would also include wastewater conveyance and stormdrain systems to serve the proposed project. Compared to the proposed project, the Reduced Project Alternative would result in similar demand for electricity and natural gas as the proposed project because the reduced

number of delivery vans operating on the project site would not affect the on-site electricity or natural gas consumption. Additionally, the Reduced Project Alternative would generate slightly less demand for water and would generate slightly less solid waste and wastewater than the proposed project due to reduced operations. Therefore, the Reduced Project Alternative would have less than significant impacts on utilities. This alternative would have less impact related to utilities and service systems than the proposed project.

5.5.15.3 Alternative 3: Office Alternative

The Office Alternative would demolish all of the existing structures on the project site and replace them with 486,088 sf of office space in two four-story office buildings that would be developed on the northern half of the project site along Katella Avenue. The Office Alternative would also require the reconfiguration of on-site water distribution, electrical lines, natural gas lines, and telecommunication lines due to the removal of buildings and construction of new buildings on the project site. The Office Alternative would also include wastewater conveyance and stormdrain systems to serve the proposed project. Compared to the proposed project, the Office Alternative would result in greater demand for electricity, natural gas, water, and telecommunications because this alternative would include office uses, which typically have a higher utility demand than warehouse uses. Additionally, the Office Alternative would generate more solid waste and wastewater. However, existing service providers are expected to be able to accommodate the increased demand for utility services due to existing infrastructure and similar previous uses on the project site. Therefore, the Office Alternative would have less than significant impacts on utilities. This alternative would have greater impacts related to utilities and service systems than the proposed project.

5.5.16 Project Objectives

The Project Objectives include:

Objective 1: Provide a new development consistent with the intent of the Cypress Corporate Center Amended Specific Plan on a recently vacated parcel.

Objective 2: Provide new jobs in an area of the City that has experienced the loss of two major employers in recent years.

Objective 3: Provide for the development of a last mile logistics facility located directly adjacent to Katella Avenue, which is one of the City's major travel corridors.

Objective 4: Ensure a sensitive transition between commercial or business park uses and residential uses by implementing precise development standards with such techniques as buffering, landscaping, and setbacks (General Plan Policy LU-2.1).

Objective 5: Maintain the streetscape along Katella Avenue in a manner that is consistent with the goals and objectives of the Cypress Corporate Center Specific Plan.

5.5.16.1 Alternative 1: No Project Alternative

Under the No Project Alternative, the existing buildings on the project site would be reoccupied and operated as a corporate headquarters. Therefore, although no new development would occur on the project site (Objective 1), the No Project Alternative would provide new employment opportunities in an area of the City that has experienced major employment losses in recent years (Objective 2). In addition, the project site's existing configuration complies with the screening, buffering, and setback requirements set forth in the Cypress Corporate Center Specific Plan (Objective 4), and it is presumed that the existing streetscape along Katella Avenue would be maintained in a manner that is consistent with the Cypress Corporate Center Specific Plan (Objective 5). Of key importance, the No Project Alternative would not develop a last-mile logistics facility (Objective 3). Therefore, the No Project Alternative would be consistent with three of the five project objectives (Objectives 2, 4, and 5). Because is not clear whether the No Project Alternative would provide more or less employment than the proposed project, it is not possible to determine whether the No Project Alternative would achieve Objective 2 to the same degree as the proposed project.

It is worth noting that the buildings on the project site were built in the 1980s to meet the needs of a specific user (Mitsubishi Motors of America). In recent decades, there has been a strong trend for large corporations to build their own customized headquarters space rather than occupying the space vacated by another company. This allows the corporation to ensure the space is configured to meet its current, specific needs, take advantage of recent improvements in energy efficiency and technology, and attract and retain top talent by offering state-of-the-art workspace and amenities. Given the age of the existing buildings on the project site, it is not likely that they would satisfy the needs of a new corporate headquarters user without substantial remodeling. Even then, the building floorplates may be too big or too small and the buildings may not be properly located on the site to allow for efficient operations. The fact that the Applicant/Developer has submitted a development application to the City to complete the proposed project suggests that it has encountered some difficulty with attracting a new user to occupy the existing buildings.

5.5.16.2 Alternative 2: Reduced Project Alternative

The Reduced Project Alternative would develop a last-mile logistics facility similar to the proposed project on the project site; however, the Reduced Project Alternative would have a reduced capacity. Because the Reduced Project Alternative would include the same uses as the proposed project, the Reduced Project Alternative would also be consistent with all of the project objectives. With respect to Objective 2 (new employment), the Reduced Project Alternative would generate less employment than the proposed project. Therefore, the Reduced Project Alternative would not achieve Objective 2 to the same degree as the proposed project.

This analysis assumes that a developer would be willing and able to feasibly develop the project site at the reduced density and that an operator would be willing to occupy the site and operate a last-mile logistics facility with a reduced capacity. The Applicant/Developer carefully considered its operational needs in light of the project site's size and all of the potential site plan configurations when preparing its plans for the proposed project. Therefore, the proposed project's design already reflects the optimal layout that would allow the operator to maximize its operating efficiencies and

operate its last-mile logistics facility profitably. For this reason, the Reduced Project Alternative is not likely to be very attractive to a potential last-mile logistics facility.

