INITIAL STUDY

FOR THE

SCHEU DISTRIBUTION CENTER

Prepared for:

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LIST OF COMMONLY USED ABBREVIATIONS AND ACRONYMS

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AC	Acre
ACOE	U.S. Army Corps of Engineers
Act	Alquist-Priolo Earthquake Fault Zoning Act
ADT	Average Daily Traffic
af	Acre-Feet
Afu	Undocumented Artificial Fill
AG	Agriculture
AMSL	Above Mean Sea Level
APN	Assessor's Parcel Number
AQ/GHG	Air Quality/Greenhouse Gas
AQMP	Air Quality Management Plans
ARB	Air Resources Board
Basin	South Coast Air Basin
BGS	Below Ground Surface
BMPs	Best Management Practices
BUOW	Burrowing Owl
CAAQS	California Ambient Air Quality Standards
CalARP	California Accidental Release Prevention Program
CalEEMod™	California Emissions Estimator Model™
Cal/EPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Cal/OSHA	California Occupational Safety and Health Administration
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDC	California Department of Conservation
CDF	California Department of Forestry
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CETAP	Community Environmental Transportation Acceptability Program
CH_4	Methane
CMP	Congestion Management Program
CMP	Corrugated Metal Pipe
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society's
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CRA	Cultural Resources Assessment
CRMP	Cultural Resources Management Plan
CSD	Cucamonga School District
CUP	Conditional Use Permit
CVWD	Cucamonga Valley Water District
CY	Cubic Yards
CZ	Change of Zone

dB	Decibel
dBA	A-Weighted Decibel
dBA CNEL	A-weighted decibel Community Noise Equivalent Level
dBA Leq	A-weighted decibel equivalent noise level
DG	Decomposed Granite
DIF	Development Impact Fee
DMA	Drainage Management Area
DPM	diesel particulate matter
Dt	Domino Fine Sandy Loam, Saline-Alkali
DTSC	Department of Toxic Substance Control
Dv	Domino Silt Loam, Saline-Alkali
EAP	Existing Plus Ambient Growth Plus Project
EAPC	Existing Plus Ambient Growth Plus Project Plus Cumulative
EnA	Exeter Sandy Loam, 0 To 2 Percent Slopes
EO	Executive Order
EoB	Exeter Sandy Loam, Slightly Saline-Alkali, 0 To 5 Percent Slopes
EPA	Environmental Protection Agency
EpA	Exeter Sandy Loam, Deep, 0 To 2 Percent Slopes
EwB	Exeter Very Fine Sandy Loam, 0 To 5 Percent Slopes
EyB	Exeter Very Fine Sandy Loam, Deep, 0 To 5 Percent Slopes
°F	Fahrenheit
FEMA	Federal Emergency Management Act
FHWA	Federal Highway Administration
FIA	Fiscal Impact Analysis
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping & Monitoring Program
FTA	Federal Transit Administration
GHG	Greenhouse Gas
GI	General Industrial
GP	General Plan
GPA	General Plan Amendment
(GBMI-KN)	Gabrieleno Band of Mission Indians – Kizh Nation
GPEIR	General Plan Environmental Impact Report
HAP	Hazardous Air Pollutants
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFCs	Hydroflourocarbons
HRA	Health Risk Assessment
Hz	Hertz
I-P	Industrial Park
IS	Initial Study
IS/EA	Initial Study/Environmental Assessment
ITE	Institute of Transportation Engineers
kW	Kilowatt
KWh	Kilowatt Hours
LACM	Natural History Museum of Los Angeles County
LBP	Lead Based Paint
LESA	Land Evaluation & Site Assessment
Leq	Equivalent Energy Level
LI	Light Industrial
LID	Low Impact Development
LOS	Level of Service
LST	Localized Significance Thresholds
MBTA	Migratory Bird Treaty Act

MFCS	Matthew Fagan Consulting Services
MGD	Million Gallons Per Day
MLD	Most Likely Descendent
MM	Mitigation Measure
MMT	Million Metric Tons
MRZ	Mineral Resources Zones
M-SC	Manufacturing-Service Commercial
$MTCO_2e$	Metric Tons of Carbon Dioxide Equivalent
MWD	Metropolitan Water District of Southern California
MWh	Megawatt-Hour
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	Nitrogen Dioxide
NOA	Naturally Occurring Asbestos
NOAA	National Oceanic and Atmospheric Administration
NO_X	Oxides of Nitrogen
NPDES	National Pollution Discharge Elimination System
NR	Noise Reduction
NRCS	Natural Resources Conservation Service
O_3	Ozone
OHP	Office of Historic Preservation
OSHA	Occupational Safety and Health Administration
Pb	Lead
pc/mi/ln	Passenger Cars Per Mile Per Lane
PFCs	Perfluorocabons
$PM_{2.5}$	Fine Particulate Matter
PM_{10}	Respirable Particulate Matter
Ppb	Parts Per Billion
Ppm	Parts Per Million
PPV	Peak Particle Velocity
PRC	Public Resources Code
PVC	Polyvinyl Chloride
PV	Photovoltaic
Qoal	Older Alluvium
RCFPD	Rancho Cucamonga Fire Protection District
RCNM	Roadway Construction Noise Model
RMS	Root Mean Squared
ROG	Reactive Organic Gases
ROW	Right-of-Way
RWQCB	Regional Water Quality Control Board
RWRF	Regional Wastewater Reclamation Facility
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCG	Southern California Gas Company
SCS	Sustainable Communities Strategy
SF_6	Sulfur Hexafluoride
SFHA	Special Flood Hazard Area
SO2	Sulfur Dioxide
SOI	Sphere of Influence

SO_X	Oxides of Sulfur
SMARA	The Surface Mining and Reclamation Act of 1975
(SMBMI)	San Manuel Band of Mission Indians
SMGB	State Mining and Geology Board
SO_2	Sulphur Dioxide
SO_x	Sulphur Oxides
SoCAB	South Coast Air Basin
Sq. Ft.	Square Feet
SRA	Source Receptor Area
s/v	Seconds Per Vehicle
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resource Control Board
TAC	Toxic Air Contaminant
TCP	Traffic Control Plan
TCR	Tribal Cultural Resource
TDS	Total Dissolved Solids
TIS	Traffic Impact Study
Tpd	Tons per day
UBC	Uniform Building Code
USACE	U.S. Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
Wd	Waukena Loam, Saline-Alkali
WDR	Waste Discharge Requirement
WQMP	Water Quality Management Plan

ENVIRONMENTAL CHECKLIST FORM

I. INTRODUCTION

1. Project Title: Scheu Distribution Center, Tentative Parcel Map (SUBTPM20006) and Design Review (DRC2018-00529)

2. Lead Agency Name: City of Rancho Cucamonga
   Address: 10500 Civic Center Drive, Rancho Cucamonga, CA 91730

3. Contact Person: Kirt Coury, Associate Planner
   Phone Number: 909-477-2750

4. Project Location: 9668 7th Street, Rancho Cucamonga, CA 91730. Reference **Figure 1, *Regional Location Map*** and **Figure 2, *Vicinity Map***.

5. Project Sponsor's Name and Address: Scheu Management Corporation - 177 D Street, Upland, CA 91786

6. General Plan Designation: General Industrial

7. Zoning: General Industrial (GI)

8. Project Description:

A proposal to subdivide one (1) parcel of 13.23 acres into four (4) parcels in conjunction with a proposal to develop the site with four (4) new industrial buildings on property located within the General Industrial (GI) District at the northeast corner of Archibald Avenue and 7th Street – Assessor's Parcel Number (APN) 0209-211-24.

A. Overview

The Project includes the following applications: Tentative Parcel Map (SUBTPM20006) and Design Review (DRC 2018-00529). These applications will collectively comprise the "Project."

B. Tentative Parcel Map - (SUBTPM20006)

SUBTPM20006 proposes to subdivide one (1) parcel of 13.23 acres into four (4) parcels in conjunction with a proposal to develop the site with four (4) new industrial buildings. Reference **Figure 3, *Tentative Parcel Map***.

C. Design Review - DRC 2018-00529

DRC 2018-00529 proposes four (4) new industrial buildings totaling 240,710 square feet (sq. ft.) on approximately 13.23 acres and will be comprised of general industrial uses. All four buildings will provide offices and warehouse space. The square footage for each building is as follows:

- Building 1 – 17,300 square feet (sq. ft.)
- Building 2 – 24,750 sq. ft.
- Building 3 – 74,660 sq. ft.
- Building 4 - 124,000 sq. ft.

Required/provided parking is 237 stalls. Required landscaping is 55,947 sq. ft. (10%) and provided landscaping is 66,373 sq. ft. (11.9%). Reference **Figure 4, *Site Plan - DRC 2018-00529***. The buildings are modern in design with many windows, metal and aluminum accents, and grey tones for paint/materials. Reference **Figure 5, *Elevations***.

Project Grading

Rough grading of the Project site will consist of approximately 2,800 cubic yards net cut and 36,300 cubic yards net fill, resulting in approximately 33,500 cubic yards of import (excluding subexcavation quantities). The imported fill material will be coming from within a 5-mile radius of the Project site. For air emissions modeling purposes a haul distance of 20 miles is assumed. Dirt is assumed to be hauled in heavy-heavy duty trucks (GWR>26,000lbs) and the total number of trips required for import would be 4,188 trips. The fill material will be clean (not containing contaminated soil), and the export site will have all the requisite environmental clearances. Reference **Figure 6*, TTM 37439 Conceptual Grading Plan***.

General Construction Assumptions

According to the *Scheu Business Center Air Quality and Greenhouse Gas Analysis*, prepared by RK Engineering, Inc., 4-23-2019 (**Appendix B**), general construction assumptions, as well as the number and types of construction equipment needed, have been assumed for the Project. The *Air Quality and Greenhouse Gas Analysis* assumed that Construction of the project would begin in the year 2018 and last approximately 14 months. The Project's construction schedule has been adjusted/expedited to meet the 2019 opening year timeline requested by the applicant. Construction activity will consist of site preparation, grading, building construction, paving, and architectural coating. Construction phases are not expected to overlap. Construction equipment assumptions are contained in **Table 1, *Construction Equipment Assumptions Phase***.

Table 1
Construction Equipment Assumptions Phase[1]

Phase[1]	Phase Duration (Days)[1]	Equipment[1]	Amount[1]	Hours Per Day[1]	Soil Disturbance Rate (Acres) 8hr-Day)[2]	Equipment Daily Disturbance Footprint (Acres)	Total Phase Daily Disturbance Footprint (Acres)
Site Preparation	10	Rubber Tired Dozers	3	8	1.0	3.0	5.0
		Tractors/Loaders/Backhoes	4	8	0.5	2.0	
Grading	30	Excavators	2	8	0.0	1.0	3.375
		Graders	1	8	0.5	0.375	
		Rubber Tired Dozers	1	8	0.5	0.375	
		Scrapers	2	8	0.5	0.750	
		Tractors/Loaders/Backhoes	2	8	0.5	0.875	
Building Construction	240	Cranes	1	7	0.0	0.0	1.5
		Forklifts	3	8	0.0	0.0	
		Generator Sets	1	8	0.0	0.0	
		Tractors/Loaders/Backhoes	3	7	0.5	1.5	
		Welders	1	8	0.0	0.0	
Paving	20	Pavers	2	8	0.0	0.0	0.0
		Paving Equipment	2	8	0.0	0.0	
		Rollers	2	8	0.0	0.0	
Architectural Coating	20	Air Compressors	1	6	0.0	0.0	0.0

Source: *Energy Analysis* (**Appendix L**)
[1] Source: Scheu Business Center Air Quality and GHG Impact Study. (CalEEMod v.2016.3.2)
[2] HP-hrs = Horsepower Hours.
[3] Source: Carl Moyer Program Guidelines. 2017 Revisions. Table D-21. https://www.arb.ca.gov/msprog/moyer/guidelines/current.htm
[4] Mbtu = Millions of Btu; assuming 1 gallon of diesel fuel = 137,381 Btu.

Drainage / Hydrology / Water Quality

The Project site is currently vacant with seasonal vegetation, and is tributary to the Archibald Avenue Storm Drain, Cucamonga Creek Channel (Primary Hydrologic Basin No. 801.21) with the downstream waters being Mill Creek/Prado Area (Primary Hydrologic Basin No. 801.21) and Santa Ana River Reach 3. Cucamonga Creek Channel is listed for pathogens, bacteria, nutrients and suspended solids and Santa Ana River Reach 3 is listed for pathogens and bacteria. Elevation on the project site range from approximately 1096 at the northeast corner to approximately to approximately 1083 at the southwest corners.

A public storm drain system will be installed in Seventh Street contiguous to the Project site connecting to the Archibald Storm Drain and will provide catch basin filters and perforated sub surface storm drain chambers to address water quality issues from the development. The public storm drain will be installed by the Developer. Reference **Figure 7, *Site and Drainage Plan***.

Circulation

The following are descriptions of the roadways adjacent to the Project site. Access will be taken from Acacia Street and 7th Street. The Project includes widening 7th Street along the Project site's frontage and construction of half-width street improvements to include asphalt paving, concrete curb, gutter, sidewalk and street lighting. The Project site has limited frontage along its northern boundary with Acacia Street; Acacia Street will be widened modestly to accommodate a knuckle design corner transition to Cottage Avenue. The Project does not include any new street lighting along Acacia Street. Additional details are contained below.

Archibald Avenue

According to **Figure 8, *Cross-Sections***, Archibald Avenue has a 51' wide half-width right-of-way (ROW). Within this half-width ROW will be 36' of pavement and a 15' wide parkway, which includes a 4' wide meandering sidewalk. The Project will install 16' of pavement, curb, gutter, as well as the 15' wide parkway.

Acacia Street

According to **Figure 8, *Cross-Sections***, Acacia Street has a 33' wide half-width ROW. Within this half-width ROW will be 15' of pavement and a 16' wide parkway, which includes a 4' wide curb separated sidewalk. The Project will install 15' of pavement, curb, gutter, as well as the 16' wide parkway.

7th Street

According to **Figure 8, *Cross-Sections***, 7th Street has a 33' wide half-width right-of-way ROW. Within this half-width ROW will be 22' of pavement and an 11' wide parkway, which includes a 6' wide curb separated sidewalk. The Project will install 22' of pavement, curb, gutter, as well as the 11' wide parkway.

Project Design Features/General Plan Mitigation Measures/Rancho Cucamonga Sustainable Communities Action Plan Compliance

The following Project Design features are incorporated into the Project for air quality emissions:

The following Project design features for construction and operations (standard requirements by SCAQMD Rules 402 and 403 require implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site):

- All active construction areas shall be watered two (2) times daily.
- All haul trucks shall be covered or shall maintain at least two (2) feet of freeboard.
- Speed on unpaved roads shall be reduced to less than 5 mph.
- Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.
- Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered twice daily.
- All operations on any unpaved surface shall be suspended if winds exceed 15 mph.
- Access points shall be washed or swept daily.
- Construction sites shall be sandbagged for erosion control.
- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Pave or gravel construction access roads at least 100 feet onto the site from the main road and use gravel aprons at truck exits.
- Replace the ground cover of disturbed areas as quickly possible.
- Prepared and submit a fugitive dust control plan SCAQMD prior to the start of construction.
- Prepare and implement a Construction management Plan which will include Best Available Control Measures that will be submitted to the City of Rancho Cucamonga.
- Construction equipment shall be maintained in proper tune.
- All construction vehicles shall be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.
- Minimize the simultaneous operation of multiple construction equipment units.
- The use of heavy construction equipment and earthmoving activity shall be suspended during Air Alerts when the Air Quality Index reaches the "Unhealthy" level.
- Utilize low emission "clean diesel" equipment with new or modified engines that include diesel oxidation catalysts, diesel particulate filters or Moyer Program retrofits that meet CARB best available control technology.
- Establish an electricity supply to the construction site and use electric powered equipment instead of diesel-powered equipment or generators, where feasible.
- Establish staging areas for the construction equipment that are as distant as possible from adjacent sensitive receptors (residential land uses).
- Use haul trucks with on-road engines instead of off-road engines for on-site hauling.

In addition, the Project is required to comply with the following mitigation measures established in the Rancho Cucamonga General Plan EIR (Section 4.3.8, Mitigation Measures, Air Quality) for construction and operation emissions:

MM 4.3-1 The City of Rancho Cucamonga shall work with the applicants of future projects to be developed under the proposed 2010 General Plan Update to implement the

following measures, derived from the SCAQMD's AQMP, where feasible, in order to reduce criteria air pollutant emissions, primarily related to vehicular travel and energy. Potential measures for consideration in future projects include:

- Provide adequate ingress and egress at all entrances to public facilities to minimize vehicle idling at curbsides.
- Provide preferential parking to high occupancy vehicles and shuttle services.
- Schedule truck deliveries and pickups during off-peak hour.
- Improve thermal integrity of the buildings and reduce thermal load with automated time clocks or occupant sensors.
- Landscape with native and/or drought-resistant species to reduce water consumption and to provide passive solar benefits.
- Provide lighter color roofing and road materials and tree planning programs to comply with the AQMP Miscellaneous Sources MSC-01 measure.
- Comply with the AQMP Miscellaneous Sources PRC-03, and Stationary Sources Operations Enhanced Inspection and Maintenance and ADV-MISC to reduce emissions of restaurant operations.

MM 4.3-2 The City of Rancho Cucamonga has developed the following requirements for specified land uses to reduce criteria pollutant emissions. These measures shall be verified either during review of project plans and specifications. Measures to be enforced include:

- All industrial and commercial facilities shall post signs requiring that trucks shall not be left idling for prolonged periods (i.e., in excess of 10 minutes).
- All industrial and commercial facilities shall designate preferential parking for vanpools.
- All industrial and commercial site tenants with 50 or more employees shall be required to post both bus and Metrolink schedules in conspicuous areas.
- All industrial and commercial site tenants with 50 or more employees shall be required to configure their operating schedules around the Metrolink schedule to the extent reasonably feasible.
- All residential and commercial structures shall be required to incorporate high efficiency/low polluting heating, air conditioning, appliances, and water heaters.
- All residential and commercial structures shall be required to incorporate thermal pane windows and weather-stripping.

MM 4.3-3 The City of Rancho Cucamonga shall ensure that future projects to be developed under the proposed 2010 General Plan Update implement the following construction-period measures to reduce criteria pollutant emissions, including, but not limited to, compliance with SCAQMD Rules as described below. These measures shall be verified either during review of project plans and specifications and/or during construction. Construction-period measures to be enforced include:

- All construction equipment shall be maintained in good operating condition so as to reduce operational emissions. Contractor shall ensure that all construction equipment is being properly serviced and maintained as per manufacturers' specifications. Maintenance records shall be available at the construction site for City verification.
- Prior to the issuance of any grading permits, the developer shall submit Construction Plans to the City denoting the proposed schedule and projected equipment use. Construction contractors shall provide evidence that low-

emission mobile construction equipment will be utilized, or that their use was investigated and found to be infeasible for the project. Contractors shall also conform to any construction measures imposed by the South Coast Air Quality Management District (SCAQMD) as well as City Planning staff.

- The construction contractor shall utilize electric or clean alternative fuel powered equipment where feasible.
- The construction contractor shall ensure that construction-grading plans include a statement that work crews will shut off equipment when not in use.
- All construction equipment shall comply with SCAQMD Rules 402 (Nuisance) and Rule 403 (Fugitive Dust Control).
- All asphalt shall meet or exceed performance standards noted in SCAQMD Rule 1108 (Cutback Asphalt).
- All paints and coatings shall meet or exceed performance standards noted in SCAQMD Rule 1113 (Architectural Coatings). Paints and coatings shall be applied either by hand or high-volume, low-pressure spray.

The following Rancho Cucamonga Sustainable Communities Action Plan Compliance measures are incorporated into the Project greenhouse gas emissions:

- The Project will include pedestrian sidewalks and access to the adjacent land uses and transit/circulation network.
- The Project will provide bicycle parking/bicycle racks, per City of Rancho Cucamonga and State of California Building Code requirements.
- The Project is located along Archibald Avenue which provides Class II bike lanes for access to the site.
- The Project will provide designated parking spaces for ride-sharing vehicles to promote ride-sharing programs that reduce the pollutants generated by the vehicle use.
- The Project is located along the Archibald Avenue Secondary Transit Corridor (Regional Service).
- The Project will participate in the City of Rancho Cucamonga's Development Impact Fee (DIF) program which supports the development and maintenance of transit amenities, bus stops, shade/weather protection, seats, and bus shelters, and encourages further transit use in the City, is used for the development and maintenance of roadways and transportation infrastructure throughout the City, and helps in protecting and developing sensitive land resources, parks, open spaces and infrastructure throughout the city.
- The Project will provide charging and fueling station for alternative fuel vehicles.
- The Project will provide designated clean air vehicle parking spaces.
- The Project will provide solar ready infrastructure.
- The Project is consistent with the land use designation and zoning for the site.
- The Project will implement pedestrian and bicycle connections to the local transportation network.
- The Project will incorporate smart growth practices which limits the impacts on natural resources, energy, air and water quality.
- The Project will promote green practices in conserving energy by implementing energy-efficient design for heating, cooling, and lighting.
- The Project will comply the State of California Title 24 Building Standards (CalGreen) requirements.

- The Project design will incorporate measures that reduce energy use through solar orientation by taking advantage of shade, prevailing winds, landscaping, and sunscreens.
- The Project will meet the CalGreen building code requirements.
- The Project will comply with the City of Rancho Cucamonga green building principles.
- The Project will incorporate low-flow fixtures and faucets to reduce water usage.
- The Project will participate in the Cucamonga Valley Water District (CVWD) water conservation and recycling program.
- The Project will install drought tolerant, native landscapes and minimize the amount of turf and sod installed.
- The Project will install water efficient irrigation and provide efficient site maintenance.
- The Project will comply with the City of Rancho Cucamonga Environmental Programs regarding waste management.
- The Project will work with City of Rancho Cucamonga and Burrtec Waste Industries to prepare a construction waste management plan.

The following Project Design features are incorporated into the Project as best management practices for noise:

DF-1 Provide an eight (8) foot high CMU block or tilt-up concrete wall along both ends of the loading docks/back of building area for buildings 3 and 4.
DF-2 Provide an eight (8) foot high CMU block or tilt-up concrete wall along the southern edge of the loading docks area for building 1.
DF-3 All rooftop mounted HVAC equipment shall be fully shielded or enclosed from the line of sight of adjacent residential uses. Shielding/parapet wall shall be at least as high as the equipment.
DF-4 Truck deliveries, loading/unloading activity, and trash pick-up shall be limited to daytime (7 a.m. – 10 p.m.) hours only.
DF-5 Limit engine idling time for all trucks to 5 minutes or less.
DF-6 Construction-related noise activities shall comply with the requirements set forth in the City of Rancho Cucamonga Municipal Code Section 17.66.050(D)(4) for adjacency to a residential land use, school, church or similar type of use, adjacency to a commercial or industrial use.
DF-7 No impact pile driving activities shall be allowed on the Project site.
DF-8 During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices and equipment shall be maintained so that vehicles and their loads are secured from rattling and banging. Idling equipment should be turned off when not in use.
DF-9 Locate staging area, generators and stationary construction equipment as far from the northwest property line, as reasonably feasible.
DF-10 Obtain a construction work permit from the City of Rancho Cucamonga prior to starting construction.

Utilities

All utilities and public services are currently available on, or adjacent to, the Project site. Utility and Service providers are as follows:

- Electricity: Southern California Edison
- Water: Cucamonga Valley Water District
- Sewer: Burrtec Waste Industries

- Cable: Time Warner Cable, Verizon
- Gas: Southern California Gas
- Telephone: Verizon, AT&T
- School: Cucamonga School District

Sewer and Water Facilities

The Project is served by the Cucamonga Valley Water District (CVWD) sewer system, which has wastewater treated by the Inland Empire Utilities Agency (IEUA) at the RP-1 and RP-4 treatment plants. There is an existing 8" sewer line in 7th Street currently terminating approximately 200' east of Archibald Avenue, which will be extended east on site to service all 4 parcels/buildings within the Project. There is an existing 18" water line in 7th Street, which will provide fire, domestic and landscape services for Parcels/Buildings 1, 2 & 4 and, a 6" water line in Acacia Street which will provide domestic and landscape service for Parcel/Building 3 currently servicing the site. Fire service for Parcel/Building 3 may be directly off the existing 6" Acacia Street line or may be looped on site to connect the 7th Street and Acacia Street lines if direct flow is inadequate. All existing utility lines will be extended by the Developer, as needed.

9. Surrounding land uses and setting: (Briefly describe the project's surroundings)

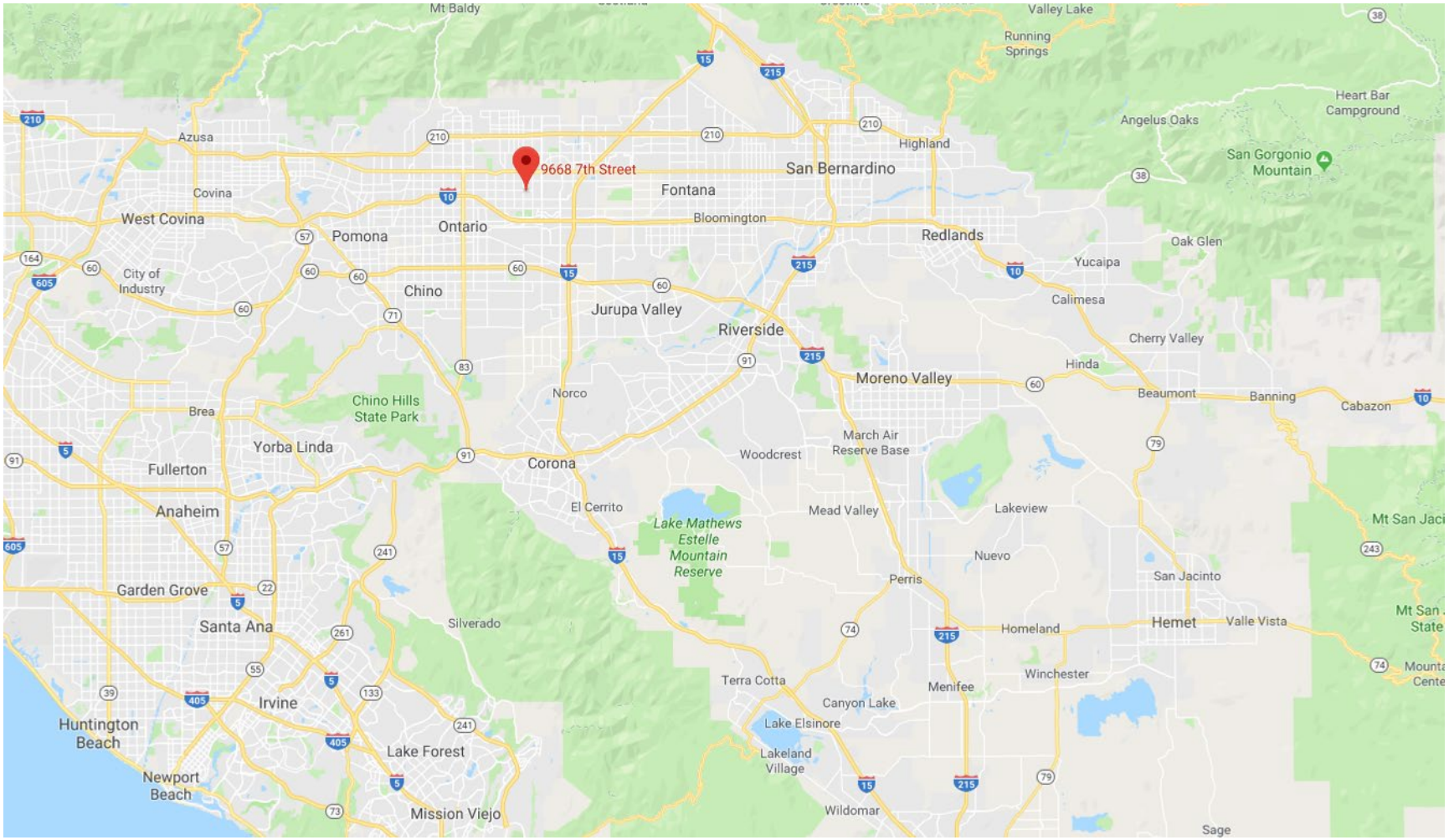
Surrounding properties are within the GI Zone; to the north, south, and west are smaller parcels housing freestanding, one-story structures and the parcel to the east is larger, also with a freestanding, one-story structure. Surrounding structures are industrial in nature. The nearest residence to the Project site is an existing residential dwelling unit located approximately 56 feet to the northeast of the site and residential homes located approximately 140 feet southwest of the site. The Project site is not located adjacent or proximate to a state scenic highway. The Project site does not contain scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway. The Project site is adjacent to the Atchison Topeka and Santa Fe railroad tracks, which run along the eastern boundary of the site. Please reference the discussions in Section 1. Aesthetics, and **Table 1-1, *Adjacent Properties and Uses***, for more details regarding surrounding land uses and setting.