5.5.16.3 Alternative 3: Office Alternative

The Office Alternative assumes that all of the existing buildings on the project site would be demolished and replaced with 486,088 sf of space in two four-story office buildings as well as a multi-story parking structure. The Office Alternative would develop an office use on the project site that is consistent with the Cypress Corporate Center Specific Plan (Objective 1), which would provide new employment opportunities in a part of the City that has experienced major employment losses in recent years (Objective 2). Because the Office Alternative would generate nearly twice as many vehicle trips (4,734 ADT) as the proposed project (2,606 ADT), it is reasonable to conclude that the Office Alternative would generate substantially more new jobs than the proposed project. Therefore, the Office Alternative would achieve Objective 2 to a greater extent than the proposed project.

The Office Alternative would be required to comply with the screening, buffering, and setback requirements set forth in the Cypress Corporate Center Specific Plan (Objective 4) and would maintain the existing streetscape along Katella Avenue in a manner that is consistent with the Cypress Corporate Center Specific Plan by placing the proposed parking areas away from the direct view of passing motorists (Objective 5). The Office Alternative would not develop a last-mile logistics facility on the project site (Objective 3). Therefore, the Office Alternative would be consistent with four of the five project objectives (Objectives 1, 2, 4, and 5). As noted above, the Office Alternative would provide more new jobs than the proposed project and would, therefore, achieve Objective 2 to a greater extent than the proposed project.

5.6 IDENTIFICATION OF ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of an Environmentally Superior Alternative among the proposed project and the alternatives evaluated in an EIR. *State CEQA Guidelines* Section 15126.6(e)(2) provides that, if the No Project Alternative is the Environmentally Superior Alternative, then the EIR shall also identify an Environmentally Superior Alternative among the other alternatives and the proposed project. The qualitative environmental effects of each alternative in relation to the proposed project are summarized in Table 5.A. As explained under 5.1, Introduction, the comparisons contained in Table 5.A and the subsequent discussion are provided for informational purposes only, because the proposed project would not result in any significant and unavoidable impacts.

Table 5.A: Comparison of the Environmental Impacts of the Proposed Project and Project Alternatives

Impact Area	Proposed Project Impact with Mitigation (if any)	Alternative 1: No Project Alternative	Alternative 2: Reduced Project Alternative	Alternative 3: Office Alternative
Aesthetics	Less than Significant	Similar	Similar	Greater
Air Quality	Less than Significant	Less	Less	Greater
Biological Resources	Less than Significant	Less	Similar	Greater
Cultural Resources	Less than Significant[1]	Less	Similar	Greater
Energy	Less than Significant	Less	Less	Greater
Geology and Soils	Less than Significant[1]	Less	Similar	Greater
Greenhouse Gas Emissions	Less than Significant	Less	Less	Greater
Hazards and Hazardous Materials	Less than Significant[1]	Less	Less	Similar
Hydrology and Water Quality	Less than Significant	Similar	Similar	Similar
Land Use and Planning	Less than Significant	Less	Similar	Similar
Noise	Less than Significant	Less	Less	Greater
Public Services	Less than Significant[1]	Similar	Less	Similar
Transportation	Less than Significant	Less	Less	Greater
Tribal Cultural Resources	Less than Significant[1]	Less	Similar	Greater
Utilities and Service Systems	Less than Significant	Greater	Less	Greater

[1] Mitigation identified.

The No Project Alternative would have the least impact on the environment because it would require minimal construction, with the exception of the minor renovation of the existing buildings on the project site, and would thereby avoid most of the proposed project's environmental impacts resulting from construction. However, the No Project Alternative would result in greater utilities and service system impacts because the reoccupation of existing structures and the operation of a corporate headquarters, as permitted under the Specific Plan, is expected to result in a greater demand for utility and service system services compared to existing uses on the project site. However, the No Project Alternative cannot be the only Environmentally Superior Alternative. Therefore, according to Section 15126.6€(2) of the *State CEQA Guidelines*, because the No Project Alternative has been identified as the environmentally superior alternative, the EIR shall also identify the proposed project or one of the other alternatives as the Environmentally Superior Alternative.

Putting aside the No Project Alternative, the Reduced Project Alternative is the Environmentally Superior Alternative. As shown in Table 5.A, the Reduced Project Alternative would result in more impacts that are "less" than the proposed project and the Office Alternative. The Reduced Project Alternative would have the least impact on the environment because the project site would be developed at a reduced capacity, thereby further reducing most of the proposed project's environmental impacts compared to the other alternatives (other than the No Project Alternative). The Reduced Project Alternative would also meet all of the project objectives, but to a lesser extent than the proposed project. Accordingly, it is determined that the Reduced Project Alternative is the Environmentally Superior Alternative because it would meet all of the project's objectives and would result in reduced environmental impacts as compared to the proposed project.