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

None.

ENVIRONMENTAL CHECKLIST FIGURES

Figure 1
Regional Location Map



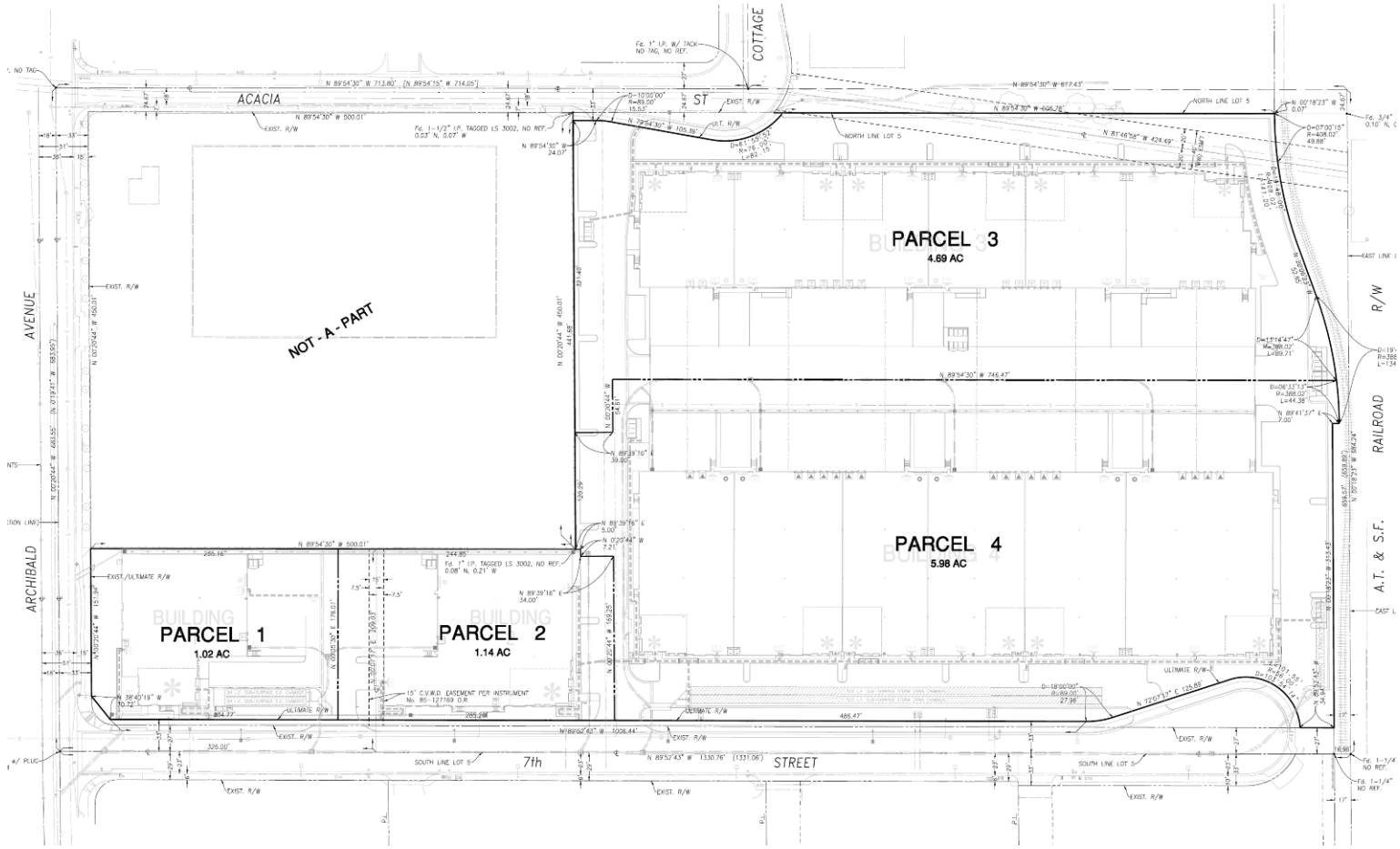
Source: Google Maps www.google.com/maps

Figure 2
Vicinity Map



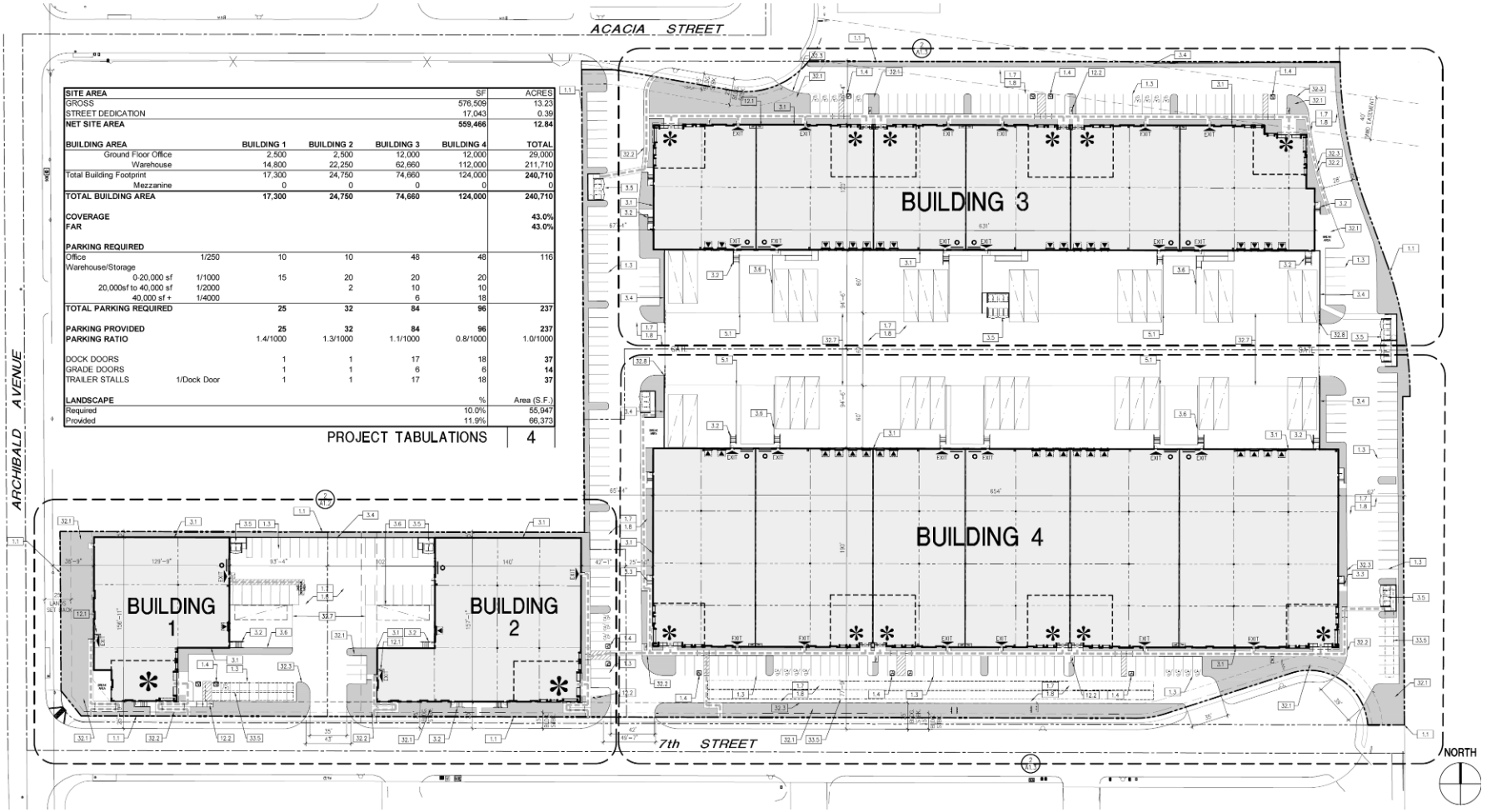
Source: Google Maps www.google.com/maps

Figure 3
Tentative Parcel Map



Source: Project Plans (**Appendix J**)

Figure 4
Site Plan - DRC 2018-00529



SITE AREA						SF	ACRES
GROSS						576,509	13.23
STREET DEDICATION						17,043	0.39
NET SITE AREA						**559,466**	**12.84**
BUILDING AREA		**BUILDING 1**	**BUILDING 2**	**BUILDING 3**	**BUILDING 4**	**TOTAL**	
Ground Floor Office		2,500	2,500	12,000	12,000	29,000	
Warehouse		14,800	22,250	62,660	112,000	211,710	
Total Building Footprint		17,300	24,750	74,660	124,000	**240,710**	
Mezzanine		0	0	0	0	0	
TOTAL BUILDING AREA		**17,300**	**24,750**	**74,660**	**124,000**	**240,710**	
COVERAGE							**43.0%**
FAR							**43.0%**
PARKING REQUIRED							
Office	1/250	10	10	48	48	116	
Warehouse/Storage							
0-20,000 sf	1/1000	15	20	20	20		
20,000sf to 40,000 sf	1/2000		2	10	10		
40,000 sf +	1/4000			6	18		
TOTAL PARKING REQUIRED		**25**	**32**	**84**	**96**	**237**	
PARKING PROVIDED		**25**	**32**	**84**	**96**	**237**	
PARKING RATIO		1.4/1000	1.3/1000	1.1/1000	0.8/1000	1.0/1000	
DOCK DOORS		1	1	17	18	**37**	
GRADE DOORS		1	1	6	6	**14**	
TRAILER STALLS	1/Dock Door	1	1	17	18	**37**	
LANDSCAPE						%	Area (S.F.)
Required						10.0%	55,947
Provided						11.9%	66,373

Source: Project Plans (**Appendix J**)

Figure 5
Elevations



Building 1



Building 2

Figure 5
Elevations, continued



Building 3



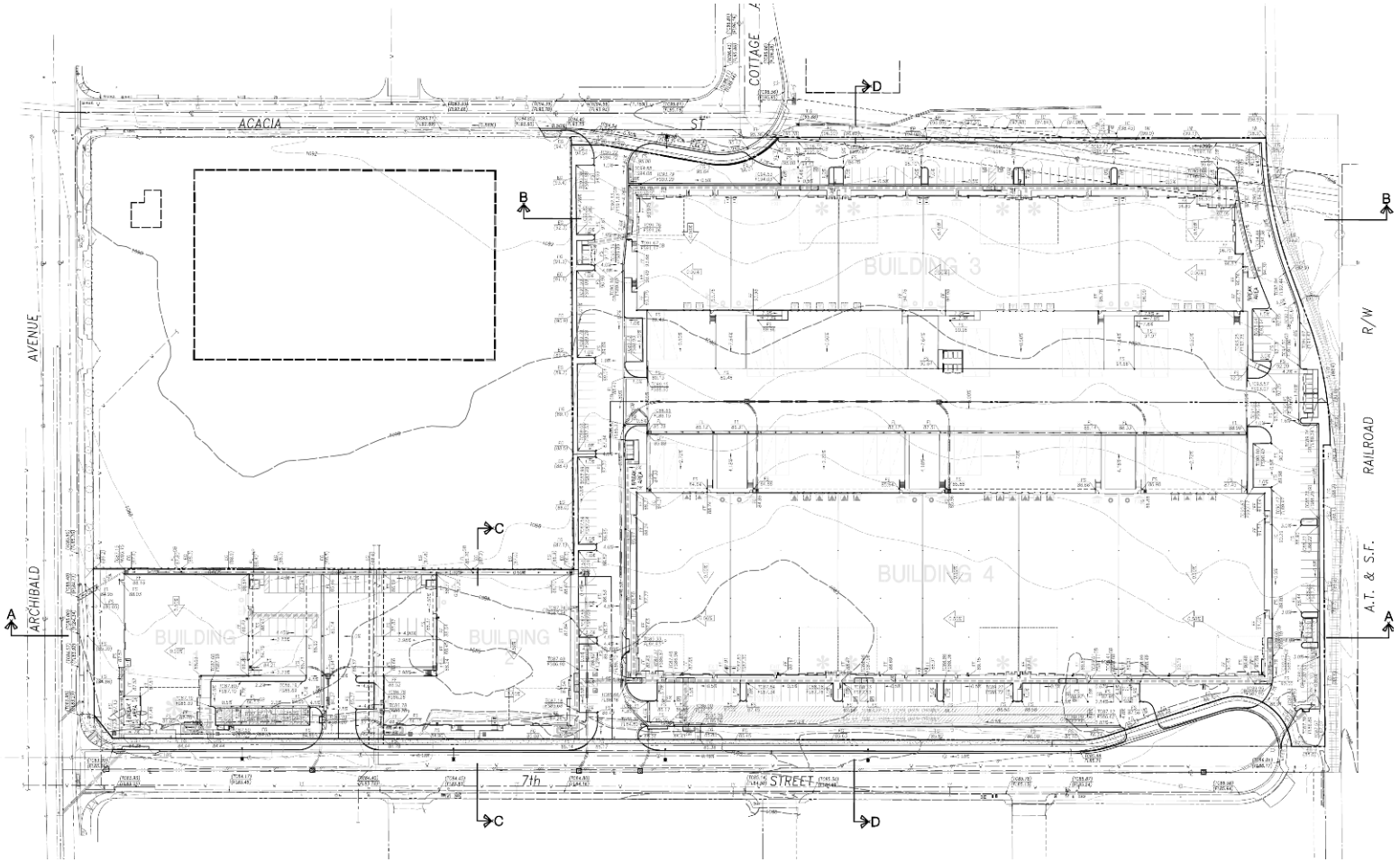
Building 4 **Source:** Project Plans (**Appendix J**)

COLOR SCHEDULE / MATERIALS

G1	GLAZING	MEDIUM PERFORMANCE COLOR: GREY
M1	CANOPY	METAL FINISH: CLEAR ANODIZED
M2	MULLIONS	ALUMINUM FINISH: CLEAR ANODIZED
P1	PAINT 1	PPG "THIN ICE" PPG1001-3 OR SIMILAR LIGHT GREY MAIN BLDG COLOR
P2	PAINT 2	PPG "FLAGSTONE" PPG1001-4 OR SIMILAR MID GREY. BASE COLOR
P3	PAINT 3	PPG "DOVER GRAY" PPG1001-5 OR SIMILAR LIGHT ACCENT COLOR
P4	PAINT 4	PPG "KNIGHTS ARMOR" PPG1001-6 OR SIMILAR DARK ACCENT COLOR

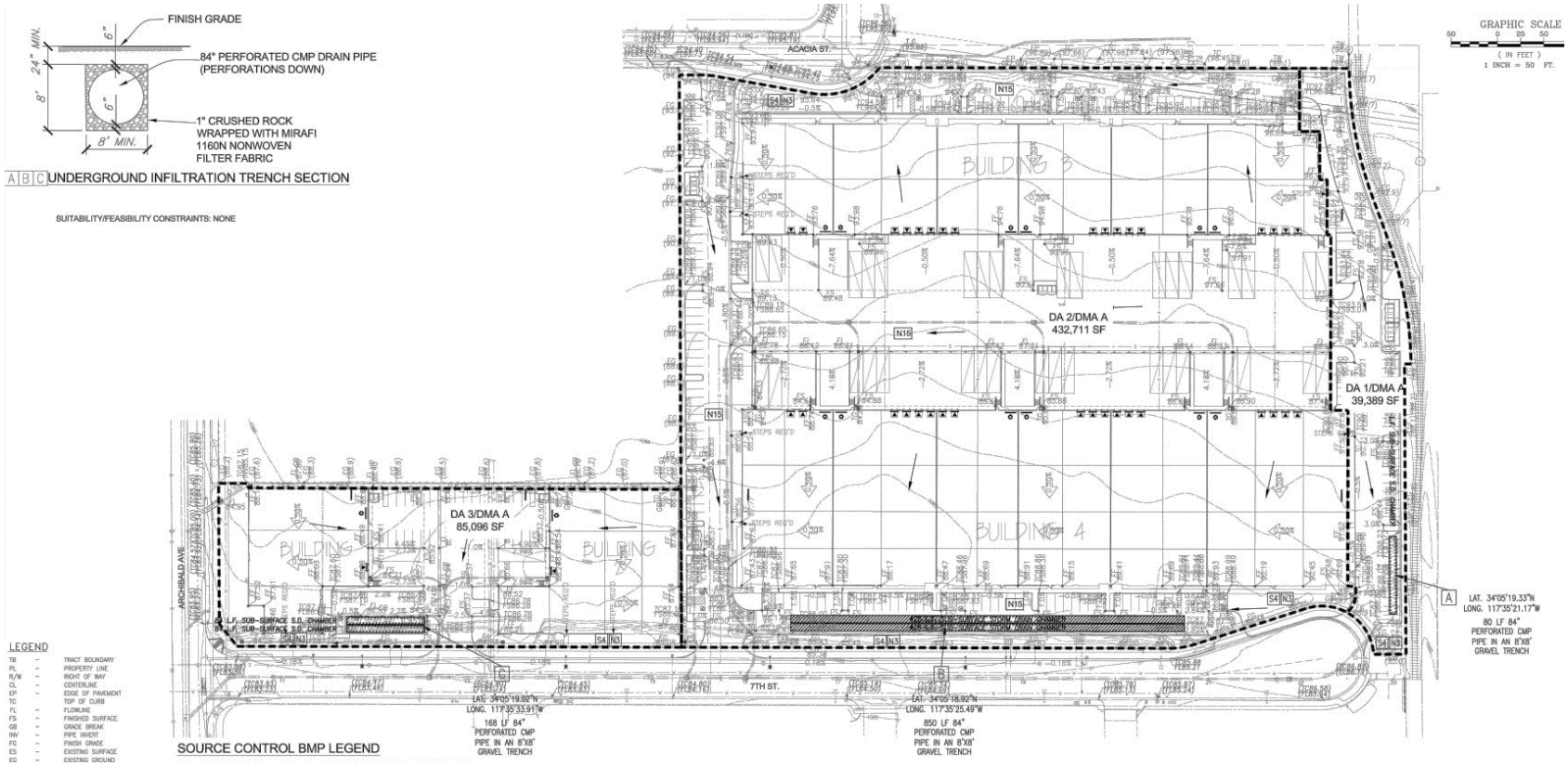
DOORS TO MATCH ADJACENT BUILDING COLOR

Figure 6
TTM 37439 Conceptual Grading Plan



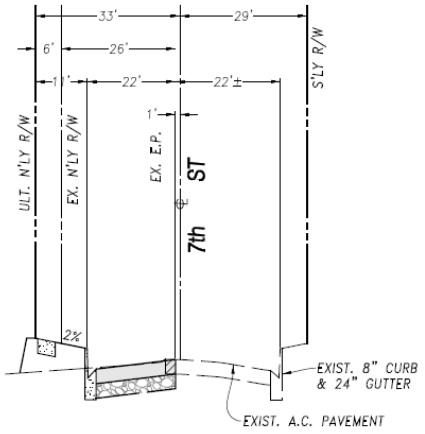
Source: Project Plans (**Appendix J**)

Figure 7
Site Drainage Plan

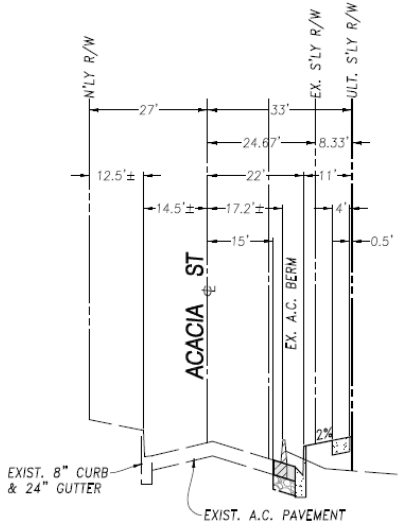


Source: Project Plans (**Appendix J**)

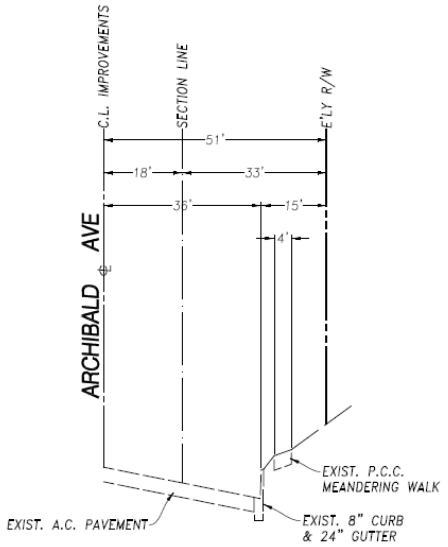
Figure 8
Cross-Sections



7th STREET TYPICAL SECTION
SCALE: 1"=20' HORIZ. 1"=2' VERT.



ACACIA STREET TYPICAL SECTION
SCALE: 1"=20' HORIZ. 1"=2' VERT.



ARCHIBALD AVENUE TYPICAL SECTION
SCALE: 1"=20' HORIZ. 1"=2' VERT.

Source: Project Plans (**Appendix J**)

II. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (x) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or “Less Than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- ☐ Aesthetics
- ☐ Agriculture Resources
- ☒ Air Quality
- ☒ Biological Resources
- ☒ Cultural Resources
- ☐ Energy
- ☒ Geology/Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards & Hazardous Materials
- ☐ Hydrology/Water Quality
- ☐ Land Use/Planning
- ☐ Mineral Resources
- ☒ Noise
- ☐ Population/Housing
- ☐ Public Services
- ☐ Recreation
- ☒ Transportation
- ☒ Tribal Cultural Resources
- ☐ Utilities/Service Systems
- ☐ Wildfire
- ☒ Mandatory Findings of Significance

III. DETERMINATION

On the basis of this initial evaluation, the following finding is made:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

10-8-2019

Date

IV. EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

V. ENVIRONMENTAL ISSUES ASSESSMENT

1. AESTHETICS.

Source(s): *City of Rancho Cucamonga 2010 General Plan EIR* (*2010 GPEIR*), *Section 4.1 Aesthetics; Project Plans* (**Appendix J**); *Rancho Cucamonga Property Information Report,* (*City GIS*, **Appendix A**); Public Records published by Realist (**Appendix K**); Google Earth Aerial Photographs; and visual inspection of Project site.

SUBSTANTIATION:

Except as provided in Public Resources Code Section 21099[1], would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	

The City of Rancho Cucamonga is situated at the southern base of the eastern extent of the San Gabriel Mountain range. In addition, the San Bernardino Mountains are located just east of the San Gabriel Mountains, separated by Interstate 15 and the Cajon Pass.

Views of the San Gabriel and San Bernardino Mountains are available from most areas within the City and provide a significant scenic backdrop for the community.

North-south roadways, including Archibald Avenue (Project site is adjacent), Haven Avenue, and Etiwanda Avenue, provide unobstructed views of the San Gabriel Mountains to the north and conversely, from the foothills, of the lower-lying valley to the south. Archibald Avenue is one of fifteen (15) major streets within the City that have been designated as Special Boulevards.

The City recognizes other scenic resources, including remaining stands of eucalyptus windrows, scattered vineyards and orchards, and natural vegetation in flood-control channels and utility corridors. The foothills at the northern end of the City provide views of wide open spaces, steep slopes, and natural vegetation, with limited development.

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1.5 miles north of Interstate 10 in the City of Rancho Cucamonga.

The Project site is surrounded by general industrial land use to the north, south, east and west; with a pocket of seasoned low-density residential use (2-4 Dwelling Units/Acre) to the southwest. It is further noted that the properties adjacent north of Acacia Street are improved with older single family residences which have an underlying General Plan Land

[1] Public Resources Code Section 21099 pertains to "Modernization of Transportation Analysis for Transit-Oriented Infill Projects." The Project does not meet any of the criteria of a transit-oriented development. Therefore, the provisions of Public Resources Code Section 21099 are not applicable.

Use designation and zoning classification of General Industrial. Any single-family uses within these houses would be considered legal non-conforming. The Project site is adjacent to the Atchison Topeka and Santa Fe railroad tracks, which run along the eastern boundary of the site.

No designated scenic highways are present in or near the City of Rancho Cucamonga. The nearest officially designated scenic highway is State Route (SR) 2 (Angeles Crest Scenic Highway), located on the north side of the San Gabriel Mountains and approximately 12 miles from the northern City boundary. Another designated scenic highway is the SR-38 (Rim of the World Scenic Highway), which is approximately 24 miles east of the City's boundary. These scenic highways are located on the western, northern, and eastern slopes of the San Gabriel and San Bernardino Mountains, far from the City of Rancho Cucamonga and its Sphere of Influence.

The Project proposes the on-site construction of four (4) concrete tilt-up warehouse buildings totaling approximately 240,710 square feet of building area, plus associated parking and site improvements. Given the Project site's location at the northeast corner of Archibald Avenue and 7th Street, the Project building improvements, most notably proposed Building 1, will have a significant visible presence from Archibald Avenue (exterior building elevations vary from 29'6" to 30'6" in height above finished grade).