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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. Implementation of the proposed project would not result in any impacts that are considered significant, adverse, and unavoidable. All environmental issues analyzed in this Draft EIR were determined to result in less than significant impacts, or can be reduced to less than significant levels with the incorporation of mitigation measures.

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 4.5, Energy, of this Draft EIR, the proposed project would not result in significant impacts related to energy use. Therefore, no mitigation is required.

6.3 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. This section examines ways in which the proposed project could foster economic or population growth, or the construction of additional housing either directly or indirectly in the surrounding environment. *State CEQA Guidelines* Section 15126.2(d) 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. To address these issues, potential growth-inducing effects were examined through analysis of the following questions:

- Would the project remove obstacles to, or otherwise foster, population growth (e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development)?

- Would the project foster economic growth?

- Would approval of the project involve some characteristic that may encourage and facilitate other activities that could significantly affect the environment?

Growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment (*State CEQA Guidelines*, Section 15126.2(e)). This issue is presented to provide additional information on ways in which the proposed project could contribute to significant changes in the environment beyond the direct consequences of developing the proposed land uses as described in earlier sections of this Draft EIR.

6.3.1 Removal of Obstacles to, or Otherwise Foster, Population Growth

The area surrounding the project site is already highly urbanized and developed with a variety of residential, commercial, office, and warehouse land uses, so limited population growth is feasible within the vicinity of the project site. In any event, the proposed project would not remove impediments to population growth in the area surrounding the project site. While the proposed project may require water, sewer, drainage, electricity, and natural gas lines on site and in the immediate vicinity of the project site, such improvements would be intended primarily to meet project-related demand and were already existing to serve existing uses on the project site and would not necessitate substantial utility infrastructure improvements. In addition, the all access and internal circulation improvements planned with respect to the proposed project are intended to provide for better circulation flows within the project site and to the project site, and would not foster off-site population growth.

The construction of the proposed project would generate a substantial number of construction-related jobs. However, the proposed project would not promote construction workers relocating their places of residence as a direct consequence of working on the proposed project because it is expected that local and regional construction workers would be available to meet the proposed project's construction needs. 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. Therefore, the proposed project would not induce material population growth from a short-term employment perspective.

The proposed project would not cause or result in direct population growth because the proposed project would not provide or removed housing on the project site. The proposed last mile logistics facility would result in employment at the project site; however, this use is not anticipated to result in substantial population growth in the area because the project site was recently utilized as a corporate headquarters for Mitsubishi Motors of America. Therefore, employment already existed on the project site. As of May 2020, the City had a labor force of 24,200, and the County had a labor

force of 1,548,900, with approximately 3,700 and 224,500 people unemployed, respectively.[1] The May 2020 unemployment rate was 15.4 percent for the City and 14.5 percent for the County.[2] This suggests an available local and regional labor pool to serve the long-term employment opportunities offered by the proposed project. Because it is expected that the local and regional labor pools would be available to full these jobs, it is unlikely that the employment offered by the proposed project would cause people to move or relocate to the area solely for the purpose of being close to the project site. Therefore, although the proposed project would provide employment opportunities, it would not result in substantial indirect growth or create a significant demand for housing in the project site vicinity.

Therefore, given that the employment opportunities generated by the construction and operation of the proposed project would be filled by people who would commute to the project site, the potential population growth associated with project employees would be minimal.

6.3.2 Foster Economic Growth

In its existing condition, the project site is an underutilized lot consisting of existing structures recently vacated by Mitsubishi Motors of America. The project site currently does not generate revenue for the City. The proposed project would provide a new source of property tax revenues to the City, thereby increasing the local tax base. As previously discussed, the construction of the proposed project would generate a substantial number of construction-related jobs and new employment opportunities in the City during the construction period. As also discussed, the proposed last mile logistics facility would provide jobs on the project site that would likely be filled by persons already residing in the City of Cypress or the region. Therefore, the proposed project would foster economic growth.

6.3.3 Other Characteristics

The proposed project includes the development of a last mile logistics facility. Because the project does not propose to amend the existing General Plan or Specific Plan land use designations and zoning classifications to residential, and would not add any permanent residents to the project site, the project would not directly increase the City's population beyond existing levels. The proposed conditional use permit would not cause a future increase in density or land use and would not have any growth-inducing impacts. Any future growth in the City is likely to occur regardless of whether or not the project is approved. Approval of the project would not involve some characteristic that may encourage and facilitate other activities that could significantly affect the environment.

6.4 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-

[1] State of California Employment Development Department. 2020. *Monthly Labor Force Data for Cities and Census Designated Places, May 2020*. June 19, 2020.

[2] Ibid.

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) 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. Water, which is a limited, slowly renewable resource, would also be consumed during construction of the proposed project. However, given the temporary nature 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.