As stated above, Archibald Avenue is one of fifteen (15) major streets within the City that have been designated as Special Boulevards which provides for extensive landscape setback areas to preserve the existing view corridors. The Special Boulevards include landscape and hardscape design, trails, and setback standards that are consistent with the development guidelines within the City. Per the General Plan (p. LU-90), Special Boulevards serve to create scenic corridors and attractive travel ways that will orient travelers and enhance foreground and distant views.

Building 1, located at the northeast corner of Archibald Avenue and 7th Street, is a proposed 17,300 square foot light-industrial warehouse with a west elevation building height varying from 29'6" to 30'6" above the finished site grade. Building 1 will be set back 30 feet from Archibald Avenue in compliance with the Archibald Avenue Special Boulevard street designation to preserve the view corridor (it is noted, as the Project site's Archibald Avenue street frontage is less than 225 feet, the 45-foot Special Boulevard set back is not applicable).

Based on the above, the Project will not result in a substantial adverse effect on a scenic vista as it will not hinder any foreground and/or distant views to those who live, work, traverse or visit the Project area. Any impacts would be less than significant.

Except as provided in Public Resources Code Section 21099[2], would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				**X**

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1.5 miles north of Interstate 10 in the City of Rancho Cucamonga.

The Project site is currently vacant with seasonal vegetation. There are no trees, no building improvements, and no site improvements. There are no rock outcroppings on the Project site. The Project site is not located adjacent or proximate to a state scenic highway. The Project site does not contain scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway. No impacts would occur.

Except as provided in Public Resources Code Section 21099[2], would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			**X**	

The Project site is surrounded by general industrial land use to the north, south, east and west; with a pocket of seasoned low density residential use (2-4 Dwelling Units/Acre) to the southwest. It is further noted that the properties adjacent north of Acacia Street are improved with older single family residences (legal non-conforming use).

Adjacent properties are summarized in **Table 1-1, *Adjacent Properties and Uses***.

[2] Public Resources Code Section 21099 pertains to "Modernization of Transportation Analysis for Transit-Oriented Infill Projects." The Project does not meet any of the criteria of a transit-oriented development. Therefore, the provisions of Public Resources Code Section 21099 are not applicable.

Table 1-1
Adjacent Properties and Uses

Location/Address/APN(s)	Ownership	Land Size (Ac)	GP/ Zoning[1]	Use	Comments
North					
Archibald Avenue & Acacia Street/9029 Archibald Avenue /0209-211-11	Cucamonga County Water District[2]	5.175	GI/GI	Quasi-Public Facility	Service yard, operations warehouse (older/ metal butler building); well head / pump equipment noted. Situated at Project site elbow.
8th Street & Cottage Avenue/9851 8th Street/0209-193-09	Mandeville Family Investment	5.85	GI/GI	Light Industrial/ Warehouse	Five building concrete tilt up (CTU) Multi-Tenant Light Industrial Business Park totaling 45,856 sq. ft.; built 1986.
Acacia Street & Cottage Avenue/8956 Cottage Avenue/0209-192-19 & 20	Sampson Family Trust	0.50 0.50 1.00	GI/GI	Light Industrial/ Warehouse	Two building CTU Multi-Tenant Light Industrial Park totaling 17,436 sq. ft. (9,336 & 8,100 sq. ft.); built 1988.
Archibald Avenue & 8th Street/Belmont Avenue/0209-191-01 thru 17, 0209-192-01 thru 12	Various owners	7,100 to 7,500 sq. ft.	GI/GI	Older SFR's	Pocket of older single-family residences (SFR's) (±24 dwelling units [DUs]), built 1920-1950's, Legal non-conforming use.
South					
Archibald Avenue & 7th Street/92125-55 Archibald/0209-211-44, 45, 48	LS Business Park, et al	5.08 3.94 5.04 14.06	GI/GI	Light Industrial/ Business Park	Scheu Business Center, 13 multi-tenant CTU buildings, totaling ±316,851 sq. ft.; built 1981-88.
7th Street, East of Archibald Avenue/0209-211-37	Cucamonga County Water District[2]	5,000 SF (est.)	GI/GI	Well Site	Commercial well owned & operated by Cucamonga Valley Water District.
7th Street, (East end of cul-de-sac)/9859 7th Street/0209-211-46	SBC V, LLC	4.72	GI/GI	Light Industrial Distribution Warehouse	Appears to be the last phase of Scheu Business Center development; ±95,369 sq. ft., built 2009.
East					
Hermosa, S. of 8th Street/9050 Hermosa/0209-211-50	T-C Hermosa Avenue	19.4	GI/GI	Light Industrial Distribution Warehouse	Large 468,682 sq. ft. distribution warehouse, built 2004. Located adjacent east of the Project site.
West					
SWC Archibald Avenue & 8th Street/9669 8th Street & 8937 Archibald Avenue/0209-171-13 & 14	Gwendolyn Potter	1.18 0.50 1.68	GI/GI	Older Residential Units	Five small, older, free standing wood frame residential DUs; legal-non-conforming use.
W/S Archibald Avenue, S. of 8th Street/8968 Archibald Avenue/0209-171-15	Keystone Nps LLC	4.375	GI/GI	Charter School	Springs Charter School, k-12; 18,549 sq. ft. facility, Spanish Style architecture, built 1924.
NWQ Archibald Avenue & 7th Street/9004-32 Archibald/0209-171-41 thru-47	Inland Corp	12.14	GI/GI	Light Ind. Business Park	6-Bldg CTU light industrial Business Park (Inland Business Park); built 1979, plus self-storage facility on Parcel 41.
NWC Archibald Avenue & 7th Street/0209-171-48	Hamka Corp, et al	1.13	GI/GI	Parking Lot	Asphalt paved/wrought iron perimeter fencing.

Notes:
1 GI = General Industrial
2 Cucamonga County Water District ownership per public records published by CoreLogic [Cucamonga Valley Water District (CVWD) is presumed to be a subsequent entity of the former Cucamonga County Water District].

The Project site's proposed light-industrial warehouse use conforms with the underlying General Plan Land Use designation (General Industrial) and Zoning classification (General Industrial; GI). Furthermore, the Project is in balance with surrounding land use adjacent to the site based on the description of the surrounding uses contained in **Table 1-1**.

Therefore, the Project will not substantially degrade the existing visual character or quality of the site and its surroundings. The visual quality will be consistent with the surrounding uses, which is consistent with the General Plan and zoning. Since the area is almost fully developed, the Project is "in-fill" in nature. Any impacts would be less than significant.

Except as provided in Public Resources Code Section 21099[3], would the Project?	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	

The Project site is located in an area that is subject to existing nighttime lighting from surrounding light-industrial warehouse and business park uses, legal non-conforming residential uses, and street lighting along Archibald Avenue and 7th Street, and to a lesser extent along Acacia Street. Street lighting along 7th Street is currently limited to the south side of the street, only.

The Project includes widening 7th Street along the Project site's frontage and construction of half-width street improvements to include asphalt paving, concrete curb, gutter, sidewalk and street lighting. The Project site has limited frontage along its northern boundary with Acacia Street; Acacia Street will be widened modestly to accommodate a knuckle design corner transition to Cottage Avenue. The Project does not include any new street lighting along Acacia Street.

Development of the Project site, as proposed, would increase the number of streetlights in the immediate vicinity. In addition, the Project development includes security lighting attached to the exterior walls of the four proposed buildings to illuminate exterior walkways and parking areas. No freestanding light standards in the parking lot area were noted in the review of the Site Plan provided.

Daytime glare caused by sunlight refraction off of the Project is considered nominal due to the Project type (concrete tilt-up light-industrial warehouse with limited glass lines, relatively limited exposure to Archibald Avenue due to site shape, and limited traffic along 7th Street which terminates into a cul-de-sac at the east end of the subject site adjacent to the Atchison Topeka and Santa Fe railroad tracks/right-of-way).

The design and placement of light fixtures are subject to compliance with City standards that require shielding, diffusing, or indirect lighting to avoid nighttime glare. On-site illumination

[3] Public Resources Code Section 21099 pertains to "Modernization of Transportation Analysis for Transit-Oriented Infill Projects." The Project does not meet any of the criteria of a transit-oriented development. Therefore, the provisions of Public Resources Code Section 21099 are not applicable.

levels (provided for street lighting, parking, circulation, and pedestrian areas) will comply with Development Code standards and will be shielded from adjacent properties. Lighting will be selected and located to confine the area of illumination to within the Project site.

The Project will create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The Project's required compliance with City standards would assist in reducing impacts to a less than significant level.

2. AGRICULTURE AND FORESTRY RESOURCES.

Source(s): *City General Plan EIR, Section 4.2 – Agriculture and Forest Resources, Exhibit 4.2-1, Farmland Resources; City General Plan, Land Use Plan, Figure LU-2; City Zoning Map,* accessed December 5, 2018*;* and Google Maps.

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				**X**

The Project site is not designated as Prime Farmlands, Unique Farmland, or Farmland of Statewide Importance.

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1½ mile north of Interstate 10 in the City of Rancho Cucamonga. The Project site is zoned General Industrial and the Project proposes the construction of four (4) concrete tilt-up speculative warehouse buildings totaling approximately 240,710 square feet of building area.

Like many Southern California communities, Rancho Cucamonga has an extensive agricultural past. Favorable climatic conditions and an abundant water supply allowed early settlers to develop successful agricultural lands with crop production that included citrus, olives, peaches, and grapes, among others. Limited evidence of the City's past agricultural industry can still be found within the Alta Loma, Cucamonga, and Etiwanda areas of the City through remnant vineyards, citrus groves, olive groves, and support structures.

While the City of Rancho Cucamonga is largely developed, there are pockets of agricultural land in the form of vineyards and orchards that are remnants of its historic agricultural past. These consist of 3- to 30-acre parcels spread out in various locations of the City.

At present, there is a limited amount of approximately 209 acres of Farmland of Local Importance, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance remaining within the City of Rancho Cucamonga according to the General Plan and the California Department of Conservation Farmland Map 2010.

Concentrations of Important Farmland are sparsely located in the southern and eastern parts of the City. Further, as mentioned above, a large number of the designated farmland parcels are small, ranging from 3 acres to 30 acres, and their economic viability is doubtful; therefore, they are not intended to be retained as farmland in the General Plan Land Use Plan. The General Plan Program EIR identified the conversion of farmlands to urban uses

as a significant unavoidable adverse impact for which a Statement of Overriding Considerations was ultimately adopted by the City Council.

The Project site is surrounded by general industrial land use to the north, south, east and west; with a pocket of seasoned low density residential use (2-4 Dwelling Units/Acre) to the southwest. The Project site is not designated nor is it adjacent to any lands designated as Prime Farmlands, Unique Farmland, or Farmland of Statewide Importance.

Based on the above, the Project will not convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agriculture use. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**

There is no agriculturally zoned land within the City of Rancho Cucamonga. Furthermore, as set forth in the General Plan (p. 4.2-4), there are no lands under Williamson Act contracts within the City limits.

Therefore, the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined in Government Code section 51104(g))?				**X**

There are no lands within the City of Rancho Cucamonga zoned as forest land, timberland, or Timberland Production.

Therefore, the Project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**

There are no lands within the City of Rancho Cucamonga that qualify as forest land or timberland.

Therefore, the Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				**X**

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1½ mile north of Interstate 10 in the City of Rancho Cucamonga. The Project site is zoned General Industrial and the Project proposes the construction of four (4) concrete tilt-up speculative warehouse buildings totaling approximately 240,710 square feet of building area.

The Project site is surrounded by general industrial land use to the north, south, east and west; with a pocket of seasoned low density residential (2-4 Dwelling Units/Acre) to the southwest.

The Project would not involve changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. No impacts would occur.

3. AIR QUALITY.

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Source(s): *Scheu Business Center Air Quality and Greenhouse Gas Impact Analysis, City of Rancho Cucamonga,* prepared by RK Engineering Group, Inc., 4-23-2019 (*AQ/GHG Analysis*, **Appendix B**).

Note: Any tables or figures in this section are from the *AQ/GHG Analysis*, unless otherwise noted.

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	

The Project site is located in the South Coast Air Basin (SCAB), in the South Coast Air Quality Management District (SCAQMD) Coastal General Forecast Area, and the Northwest San Bernardino Valley Air Monitoring Area 32. The SCAQMD has established air quality emissions thresholds for criteria air pollutants for the purposes of determining whether a project may have a significant effect on the environment. By complying with the thresholds of significance, the Project would be in compliance with the SCAQMD 2016 Air Quality Management Plan (AQMP) and with federal and state air quality standards.

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the Project is the AQMP. The following discussion centers on any potential inconsistencies in the Project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the Project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that the Project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states:

> "*New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP*."

It should be noted that strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies.

The SCAQMD CEQA Handbook identifies two key indicators of consistency:

1. Whether the project will result in an increase in 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 AQMP; and
2. Whether the project will exceed the assumptions in the AQMP in 2016 or increments based on the year of project buildout and phase.

The following is an analysis of these two consistency indicators:

Criterion 1 - Increase in the Frequency or Severity of Violations

The results of the short-term construction emission levels and long term operational emission levels show that the Project would not result in significant impacts based on the SCAQMD regional and local thresholds of significance. (Reference Tables **Table 3-3, *Regional Construction Emissions – Unmitigated***, **Table 3-4, *Regional Construction Emissions – Mitigated***, and **Table 3-7, *Localized Construction Emissions*** for construction emissions and **Table 3-5, *Regional Operational Emissions*** operational emissions).