Operation of the proposed project would continue to expend similar nonrenewable resources that are currently consumed within Cypress 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 buildings, transportation within the project site, and building lighting. Fossil fuels are primary energy sources for project construction and operation. This existing, finite energy source would thus be incrementally reduced. Under Title 24, Part 6 of the California Code of Regulations (CCR), conservation practices limiting the amount of energy consumed by the proposed project would be required during operation. Nevertheless, the use of such resources would continue to represent a long-term commitment of essentially nonrenewable resources.

The proposed project would result in the limited use of potentially hazardous materials contained in typical cleaning agents and pesticides for landscaping on the project site. 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.

In summary, construction and operation of the proposed project would commit the use of slowly renewable and nonrenewable 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

and consistent with regional and local urban design and development goals for the area. As a result, the use of nonrenewable resources in this manner would not result in significant irreversible changes to the environment under the proposed project.

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7.0 MITIGATION MONITORING AND REPORTING PROGRAM

7.1 MITIGATION MONITORING REQUIREMENTS

California Public Resources Code Section 21081.6, which is part of the CEQA statute, mandates that 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.

- The lead agency shall provide measures to mitigate or avoid potentially 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, 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 for the proposed Amazon Facility project (proposed project) has been prepared in compliance with Section 21081.6. It describes the requirements and procedures to be followed by the City of Cypress, as the Lead Agency, to ensure that all mitigation measures adopted as part of the proposed project will be carried out as described in this Draft EIR.

Table 7.A sets forth the proposed mitigation monitoring and reporting program. It lists each of the mitigation measures specified in this Draft EIR and identifies the party or parties responsible for implementation and monitoring of each measure.

Table 7.A: Mitigation Monitoring and Reporting Program

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
4.3: Biological Resources					
Regulatory Compliance Measure 4.3-1: **Nesting Bird Survey and Avoidance.** If vegetation removal, construction, or grading activities are planned to occur within the active nesting bird season (February 1 through August 31), the City of Cypress, or designee, shall confirm that the Applicant/Developer has retained a qualified biologist who shall conduct a preconstruction nesting bird survey no more than 3 days prior to the start of such activities. The nesting bird survey shall include the work area and areas adjacent to the site (within 500 feet, as feasible) that could potentially be affected by project-related activities such as noise, vibration, increased human activity, and dust, etc. For any active nest(s) identified, the qualified biologist shall establish an appropriate buffer zone around the active nest(s). The appropriate buffer shall be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Project activities shall be avoided within the buffer zone until the nest is deemed no longer active, as determined by the qualified biologist.	Three days prior to commencement of grading activities	Applicant/Developer and City of Cypress Community Development Director, or designee			
4.4: Cultural Resources					
Regulatory Compliance Measure 4.4-1: **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 of Orange (County) Coroner has made a determination of origin and disposition pursuant to State Public Resources Code (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	During construction activities	Construction supervisor/ Applicant/ Developer/			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
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 items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.					
Mitigation Measure 4.4-1 : **Cultural Resources Monitoring and Accidental Discovery.** Prior to the issuance of grading permits, and in adherence to the recommendations of the *Cultural Resources Study for the Amazon Distribution Center Project* (2020), the Applicant/Developer shall retain a qualified archaeological monitor, with approval of the City of Cypress (City) Community Development Director or designee. A monitoring plan shall be prepared by the archaeologist and implemented upon approval by the City. The monitor shall be present full-time during the first 10 working days when excavation activities will extend below Artificial Fill deposits into native soils. No archaeological monitoring is required during demolition of existing buildings or clearing/grubbing of existing landscape If cultural materials are discovered during grading or excavation, the construction contractor shall divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find. Project personnel shall not collect or move any archaeological materials or human remains and associated materials. To the extent feasible, project activities shall avoid these deposits. Where avoidance is not feasible, the archaeological deposits shall be evaluated for their eligibility for listing on the California Register of Historical Resources. If the deposits are not eligible, avoidance is not necessary. If the deposits are eligible, adverse effects on the	Prior to the issuance of a grading permit and during construction activities	Applicant/Developer and/or construction supervisor/City of Cypress Director of Community Development Department, or designee			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
deposits must be avoided, or such effects must be mitigated. Mitigation can include, but is not necessarily limited to: excavation of the deposit in accordance with a data recovery plan (see California Code of Regulations [CCR] Title 4(3) Section 5126.4(b)(3)(C)) and standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; production of a report detailing the methods, findings, and significance of the archaeological site and associated materials; curation of archaeological materials at an appropriate facility for future research and/or display; an interpretive display of recovered archaeological materials at a local school, museum, or library; and public lectures at local schools and/or historical societies on the findings and significance of the site and recovered archaeological materials. The City Community Development Director, or designee, shall be responsible for reviewing any reports produced by the archaeologist to determine the appropriateness and adequacy of the findings and recommendations.					
4.5: Energy					
Regulatory Compliance Measure 4.5-1: **Idling Restriction Signage.** Prior to the issuance of grading permits, the City of Cypress (City) Community Development Director shall confirm that the grading plans for the project include a requirement that a sign shall be posted on site stating that construction workers shall shut off engines at or before five minutes of idling.	Prior to issuance of a building permit	Applicant/Developer and City of Cypress Chief Building Official, or designee			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
Regulatory Compliance Measure 4.5-2: **California Code of Regulations (CCR), Title 24.** Prior to the issuance of building permits, the City Chief Building Official, or designee, shall confirm that the project design complies with the 2019 Building Energy Efficiency Standards (CCR Title 24) energy conservation and green building standards, as well as those listed in Part 11 (California Green Building Standards [CALGreen Code]). The City's Chief Building Official shall confirm that the project complies with the mandatory measures listed in the CALGreen Code for residential and non-residential building construction.	Prior to issuance of a building permit	Applicant/Developer and City of Cypress Chief Building Official, or designee			
4.6: Geology and Soils					
Regulatory Compliance Measure 4.6-1: **California Building Code Compliance Seismic Standards.** All structures shall be designed in accordance with the seismic parameters presented in the Geotechnical Assessment prepared for this project (SCG Geotechnical, Inc., 2019) and applicable sections of the most current California Building Code (CBC). Prior to the issuance of building permits for planned structures, the Project Soils Engineer and the City of Cypress Chief Building Official, or designee, shall review building plans to verify that the structural design conforms to the requirements of the Geotechnical Assessment and the City of Cypress Municipal Code.	Prior to issuance of building permits	Applicant/Developer and City of Cypress Chief Building official, or designee			
Mitigation Measure 4.6-1: **Compliance with the Recommendations in the Project Geotechnical Assessment.** The Applicant/Developer's construction contractor shall implement the recommendations of the *Geotechnical Investigation, Amazon Distribution Center, SWC Katella Avenue and Holder Street, Cypress, California* (Geotechnical Assessment) (Southern California Geotechnical, Inc. [SCG], December 4, 2019; Geotechnical Assessment) prepared for the proposed project, as applicable to the satisfaction of the City of Cypress' (City) Chief Building Official or designee.	Prior to issuance of grading permits	Applicant/Developer and City of Cypress Chief Building official, or designee			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
Additional site testing and final design evaluation shall be conducted by the Project Geotechnical Consultant to refine and enhance these requirements. The Applicant/Developer shall require the Project Geotechnical Consultant to assess whether the requirements in that report need to be modified or refined to address any changes in the project features that occur prior to the start of grading. If the Project Geotechnical Consultant identifies modifications or refinements to the requirements, the Applicant/Developer shall require appropriate changes to the final project design and specifications. Design, grading, and construction shall be performed in accordance with the requirements of the Cypress Municipal Code and the California Building Code (CBC) applicable at the time of grading, appropriate local grading regulations, and the requirements of the Project Geotechnical Consultant as summarized in a final written report, subject to review by the Cypress Director of Public Works, or designee, prior to commencement of grading activities. Grading plan review shall also be conducted by the Director of Public Works, or designee, prior to the start of grading to verify that the requirements developed during the geotechnical design evaluation have been appropriately incorporated into the project plans. Design, grading, and construction shall be conducted in accordance with the specifications of the Project Geotechnical Consultant as summarized in a final report based on the CBC applicable at the time of grading and building, and the City's Building Code. On-site inspection during grading shall be conducted by the Project Geotechnical Consultant and the Cypress Director of Public Works/City Engineer, or designee, to ensure compliance with geotechnical specifications as incorporated into project plans. Prior to the final grading permits, the Project Geotechnical Consultant shall submit a Final Testing and Observation Geotechnical Report for Rough Grading to the Cypress Director of Public Works/City Engineer, or designee.					