Therefore, the Project would not contribute to the exceedance of an air pollutant concentration standard and is found to be consistent with the AQMP for the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP

Consistency with the AQMP assumptions is determined by performing an analysis of the Project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the Project are based on the same forecasts as the AQMP. The 2016-2040 Regional Transportation/Sustainable Communities Strategy, prepared by SCAG, 2016, includes chapters on: the challenges in a changing region, creating a plan for our future, and the road to greater mobility and sustainable growth. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA.

The Project is consistent with the Rancho Cucamonga General Plan and land use projections for a site with a General Industrial General Plan Land Use Designation. Therefore, the Project is consistent with the assumptions in the latest version of the AQMP (Reference Tables **Table 3-3, *Regional Construction Emissions – Unmitigated***, **Table 3-4, *Regional Construction Emissions – Mitigated***, and **Table 3-7, *Localized Construction Emissions*** for construction emissions and **Table 3-5, *Regional Operational Emissions*** operational emissions).

Based on the analysis above, the Project would not conflict with or obstruct implementation of the applicable air quality plan. Any impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		**X**		

Construction Emissions

The following provides a discussion of the methodology used to calculate regional construction air emissions and an analysis of the Project's short-term construction emissions for the criteria pollutants.

Methodology

Construction of the Project is assumed to begin in the year 2018 and last approximately 14 months. The 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.

The Project's construction schedule has been adjusted to meet the 2019 opening year timeline. Construction activity will consist of site preparation, grading, building construction, paving, and architectural coating. Construction phases are not expected to overlap. It is expected that approximately 33,500 cubic yards of material will be imported to the site during the grading phase. For purposes of the *AQ/GHG Analysis*, the import site will be located within a 5-mile radius of the Project site.

The California Emissions Estimator Model Version 2016.3.2 (CalEEMod) was used to calculate criteria air pollutants from the construction and operation of the Project. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify criteria air pollutant and GHG emissions.

The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions (such as GHG emissions from off-site energy generation, solid waste disposal, vegetation planting and/or removal, and water use – discussed in Section 7, Greenhouse Gas Emissions, of this Initial Study). The model also identifies mitigation measures to reduce criteria pollutant and GHG emissions. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts.

The CalEEMod default construction equipment list is based on survey data and the size of the site; however, the equipment quantity has been adjusted for building construction phase in order to meet the 2019 open year timeline. The parameters used to estimate construction emissions, such as the worker and vendor trips and trip lengths, utilize the CalEEMod defaults. **Table 3-1, *Construction Equipment Assumptions Phase*** and a construction

equipment list.

Table 3-1
Construction Equipment Assumptions Phase

Phase[1]	Equipment[1]	Amount[1]	Hours Per Day[1]	Soil Disturbance Rate (Acres) 8hr-Day)[2]	Equipment Daily Disturbance Footprint (Acres)	Total Phase Daily Disturbance Footprint (Acres)
Site Preparation	Rubber Tired Dozers	3	8	1.0	3.0	5.0
	Tractors/Loaders/Backhoes	4	8	0.5	2.0	
Grading	Excavators	2	8	0.0	1.0	3.375
	Graders	1	8	0.5	0.375	
	Rubber Tired Dozers	1	8	0.5	0.375	
	Scrapers	2	8	0.5	0.750	
	Tractors/Loaders/Backhoes	2	8	0.5	0.875	
Building Construction	Cranes	1	7	0.0	0.0	1.5
	Forklifts	3	8	0.0	0.0	
	Generator Sets	1	8	0.0	0.0	
	Tractors/Loaders/Backhoes	3	7	0.5	1.5	
	Welders	1	8	0.0	0.0	
Paving	Pavers	2	8	0.0	0.0	0.0
	Paving Equipment	2	8	0.0	0.0	
	Rollers	2	8	0.0	0.0	
Architectural Coating	Air Compressors	1	6	0.0	0.0	0.0

[1] CalEEMod Defaults
[2] The quantity of Building Construction equipment has been increased to fast track the process in order to meet the timeline.

The quantity of fugitive dust estimated by CalEEMod is based on the pieces of equipment used during and grading. CalEEMod estimates the worst-case fugitive dust impacts will occur during the grading phase. The maximum daily disturbance footprint would be 5.0 acres per 8-hour day with all equipment in use.

Air Quality Regional Significance Thresholds

The SCAQMD has established air quality emissions thresholds for criteria air pollutants for the purposes of determining whether a project may have a significant effect on the environment per Section 15002(g) of the CEQA Guidelines. By complying with the thresholds of significance, the Project would be in compliance with the AQMP, and the federal and state air quality standards.

Table 3-2, *SCAQMD Regional Significance Thresholds*, lists the air quality significance thresholds for the six criteria air pollutants analyzed in this report. Lead is not included as part of this analysis as the Project is not expected to emit lead in any significant measurable quantity.

Table 3-2
SCAQMD Regional Significance Thresholds

Pollutant	Construction (lbs./day)	Operation (lbs./day)
NO_X	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550

Regional Air Quality Impacts from Construction

Regional air quality emissions include both on-site and off-site emissions associated with construction of the Project. Construction traffic is also included in this analysis. Construction traffic is expected to be heaviest during the grading phase when approximately 33,500 cubic yards of material will be imported to the site. Approximately 4,188 hauling trips will be required to import the earthwork material. One truckload carries 16 cubic yards of material per trip. Trucks are assumed to make two trips, one loaded and one empty return.

Regional daily emissions of criteria pollutants are compared to the SCAQMD regional thresholds of significance. The Project must follow all standard SCAQMD rules and requirements with regards to fugitive dust control, as described below. Compliance with the dust control is considered a standard requirement and included as part of the Project's design features (listed above), not mitigation, as this is a regulatory requirement.

The estimated maximum daily construction emissions without mitigation are summarized in **Table 3-3, *Regional Construction Emissions - Unmitigated***.

Table 3-3
Regional Construction Emissions - Unmitigated

Maximum Daily Emissions (lbs./day)[1]						
Activity	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Site Preparation	4.68	48.28	23.49	0.04	9.69	6.22
Grading	6.26	99.20	42.44	0.18	8.81	4.67
Building Construction	6.51	51.64	44.73	0.10	5.83	3.27
Paving	2.55	15.31	15.41	0.02	0.99	0.80
Architectural Coating	116.50	2.03	4.23	0.01	0.67	0./27
Maximum[1]	116.50	99.20	44.73	0.18	9.69	6.22
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	**Yes**	**No**	**No**	**No**	**No**	**No**

[1] Maximum daily emissions during summer or winter; includes both on-site and off-site Project emissions.

As shown in **Table 3-3**, regional daily emissions of criteria pollutants are expected to be below the allowable thresholds of significance for all criteria pollutants, with the exception of VOC. In order to ensure the Project emissions levels are within the allowable threshold limits, **Mitigation Measure MM-AQ-1**, below, shall be implemented during architectural coating and painting to reduce daily VOC emissions.

MM-AQ-1: During architectural coating and painting, the contractor shall limit the amount of daily building surface area to be painted to 14,000 square feet or less.

The estimated maximum daily construction emissions with incorporation of **Mitigation Measure MM-AQ-1**, are summarized in **Table 3-4, *Regional Construction Emissions - Mitigated***.

Table 3-4
Regional Construction Emissions - Mitigated

Maximum Daily Emissions (lbs./day)[1]						
Activity	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Site Preparation	4.68	48.28	23.49	0.04	9.69	6.22
Grading	6.26	99.20	42.44	0.18	8.81	4.67
Building Construction	6.51	51.64	44.73	0.10	5.83	3.27
Paving	2.55	15.31	15.41	0.02	0.99	0.80
Architectural Coating	68.75	2.02	4.23	0.01	0.67	0.27
Maximum[1]	71.31	99.20	44.73	0.18	9.69	6.22
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

[1] Maximum daily emissions during either summer or winter; includes both on-site and off-site Project emissions.
[2] In order to meet the Project opening year 2019 timeframe, paving and architectural coating phases may have the potential to overlap and therefore the combined daily emissions of both phases are considered.

Regional emissions would not exceed the applicable SCAQMD standards for all criteria pollutants with the implementation of **Mitigation Measure MM-AQ-1**.

The Project's short-term construction impact on regional air resources would be reduced to a less than significant level with compliance with Project design features, and implementation of **Mitigation Measure MM-AQ-1**.

Operational Emissions

Operational Assumptions

Operational emissions occur over the life of the Project and are considered "long-term" sources of emissions. Operational emissions include both direct and indirect sources (mobile source emissions, energy source emissions, areas source emissions and other source emissions).

- *Mobile Source Emissions*

Mobile source emissions are the largest source of long-term air pollutants from the operation of the Project. Mobile sources are direct sources of project emissions that are primarily attributed to tailpipe exhaust and road dust (tire, brake, clutch, and road surface wear) from motor vehicles traveling to and from the site.

Estimates of mobile source emissions require information on four parameters: trip generation, trip length, vehicle/fleet mix, and emission factors (quantity of emission for each mile traveled or time spent idling by each vehicle).

The trip generation rates for this Project are based on the latest version of the ITE Trip Generation Manual. Weekday daily trip rates are based on the 10th edition, as estimated in the *Scheu Business Center Update Traffic Impact Study,* prepared by RK Engineering Group, Inc., 9-18-2019 (**Appendix H**). Saturday and Sunday rates are based on CalEEMod default values.

- *Energy Source Emissions*

Energy usage includes both direct and indirect sources of emissions. Direct sources of emissions include on-site natural gas usage (non-hearth) for heating, while indirect emissions include electricity generated by offsite power plants. Natural gas use is measured in units of a thousand British Thermal Units (kBTU) per size metric for each land use subtype and electricity use is measured in kilowatt hours (kWh) per size metric for each land use subtype.

CalEEMod divides building electricity and natural gas use into uses that are subject to Title 24 standards and those that are not. Lighting electricity usage is also calculated as a separate category in CalEEMod. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24, such as space heating, space cooling, water heating, and ventilation. Non-Title 24 uses include all other end uses, such as appliances, electronics, and other miscellaneous plug-in uses. Because some lighting is not considered as part of the building envelope energy budget, and since a separate mitigation measure is applicable to this end use, CalEEMod makes lighting a separate category.

For natural gas, uses are likewise categorized as Title 24 or Non-Title 24. Title 24 uses including building heating and hot water end uses. Non-Title 24 natural gas uses include cooking and appliances (including pool/spa heaters).

The baseline values are based on the California Energy Commission sponsored California Commercial End Use Survey, and Residential Appliance Saturation Survey studies.

- *Area Source Emissions*

Area source emissions are direct sources of emissions that fall under four categories; hearths, consumer products, architectural coatings, and landscaping equipment. Per SCAQMD rule 445, no wood burning devices are allowed in developments; therefore, no wood hearths are included in this Project.

Consumer products are various solvents used in non-industrial applications which emit ROGs during their product use. These typically include cleaning supplies, kitchen aerosols, cosmetics and toiletries.

Another main area source emission includes the operation of forklifts in the warehouse. It is assumed that each warehouse will use 1 (one) forklift. So, a total of 10 (ten) forklifts has been taken into account while calculating the area source emission. Area source emissions may also include the operation of forklifts or other off-road equipment that may be used on-site. It is assumed that approximately ten (10) forklifts will be in operation

simultaneously for 8-hours per day--260 days per year. This is considered a conservative estimate based on engineering judgment.

- *Other Sources of Operational Emissions*

Water. Greenhouse gas emissions are generated from the upstream energy required to supply and treat the water used on the Project site. Indirect emissions from water usage are counted as part of the Project's overall impact.

Waste. CalEEMod calculates the indirect GHG emissions associated with waste that is disposed of at a landfill. The program uses annual waste disposal rates from the California Department of Resources Recycling and Recovery (CalRecycle) data for individual land uses. The program quantifies the GHG emissions associated with the decomposition of the waste which generates methane based on the total amount of degradable organic carbon.

Regional Operational Emissions

Long-term operational air pollutant impacts from the Project are shown in **Table 3-5, *Regional Operational Emissions***, below.

Table 3-5
Regional Operational Emissions

Maximum Daily Emissions (lbs./day)[1]						
Activity	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Mobile Sources	3.56	22.98	48.41	0.16	11.40	3.16
Energy Sources	0.23	2.10	1.76	0.01	0.16	0.16
Area Sources	5.51	0.00	0.06	0.00	0.00	0.00
Total[1]	9.30	25.08	50.23	0.17	11.56	3.32
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

[1] Maximum daily emissions during summer or winter; includes both on-site and off-site Project emissions.

The Project's daily operational emissions will be below the applicable SCAQMD regional air quality standards and thresholds of significance, and the Project would not contribute substantially to an existing or projected air quality violation. Any impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?		**X**		

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24-hours or longer, such as residencies, hospitals, and schools.

The nearest existing sensitive receptors (residential homes) are located approximately 56 feet (approximately 17 meters) southwesterly of the Project site. The closest receptor distance on the mass rate LST look-up tables is 25 meters. Although receptors are located closer than 25 meters to the Project site, SCAQMD LST methodology states that projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, the sensitive receptor distance from the site boundary is assumed to be 25 meters and the daily disturbance area is calculated to be 5.0 acres.

As shown in the analysis in response to Section 3.b, local and regional Project construction and operational impacts are less than significant with the inclusion of Project adherence to SCAQMD Rules, Project design features, adherence to General Plan EIR Mitigation Measures 4.3-1, 4.3-2 and 4.3-3, and incorporation of **Mitigation Measure MM-AQ-1**. Therefore, any impacts from implementation of the Project that would expose sensitive receptors to substantial pollutant concentrations would be less than significant.