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
Mitigation Measure 4.6-2: **Procedures for Unexpected Paleontological Resources Discoveries.** In the event that paleontological resources are encountered, work in the immediate area of the discovery shall be halted and the Applicant/Developer shall retain a professional Paleontologist who meets the qualifications established by the Society of Vertebrate Paleontology to assess the discovery. The qualified, professional Paleontologist shall make recommendations regarding the treatment and disposition of the discovered resources, as well as the need for subsequent paleontological mitigation, which may include, but not be limited to, paleontological monitoring, collection of observed resources, preservation, stabilization and identification of collected resources, curation of resources into a museum repository, and preparation of a monitoring report of findings. The City of Cypress shall ensure that the recommendations from the qualified, professional Paleontologist shall be followed by the Applicant/ Developer.	During ground-disturbing activities	Applicant/Developer and/or construction supervisor/City of Cypress Director of Community Development Department or designee			
4.8: Hazards and Hazardous Materials					
Mitigation Measure 4.8-1: If the clarifiers are left intact and functional, the Applicant/ Developer shall periodically inspect them during routine service to ensure that they remain in good condition. If the hydraulic lift(s) and/or clarifiers on the project site are left remaining intact, the Applicant/Developer shall adhere to all local regulatory agency requirements related to the proper decommissioning of those facilities, which may include soil sampling.	During routine service or prior to the commencement of construction activities	Applicant/Developer			
4.9: Hydrology and Water Quality					
Regulatory Compliance Measure 4.9-1: **Construction General Permit.** Prior to commencement of construction activities, the Applicant/Developer shall obtain coverage under the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with*	Prior to commencement of construction activities	Applicant/Developer and City of Cypress Director of Community Development Department or			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
Construction and Land Disturbance Activities (Construction General Permit), NPDES No. CAS000002, Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ, or any other subsequent permit. This shall include submission of Permit Registration Documents (PRDs), including permit application fees, a Notice of Intent (NOI), a risk assessment, a site plan, a Stormwater Pollution Prevention Plan (SWPPP), a signed certification statement, and any other compliance-related documents required by the permit, to the State Water Resources Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). Construction activities shall not commence until a Waste Discharge Identification Number (WDID) is obtained for the project from the SMARTS and provided to the Director of the City of Cypress (City) Community Development Department, or designee, to demonstrate that coverage under the Construction General Permit has been obtained. Project construction shall comply with all applicable requirements specified in the Construction General Permit, including, but not limited to, preparation of a SWPPP and implementation of construction site best management practices (BMPs) to address all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate risk level identified for the project. The SWPPP shall identify the sources of pollutants that may affect the quality of stormwater and shall include BMPs (e.g., Sediment Control, Erosion Control, and Good Housekeeping BMPs) to control the pollutants in stormwater runoff. Construction Site BMPs shall also conform to the requirements specified in the latest edition of the Orange County Stormwater Program *Construction Runoff Guidance Manual for Contractors, Project Owners, and Developers* to control and minimize the impacts of construction and construction-related activities, materials, and pollutants on the watershed. Upon completion of construction activities and stabilization of the project site, a Notice of Termination shall be submitted via SMARTS.		designee			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
Regulatory Compliance Measure 4.9-2: **Groundwater Dewatering Permit.** If groundwater dewatering is required during construction or excavation activities and the dewatered groundwater is discharged to the sanitary sewer system, the Applicant/Developer shall obtain a discharge permit from the Director of the City of Cypress Public Works Department. If the dewatered groundwater is discharged to the stormdrain system, the Applicant/Developer shall obtain coverage under the *General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimis) Threat to Water Quality (*Order No. R8-2020-0006, NPDES No. CAG998001), which covers discharges to surface waters that pose an insignificant (de minimis) threat to water quality within. This shall include submission of a Notice of Intent for coverage under the permit to the RWQCB at least 45 days prior to the start of dewatering. The Applicant/Developer shall provide the Waste Discharge Identification Number (WDID) to the Director of the City's Public Works Department, or designee, to demonstrate proof of coverage under the *De Minimis* Permit. Groundwater dewatering shall not be initiated until a WDID is received from the Santa Ana Regional Water Quality Control Board (RWQCB) and is provided to the Director of the City's Public Works Department, or designee. Groundwater dewatering activities shall comply with all applicable provisions in the permit, including water sampling, analysis, treatment (if required), and reporting of dewatering-related discharges. Upon completion of groundwater dewatering activities, a Notice of Termination shall be submitted to the Santa Ana RWQCB.	Prior to commencement of construction activities	Applicant/Developer and City of Cypress Director of Community Development Department or designee			
Regulatory Compliance Measure 4.9-3: **Water Quality Management Plan.** Prior to the issuance of grading or building permits, the Applicant/Developer shall submit a Final Water Quality Management Plan (WQMP) to the City of Cypress Engineer, or designee, for review and approval in compliance with the requirements of the *Waste Discharge Requirements for the County*	Prior to the issuance of grading or building permits	Applicant/Developer and City of Cypress Engineer, or designee			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
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 (Order No. R8-2009-0030, NPDES No. CAS618030, as amended by Order No. R8-2010-0062) (North Orange County MS4 Permit). The Final WQMP shall be prepared consistent with the requirements of the *Technical Guidance Document for Water Quality Management Plans* (December 2013) and the Water Quality Management Plan template, or subsequent guidance manuals. The Final WQMP shall specify the BMPs to be incorporated into the project design to target pollutants of concern in runoff from the project area. The City shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design.					
Regulatory Compliance Measure 4.9-4: **Industrial General Permit.** Prior to commencement of industrial activities and issuance of a Certificate of Occupancy, the Applicant/Developer shall obtain coverage under the State Water Resources Control Board Industrial General Permit (Order WQ 2014-0057-DWQ as amended by Orders 2015-0122-DWQ and the 2018 Amendment documents) (Industrial General Permit). The Industrial General Permit regulates the discharge of storm water associated with industrial activity as defined by the U. S. Environmental Protection Agency. The proposed industrial activity at the proposed project falls under the Standard Industrial Code 4212 (Local Trucking without Storage) which is regulated under the Industrial General Permit. The proposed project shall comply with all applicable requirements specified in the Industrial General Permit, including the preparation of a Storm Water Pollution Prevention Plan and implementation of best management practices to control and minimize the impacts of industrial related activities, materials, and pollutants on the watershed.	Prior to commencement of industrial activities and issuance of a Certificate of Occupancy.	Applicant/Developer			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
Regulatory Compliance Measure 4.9-5: **Final Hydrology and Hydraulic Analysis.** The Applicant/Developer shall submit a Final Hydrology Study to the City of Cypress Director of Engineering, or his/her designee, for review and approval prior to issuance of grading and building permits. The Final Hydrology Study 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 Study shall demonstrate that the on-site drainage facilities and on-site underground detention systems are designed in compliance with 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 (Order No. R8-2009-0030, NPDES No. CAS618030, as amended by Order No. R8-2010-0062) (North Orange County MS4 Permit)* and the City peak flow restrictions from the City of Cypress Master Plan of Drainage. The Final Hydrology Study shall also demonstrate that the on-site drainage facilities and on-site underground detention systems are adequately sized to accommodate stormwater runoff from the design storm so that post-development runoff volume for the 25-year, 24 hour frequency storm does not exceed the pre-development flow rate, does not exceed the hydromodification requirements, and does not exceed the maximum allowable discharge for the project site ($Q_{allowable}$). The City Director of Engineering, or designee, shall ensure that the drainage facilities specified in the Final Hydrology Study are incorporated into the final project design.	Prior to the issuance of grading or building permits	Applicant/Developer and City of Cypress Engineer, or designee,			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
4.11: Noise					
Regulatory Compliance Measure 4.11-1: The construction contractor shall limit all construction-related activities to between the hours of 7:00 a.m. and 8:00 p.m. on weekdays and Saturdays. No construction shall be permitted outside of these hours or on Sundays or a federal holiday.	During construction	Applicant/Developer and City of Cypress Director of Community Development Department or designee			
4.12: Public Services					
Regulatory Compliance Measure 4.12-1: **Secured Fire Protection Agreement.** Prior to the issuance of any building permits, the Applicant/Developer shall enter into a Secured Fire Protection Agreement with the Orange County Fire Authority (OCFA). This Agreement shall specify the Applicant/Developer's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. Said agreement shall be reached as early as possible in the planning process.	Prior to issuance of any building permits	Applicant/Developer and Orange County Fire Authority (OCFA)/ City of Cypress Director of Community Development Department or designee			
4.14: Tribal Cultural Resources					
Mitigation Measure 4.14-1:Tribal Cultural Resources. Prior to the issuance of a grading permit, the Applicant/Developer shall retain one Gabrieleno Native American Tribal group to provide a tribal monitor for all ground-disturbing construction activities on the project site. Evidence that a tribal monitor has been retained shall be provided to the City of Cypress (City) Community Development Director, or designee, prior to the issuance of a grading permit. If tribal cultural resources (as defined in Public Resources Code (PRC) Section 21074) are discovered during construction activities, ground-disturbing activities in the immediate vicinity of the find shall be halted until the find is assessed by the tribal monitor. Ground-disturbing construction activities shall be allowed to continue in other portions of the project while the find is being assessed. If the find is determined to be a tribal cultural resource, the Gabrieleno Native American Tribe whose representative is responsible for tribal	Prior to issuance of any building permits and during ground-disturbing construction activities	Applicant/Developer and Gabrieleno Native American Tribal group and City of Cypress Community Development Director, or designee			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
monitoring shall coordinate with the Applicant/Developer to determine appropriate treatment of the resource. The Native American tribal monitor shall complete monitoring logs on a daily basis that provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The tribal monitor shall also provide appropriate insurance certificates. Tribal monitoring shall not be conducted after initial excavation of native (previously undisturbed) soil has occurred (i.e., no tribal monitoring shall be required for landscaping activities occurring after completion of project grading and trenching, as this soil will have been previously monitored). On-site tribal monitoring shall be considered complete after project grading and trenching are completed, and no disturbance to native (previously undisturbed) soils is anticipated.					
4.15: Utilities and Service Systems					
Regulatory Compliance Measure 4.15-1: **Sewer Improvement Standards.** All required sewer improvements shall be designed and constructed to City of Cypress (City) and Orange County Sanitation District (OCSD) standards and shall be approved by the City of Cypress Engineer prior to development. These improvements may be constructed in a phased sequence depending upon the development process. Facilities shall be dedicated to the City and/or OCSD at the completion of construction.	Prior to issuance of building permits and completion of applicable facilities	Applicant/Developer and City of Cypress Engineer or designee			
Regulatory Compliance Measure 4.15-2: **Water Conservation.** The Applicant/Developer shall comply with all State laws for water conservation measures. Voluntary water conservation strategies shall be encouraged. The Building Division shall determine compliance prior to issuance of building permits.	Prior to issuance of building permits	Applicant/Developer and City of Cypress Building Division			