Localized Construction Emissions

CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. The *AQ/GHG Analysis* identifies the following parameters in the Project design in order to compare CalEEMod reported emissions against the localized significance threshold lookup tables:

- The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.
- The maximum number of acres disturbed on the peak day.
- Any emission control devices added onto off-road equipment.
- Specific dust suppression techniques used on the day of construction activity with maximum emissions.

Air quality emissions were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold (LST) Look-up Tables. **Table 3-6, *SCAQMD Localized Significance Thresholds (LST)***, lists the Localized Significance Thresholds (LST) used to determine whether a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that are not expected to cause or

contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. LSTs are developed based on the ambient concentrations of four applicable air pollutants for source receptor area (SRA) 32 – Northwest San Bernardino Valley.

The nearest existing sensitive receptors (residential homes) are located approximately 56 feet (approximately 17 meters) southwesterly of the Project site. The closest receptor distance on the mass rate LST look-up tables is 25 meters. Although receptors are located closer than 25 meters to the Project site, SCAQMD LST methodology states that projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, the sensitive receptor distance from the site boundary is assumed to be 25 meters and the daily disturbance area is calculated to be 5.0 acres.

Table 3-6
SCAQMD Localized Significance Thresholds (LST)

Pollutant	Construction (lbs./day)	Operational (lbs./day)
NO_X	270	270
CO	2,193	2,193
PM_{10}	16	4
$PM_{2.5}$	9	2

Table 3-7, *Localized Construction Emissions* illustrates the construction related localized emissions and compares the results to SCAQMD LST thresholds.

Table 3-7
Localized Construction Emissions

Maximum Daily Emissions (lbs./day)[1]				
Activity	**NOx**	**CO**	**PM_{10}**	**$PM_{2.5}$**
On-site Emissions	59.52	35.09	9.49	6.17
SCAQMD Construction Threshold[2]	270	3,437	59	16
Exceeds Threshold (?)	**No**	**No**	**No**	**No**

[1] Maximum daily emissions during summer or winter; includes on-site project emissions only.
[2] Reference 2006-2008 SCAQMD Mass Rate Localized Significant Thresholds for construction and operation. SRA-32, Northwest San Bernardino Valley, 5-acre site, receptor distance 25 meters.

As shown in **Table 3-7**, the emissions will be below the SCAQMD thresholds of significance for localized construction emissions. Construction LST impacts would be less than significant with the incorporation of Project design features as standard conditions of approval.

Diesel Particulate Matter – Construction

The greatest potential for toxic air contaminant emissions from the Project would be related to diesel particulate matter (DPM) emissions associated with heavy diesel equipment used during construction. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 30-year lifetime will contract cancer, based on the use of standard risk-assessment methodology.

As shown in **Table 3-4, *Regional Construction Emissions - Mitigated,*** and in **Table 3-7, *Localized Construction Emissions***, construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed regional or local thresholds. Given the short-term construction schedule, the Project's construction activity is not expected to be a long-term (i.e., 30 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk and a health risk assessment is not warranted.

In September 2000, the CARB adopted the Diesel Risk Reduction Plan, which recommends several control measures to reduce the risks associated with diesel particulate matter (DPM). The key elements of the Plan are to clean up existing engines through engine retrofit emission control devices, to adopt stringent standards for new diesel engines, to lower the sulfur content of diesel fuel, and implement advanced technology emission control devices on diesel engines.

To ensure the level of DPM exposure is reduced as much as possible, the Project shall implement the best available pollution control strategies to minimize potential health risks (see above). With implementation of these best available pollution control strategies, Project impacts from DPM would be less than significant.

Asbestos - Construction

Asbestos is a mineral fiber that has been used commonly in a variety of building construction materials for insulation and as a fire-retardant. When asbestos-containing materials are damaged or disturbed by repair, remodeling or demolition activities, microscopic fibers become airborne and can be inhaled into the lungs, where they can cause significant health problems.

Based on the California Division of Mines and Geology General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, naturally occurring asbestos, found in serpentine and ultramafic rock, has not been shown to occur within in the vicinity of the Project site. Therefore, the potential risk for naturally occurring asbestos (NOA) during Project construction is small. However, in the event NOA is found on the site, the Project will be required to comply with the NESHAP standards. An Asbestos NESHAP Notification Form shall be completed and submitted to the CARB immediately upon discovery of the contaminant.

The Project will be required to follow NESHAP standards for emissions control during site renovation, waste transport and waste disposal. This is a standard condition and is not considered unique mitigation under CEQA. A person certified in asbestos removal

procedures will be required to supervise on-site activities. By following the required asbestos abatement protocols, the Project impacts would be less than significant.

Localized Operational Emissions

Table 3-8, *Localized Operational Emissions*, shows the localized operational emissions and compares the results to SCAQMD LST thresholds of significance.

Table 3-8
Localized Operational Emissions

Maximum Daily Emissions (lbs./day)[1]				
LST Pollutants	**NOx** (lbs./day)	**CO** (lbs./day)	**PM_{10}** (lbs./day)	**$PM_{2.5}$** (lbs./day)
On-site Emissions[2]	3.24	4.24	0.73	0.32
SCAQMD Operation Threshold[3]	270	2,193	4	2
Exceeds Threshold (?)	**No**	**No**	**No**	**No**

[1] Maximum daily emissions in summer or winter.
[2] Mobile source emissions include on-site vehicle emissions only. It is estimated that approximately 5% of mobile emissions will occur on the Project site.
[3] Reference: 2006-2008 SCAQMD Mass Rate Localized Significant Thresholds for construction and operation Table C-1 through C-6; SRA 32, Northwest San Bernardino Valley, disturbance area of 5-acre and receptor distance of 25 meters.

As shown in **Table 3-8**, emissions will be below the SCAQMD thresholds of significance for localized operational emissions. Project impacts would be less than significant.

Toxic Air Contaminants – Operations

A toxic air contaminant (TAC) is defined as air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health, and for which there is no concentration that does not present some risk. Typically, the primary source of TAC emissions for commercial land uses would be from on-site operations of diesel trucks. Diesel trucks emit diesel particulate matter (DPM) which is a known source of TACs. The Project would consist of an industrial business center uses that may attract heavy trucks for shipping and delivery purposes.

Unlike a high cube truck distribution center, the Project is not expected to be a significant and continuous generator of truck traffic. Based on the Project's trip generation, the Project is expected to generate a maximum of 1,191 trips per day, with approximately 6% heavy-heavy duty trucks. This would result in approximately 35 heavy trucks per day (one truck is expected to make 2 trips, entering and exiting).

According to the SCAQMD CEQA Handbook, any project that has the potential to expose the public to toxic air contaminants in excess of the following thresholds would be considered to have a significant air quality impact:

- If the Maximum Incremental Cancer Risk is 10 in one million or greater; or

- Toxic air contaminants from the proposed project would result in a Hazard Index increase of 1 or greater.

Based on the Project's trip generation, it is not anticipated that the Project would result in significant incremental increases in potential cancer risks to surrounding sensitive receptors. It should be noted however that a detailed health risk assessment has not been performed for this Project and in order to determine if the Project may have a significant impact related to hazardous air pollutants, the Health Risk Assessment Guidance for analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, (Diesel Analysis), prepared by SCAQMD, August 2003, recommends that if the Project is anticipated to create hazardous air pollutants through stationary sources or regular operations of diesel trucks on the project site, then the proximity of the nearest receptors to the source of the hazardous air pollutants and the toxicity of the hazardous air pollutants should be analyzed through a comprehensive facility-wide health risk assessment (HRA). No HRA is required due to the fact that the Project will be required to adhere to SCAQMD Rules, incorporate Project design features, adhere to General Plan EIR Mitigation Measures 4.3-1, 4.3-2 and 4.3-3, and incorporate of **Mitigation Measure MM-AQ-1.** This will ensure that impacts from TACs would be less than significant.

Local CO Emission Impacts from Project-Generated Vehicular Trips

A CO hot spot is a localized concentration of carbon monoxide (CO) that is above the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. At the time of the publishing of the 1993 CEQA Air Quality Handbook, the SCAB was designated nonattainment, and projects were required to perform hot spot analyses to ensure they did not exacerbate an existing problem. Since this time, the SCAB has achieved attainment status and the potential for hot spots caused by vehicular traffic congestion has been greatly reduced. In fact, the SCAQMD AQMP found that peak CO concentrations were primarily the result of unusual meteorological and topographical conditions, not traffic congestion. Additionally, the 2003 SCAQMD AQMP found that, at four of the busiest intersections in SCAB, there were no CO hot spot exceedances.

The Scheu Business Center Traffic Impact Study, prepared by RK Engineering, found that all study area intersections are anticipated to operate at a satisfactory LOS in both a.m. and p.m. peak hours with the addition of Project traffic and the recommended mitigation measures. As a result, it is reasonable to conclude that the Project would not significantly increase traffic congestion in the vicinity of the site that would lead to the formation of CO Hot Spots. The Project impact to CO Hot Spots is less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) affecting a substantial number of people?			**X**	

Land uses that commonly receive odor complaints include agricultural uses (farming and livestock), chemical plants, composting operations, dairies, fiberglass molding facilities, food processing plants, landfills, refineries, rail yards, and wastewater treatment plants.

Heavy-duty equipment in the Project area during construction will emit odors; however, the construction activity would cease to occur after individual construction is completed. The Project is required to comply with Rule 402 during construction, which states that 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 Project does not contain land uses that would typically be associated with significant odor emissions. The Project will also be required to comply with Rule 402 during operations.

No other sources of objectionable odors have been identified for the Project. The Project would not result in other emissions (such as those leading to odors) affecting a substantial number of people. Any impacts would be less than significant.

4. BIOLOGICAL RESOURCES.

Source(s): *Habitat Assessment for the Approximately 13-Acre Greenfield Property,* prepared by ELMT Consulting, 4-17-2019 (*Habitat Assessment*, **Appendix C**); City of Rancho Cucamonga Municipal Code (Chapter 17.80, Tree Preservation); and *City General Plan EIR*, *Section 4.4, Biological Resources*.

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		**X**		

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the Project site. In addition to the literature review, a general habitat assessment or field investigation of the Project site was conducted to document existing conditions and assess the potential for special-status biological resources to occur within the Project site. These are discussed in detail, below.

Literature Review

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

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

- Google Earth Pro historic aerial imagery (1994-2018);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service

(NRCS), Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profiles.

The literature review provided a baseline from which to inventory the biological resources potentially occurring within the Project site. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the Project site.

Habitat Assessment/Field Investigation

Following the literature review, the Project biologist inventoried and evaluated the condition of the habitat within the Project site on September 26, 2018. Plant communities and land cover types identified on aerial photographs during the literature review were verified by walking meandering transects throughout the Project site. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field investigation.

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

Existing Site Condition

On-site elevation ranges from approximately 1,086 to 1,098 feet above mean sea level and generally slopes from north to south with no areas of topographic relief. Based on the National Resources Conservation Services information from the United States Department of Agriculture Web Soil Survey the Project site is underlain by the following soil units: Hanford sandy loam (0 to 5 percent slopes), and Hanford coarse sandy loam (2 to 9 percent slopes). Soils on-site have been mechanically disturbed from existing development. Soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., grading activities and surrounding development).

The Project site is located within a heavily developed area in the City of Rancho Cucamonga. The Project site occurs in an area surrounded by land that has undergone a conversion from natural habitats into residential, commercial and industrial land uses. The Project site is bordered by residential and commercial land uses to the north, industrial and commercial land uses to the west, commercial land uses to the south, and industrial land uses to the east.

Vegetation

Due to existing land uses, no native plant communities or natural communities of special concern were observed on or adjacent to the Project site. The Project site primarily consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances that was historically used for agricultural land uses. The Project site no longer is used for agricultural activities but has been subject to on-going weed abatement activities and disturbance associated with surrounding development. These disturbances have eliminated and/or greatly disturbed the natural plant communities that once occurred within the boundaries of the Project site. It should be noted that dirt stockpiles and debris piles (from illegal dumping) were observed on the southern boundary of the project site, along 7th Street. No native plant communities would be impacted from implementation of the Project.

The Project site contains a land cover type that would be classified as developed. Early successional and non-native weedy plant species compose a majority of the Project site as a result of the on-going disking/weed abatement activities. Plant species observed on- site include Russian thistle (*Salsola tragus*), puncture vine (*Tribulus terrestris*), doveweed (*Croton setigerus*), Spanish lotus (*Acmispon americanus*), wild oat (*Avena sp.*), ragweed (*Ambrosia psilostachya*), prickly lettuce (*Lactuca serriola*), ripgut (*Bromus diandrus*), red brome (*Bromus madritensis ssp. rubens*), jimson weed (*Datura wrightii*), pigweed (*Chenopodium album*), and golden crownbeard (*Verbesina encelioides*).

- *Wildlife*

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. The following provides a discussion of those wildlife species that were observed or are expected to occur within the Project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. The Project site provides limited habitat for wildlife species except those adapted to a high degree of anthropogenic disturbances and development.

1. Fish

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the Project site. Therefore, no fish are expected to occur and are presumed absent from the Project site.

2. Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or within the vicinity of the Project site. Therefore, no amphibians are expected to occur on the Project site and are presumed absent.

Reptiles

During the field investigation Great Basin fence lizard (*Sceloporus occidentalis longipes*) was the only reptilian species observed on-site. Common reptilian species adapted to a high degree of anthropogenic disturbances that have the potential to occur on-site include western side-blotched lizard (*Uta stansburiana elegans*), alligator lizard (*Elgaria multicarinata*), and gopher snake (*Pituophis catenifer annectens*). Due to the high level of anthropogenic disturbances on-site, and surrounding development, no special-status reptilian species are expected to occur within Project site.