Mitigation Measure/Regulatory Compliance Measure	Monitoring Milestone	Responsible Party Responsible for Monitoring	Verification of Compliance		
			Initials	Date	Remarks
Regulatory Compliance Measure 4.15-3: **Construction and Demolition Ordinance**. The Construction Contractor shall comply with the provisions of City Ordinance No. 1166 and the 2019 California Green Building Standards Code, which would reduce construction and demolition waste. Ordinance No. 1166 is codified in Article VIII, Materials Questionnaire for Certain Construction and Demolition Project within the City of Cypress in the City of Cypress Municipal Code.	Prior to and during project construction	Applicant/Developer and City of Cypress Director of Community Development Department or designee			

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8.0 LIST OF PREPARERS AND PERSONS CONSULTED

8.1 CITY OF CYPRESS

The following individuals from the City of Cypress (City) were involved in the preparation of this Draft Environmental Impact Report (EIR):

- Jeff Zwack, City Planner, Community Development Department
- Doug Dancs, PE, Director of Community Development, Community Development Department

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

The following individuals were involved in the preparation of this Draft EIR:

- Deborah Pracilio, Principal in Charge
- Ryan Bensley, AICP, Associate/Project Manager
- Amy Fischer, Principal/Air Quality, Noise and Global Climate Change Specialist
- Sarah Rieboldt, PH.D., Associate/Senior Paleontological Resources Manager
- Jayna Harris, Associate/Senior Environmental Planner
- Nicole West, CPSWQ, QSD/QSP, Associate
- Jason Lui, Associate/Senior Noise Specialist
- Shelby Cramton, Senior Environmental Planner
- Michael Slavick, Senior Air Quality Specialist
- Kerrie Collison, Senior Cultural Resources Manager
- Marlene Watanabe, Assistant Environmental Planner
- Abby Annicchiarico, Assistant Environmental Planner
- Jazmine Estores, Assistant Environmental Planner
- Gary Dow, Associate, Graphics
- Matt Phillips, Graphics Technician
- Lauren Johnson, Technical Editor
- Chantik Virgil, Senior Word Processor

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 Urban Crossroads

The following individuals were involved in the preparation of the *Katella Avenue Amazon Facility Traffic Impact Analysis* (June 2020):

- Aric Evatt, PTP, Principal
- Charlene So, P.E., Senior Associate

The following individuals were involved in the preparation of the *Katella Avenue Amazon Facility Noise Impact Analysis* (June 2020):

- Bill Lawson, P.E., INCE, Principal
- Sama Shami, Assistant Noise/Acoustics Analyst

The following individuals were involved in the preparation of the *Katella Avenue Amazon Facility Mobile Source Health Risk Assessment* (June 2020):

- Haseeb Qureshi, M.E., Senior Associate

The following individuals were involved in the preparation of the *Katella Avenue Amazon Facility Energy Analysis* (May 2020):

- Haseeb Qureshi, M.E., Senior Associate
- Alysssa Tamase, Analyst

The following individuals were involved in the preparation of the *Katella Avenue Amazon Facility Greenhouse Gas Analysis (May 2020*):

- Haseeb Qureshi, M.E., Senior Associate
- Alysssa Tamase, Analyst

The following individuals were involved in the preparation of the *Katella Avenue Amazon Facility Air Quality Impact Analysis (May 2020*):

- Haseeb Qureshi, M.E., Senior Associate
- Alysssa Tamase, Analyst

8.3.2 raSmith, Inc.

The following individuals were involved in the preparation of the *Preliminary Hydrology and Hydraulic Report for Amazon Delivery Station, DLX7 (May 2020*):

- Sam Jacoby, P.E., Senior Project Engineer

The following individuals were involved in the preparation of the *Preliminary Water Quality Management Plan (May 2020*):

- Sam Jacoby, P.E., Senior Project Engineer

8.3.3 Southern California Geotechnical, Inc.

The following individuals were involved in the preparation of the *Geotechnical Investigation, Two Proposed Warehouses, SWC Katella Avenue and Holder Street, Cypress, California (October 2019)*:

- Robert G. Trazo, M.Sc., G.E., Principal Engineer
- Ross Kovtun, Staff Geologist

8.3.4 Partner Engineering and Science, Inc.

The following individuals were involved in the preparation of the *Phase I Environmental Site Assessment – Mitsubishi Facility (August 2019):*

- Robin Blanchard, Senior Assessor
- Sarah Vosovic, Project Manager
- Mark Lambson, Principal

8.3.5 LSA

The following individuals were involved in the preparation of the *Cultural Resources Study for the Amazon Distribution Center Project (June 2020):*

- Sarah Rieboldt, PH.D., Associate/Senior Paleontological Resources Manager
- Kerrie Collison, Senior Cultural Resources Manager

8.4 PROJECT APPLICANT/DEVELOPER

8.4.1 Duke Realty Services

The project Applicant/Developer was consulted during the preparation of this Draft EIR:

- Adam Schmid, Senior Development Services Manager, Duke Realty Services

8.5 PERSONS CONSULTED

The following individuals were consulted during the preparation of this Draft EIR:

- Gabrieleno Band of Mission Indians – Kizh Nation
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- Rincon Band of Luiseño Indians
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