3. Birds

The Project site provides minimal foraging habitat for bird species adapted to a high degree of human disturbance. Bird species detected during the field investigation included American kestrel (*Falco sparverius*), lesser goldfinch (*Spinus psaltria*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), house finch (*Haemorhouse mexicanus*), American crow (*Corvus brachyrhynchos*), red-tailed hawk (*Buteo jamaicensis*), Cassin's kingbird (*Tyrannus vociferans*), Anna's hummingbird (*Calypte anna*), and Say's phoebe (*Sayornis saya*).

4. Mammals

During the field investigation cottontail (*Sylvilagus audubonii*) was the only mammalian species observed on-site. Common mammalian species adapted to a high degree of anthropogenic disturbances that have the potential to occur within the project site include Botta's pocket gopher (*Thomomys bottae*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*).

- *Nesting Birds*

No active nests or birds displaying nesting behavior were observed during the September 26, 2018 field investigation, which was conducted outside of the avian nesting season. The Project site provides limited nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. Most of the nesting habitat is associated with the eucalyptus trees found along the northeast corner of the project site. The open, disturbed habitat on-site also provides nesting opportunities for ground-nesting species such as killdeer (*Charadrius vociferus*).

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey shall be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season (reference **Mitigation Measure MM-BIO-1**. With the incorporation of **Mitigation Measure MM-BIO-1**, any impacts would be less than significant.

MM-BIO-1: No grubbing, clearing, or grading shall occur during the general songbird and raptor nesting season, which is generally January 15 to August 31. All grading permits, improvement plans, and the final map

shall state the same. If grubbing, clearing, or grading is proposed to occur during the general bird nesting season, a pre-construction survey within all suitable habitat shall be conducted by a qualified biologist to determine if active bird nests are present within the disturbance area. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within the disturbance area, clearing, grubbing, and grading shall be allowed to proceed. If active nests or nesting birds are observed within the disturbance area, the biologist shall delineate a buffer of 300 feet (500 feet for raptors) around each nest. Construction activities within the buffer shall not be permitted until nesting behavior has ceased, nests have failed, or young have fledged. The biological monitor may modify the buffer or propose other recommendations in order to minimize disturbance to nesting birds.

- *Jurisdictional Areas*

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

No jurisdictional drainage and/or wetland features were observed on the Project site during the habitat assessment that would be considered jurisdictional by the Corps, Regional Board, or CDFW. Therefore, regulatory approvals from the Corps, Regional Board, and/or CDFW will not be required for implementation of the Project.

- *Special-Status Biological Resources*

The CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Guasti USGS 7.5-minute quadrangle. Only one quadrangle was queried since the Project site is already developed, completely surrounded by existing development, and does not connect with any natural areas or native plant communities in the region. The *Habitat Assessment* evaluated the conditions of the habitat(s) within the boundaries of the Project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified twelve (12) special-status plant species and thirty-two (32) special-status wildlife species as having potential to occur within the Guasti USGS 7.5-minute quadrangle. No special-status plant communities have been recorded within the Guasti USGS 7.5-minute quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the Project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project site are presented in *Table C-1: Potentially Occurring Special-Status Biological Resources*, provided in

Attachment C of the *Habitat Assessment*.

1. Special-Status Plants

According to the CNDDB and CNPS, twelve (12) special-status plant species have been recorded in the Guasti quadrangle. No special-status plant species were observed on-site during the habitat assessment. The Project site primarily consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances including on-going disking/weed abatement activities. These disturbances have eliminated the natural plant communities that once occurred on-site which has removed suitable habitat for special-status plant species known to occur in the general vicinity of the Project site. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the Project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent from the Project site. No focused surveys are recommended.

2. Special-Status Wildlife

According to the CNDDB, thirty-two (32) special-status wildlife species have been reported in the Guasti quadrangle. No special-status wildlife species were observed on-site during the habitat assessment. The Project site primarily consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances including on-going disking/weed abatement activities. These disturbances have eliminated the natural plant communities that once occurred on-site which has greatly reduced potential foraging opportunities for wildlife species. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the Project site has a moderate potential to support Cooper's hawk (*Accipiter cooperii*), burrowing owl, and horned lark (*Eremophila alpestris actia*). Further it was determined that the Project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the area since the Project site has been heavily disturbed from on-site disturbances and existing development.

In order to ensure impacts to the aforementioned species do not occur from implementation of the Project, **Mitigation Measure MM-BIO-1** and **MM-BIO-2** are required. With implementation of the **Mitigation Measure MM-BIO-1** and **MM-BIO-2**, impacts to the aforementioned species would be less than significant.

MM-BIO-2: A 30-day preconstruction survey for burrowing owl is required. The survey shall be conducted by a qualified biologist no more than 30 days prior to ground disturbance in accordance with survey requirements contained CDFW's *Staff Report on Burrowing Owl Mitigation* to avoid direct take of burrowing owl. If burrowing owl are determined to occupy the Project site or immediate vicinity, the City of Rancho Cucamonga Community Development Department will be notified, and avoidance measures will be implemented, as appropriate, pursuant to the California Fish and Game Code, the MBTA, and the mitigation guidelines prepared by the CDFW (2012).

The following measures are recommended in the CDFW guidelines to avoid impacts on an active burrow:

- **No disturbance should occur within 50 meters (approximately 160 feet) of occupied burrows during the non-breeding season.**
- **No disturbance should occur within 75 meters (approximately 250 feet) of occupied burrows during the breeding season.**

For unavoidable impacts, passive or active relocation of burrowing owls would need to be implemented by a qualified biologist outside the breeding season, in accordance with procedures set by the CDFW.

Based on regional significance, the potential occurrence of burrowing owl within the Project site is described in further detail below.

Burrowing Owl

The burrowing owl is currently listed as a California Species of Special Concern. It is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently-sloping areas characterized by sparse vegetation and bare ground. Burrowing owls are dependent upon the presence of burrowing mammals (such as ground squirrels) whose burrows are used for roosting and nesting. The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. Burrowing mammals may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. They also require open vegetation allowing line-of-sight observation of the surrounding habitat to forage as well as watch for predators.

No burrowing owls or recent sign (i.e., pellets, feathers, castings, or white wash) was observed during the field investigation. The Project site is unvegetated and/or vegetated with a variety of low-growing plant species that allow for line-of-sight observation favored by burrowing owls. However, the Project site lacks suitable burrows (>4 inches in diameter) capable of providing roosting and nesting opportunities. Further, several power poles, overhead power lines, ornamental trees, and tall office buildings surround the Project site which decrease the likelihood that burrowing owls would occur on the project site as these features provide perching opportunities for larger raptor species (i.e., red-tailed hawk [*Buteo jamaicensis*]) that prey on burrowing owls.

Based on the results of the field investigation, it was determined that the Project site has a moderate to low potential to support burrowing owls and focused surveys are not recommended. However, a pre-construction burrowing owl clearance survey shall be conducted prior to development to ensure burrowing owl remain absent from the Project site (reference **Mitigation Measure MM-BIO-1** and **MM-BIO-2**, above).

- *Critical Habitat*

Under the federal Endangered Species Act, “Critical Habitat” is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or

biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The Project site is not located with federally designated Critical Habitat. The nearest designated Critical Habitat is located approximately 4.2 miles northeast of the Project site for San Bernardino kangaroo rat (*Dipodomys merriami parvus*). Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS for impacts to Critical Habitat will not be required for implementation of the Project.

In conclusion, the Project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. With the incorporation of **Mitigation Measures MM-BIO-1** and **MM-BIO-2**, any impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?		**X**		

Reference the discussion in Section 4.a, above. The Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. With the incorporation of **Mitigation Measures MM-BIO-1** and **MM-BIO-2**, any impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				**X**

According to the *Habitat Assessment*, The United States Army Corps of Engineers (Corps) regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the CWA. No jurisdictional drainage and/or wetland features were observed on the Project site during the habitat assessment that would be considered jurisdictional by the Corps. Regulatory approvals from the Corps will not be required for implementation of the Project.

Therefore, the Project would not have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				**X**

According to the *Habitat Assessment*, habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The Project will be confined to existing disturbed areas and is surrounded by development, which has removed natural plant communities from the surrounding area. The Project site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or connecting the Project site to any identified wildlife corridors or linkages.

Therefore, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				**X**

Per the *Habitat Assessment*, due to existing land uses, no native plant communities or natural communities of special concern were observed on or adjacent to the Project site. The Project site primarily consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances that was historically used for agricultural land uses. The Project site no longer is used for agricultural activities but has been subject to on-going weed abatement activities and disturbance associated with surrounding development.

The Project site contains a land cover type that would be classified as developed. Plant species observed on- site include Russian thistle, puncture vine, doveweed, Spanish lotus, wild oat, ragweed, prickly lettuce, ripgut, red brome, jimson weed, pigweed, and golden crownbeard.

Based on this information, there are no trees that would fall under the purview of Municipal Code (Chapter 17.80, Tree Preservation). Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				**X**

According to the *GPEIR*, neither the City nor the Sphere of Influence lie within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan area. Therefore, the Project would not conflict with the provisions of an adopted plan. No impacts would occur.

5. CULTURAL RESOURCES.

Source(s): Phase I Cultural Resources Assessment of the 13.23 Scheu Business Center Project Site (APN 209-211-024) Located Immediately Northeast of the Intersection of Archibald Avenue and 7th Street, City of Rancho Cucamonga, San Bernardino County prepared by Archaeological Associates, dated January, 2019 (*Cultural Assessment*, **Appendix D1**); *Pre-Construction Paleontological Assessment of the 13.23 Scheu Business Center Project Site (APN 209-211-024) Located Immediately Northeast of the Intersection of Archibald Avenue and 7th Street in the City Of Rancho Cucamonga, San Bernardino County*, prepared by Archaeological Associates, dated 5-1-2019 (*Paleontological Assessment*, **Appendix D2**); and *Geotechnical Investigation – Proposed Industrial/Warehouse Building, NEC Archibald Avenue & Seventh Street*, prepared by Sladden Engineering, April 30, 2013 (*Geo Investigation*, **Appendix E-1**).

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				**X**

Topographically, the Project site is flat and devoid of significant relief. Elevations range from a maximum of 1095 feet above mean sea level along the northern Project boundary to a minimum of approximately 1085 feet along the southern Project boundary. The Project site is largely devoid of vegetation due to weed abatement although a sparse cover of exotic weeds and forbes exists. There are no standing structures within the Project boundaries although numerous piles of soil have been placed along the southern Project boundary.

The statute that defines a "historic resource", Public Resources Code (PRC) §5020.1(j), identifies as including but not limited to any object, building, site, area, place, record, or manuscript that is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California."

More specifically, CEQA guidelines explain that the term "historical resources" applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the lead agency (14 Cal. Code Regs §15064.5(a)(1)-(3)). Regarding the proper criteria for the evaluation of historical significance, CEQA guidelines mandate that "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" (Ibid). A resource may be listed in the California Register if it meets any of the following criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. It is associated with the lives of persons important in our past.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. It has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

The results of the records search and field study were negative for the presence of prehistoric and historic resources within the project area. Therefore, no further work in conjunction with prehistoric or historic resources is warranted or recommended including monitoring of earth disturbing activities connected with future development.

Therefore, the Project would not cause a substantial adverse change in the significance of a historical resource as defined in '15064.5. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		**X**		

Please reference the discussion in 5.a., above. The Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5. Should any archaeological resources be inadvertently discovered during ground disturbance activities, the Project shall comply with **Mitigation Measures MM-TCR-1** and **MM-TCR-2**. Please see Section 18, Tribal Cultural Resources. Impacts would be reduced to a less than significant level.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of formal cemeteries?			**X**	

No known religious or sacred sites exist within the Project area. No evidence is in place to suggest the Project site has been used for human burials. The California Health and Safety Code (Section 7050.5) states that if human remains are discovered on-site, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. As adherence to State regulations is required for all development, it is not considered unique mitigation under CEQA. Any impacts would be less than significant.

6. ENERGY.

Source(s): *Scheu Business Center Energy Conservation Analysis,* prepared by RK Engineering Group, Inc., 4-25-2019 (*ECA*, **Appendix L**).

- **Any tables or figures in this section are from the *ECA*, unless otherwise noted.**

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			**X**	

Background Information

There are many different types and sources of energy produced and consumed in the United States. The U.S. Energy Information Administration (EIA) categorizes energy by primary and secondary sources, renewable and nonrenewable sources, and by the different types of fossil fuels.

Primary energy is captured directly from natural resources and includes fossil fuels, nuclear energy, and renewable sources of energy. Electricity is a secondary energy source that results from the transformation of primary energy sources.

A renewable energy source includes solar energy from the sun, geothermal energy from heat inside the earth, wind energy, biomass from plants, and hydropower from flowing water. Nonrenewable energy sources include petroleum products, hydrocarbon gas liquids, natural gas, coal, and nuclear energy.

Fossil fuels are non-renewable resources formed by organic matter over millions of years and include oil, coal and natural gas.

The EIA defines the five energy consuming sectors within the United States as follows:

- **Industrial Sector:** Includes facilities and equipment used for manufacturing, agriculture, mining, and construction.
- **Transportation Sector:** Includes vehicles that transport people or goods, such as cars, trucks, buses, motorcycles, trains, aircraft, boats, barges, and ships.
- **Residential Sector**: Includes homes and apartments.
- **Commercial Sector:** Includes offices, malls, stores, schools, hospitals, hotels, warehouses, restaurants, and places of worship and public assembly.
- **Electric Power Sector**: Consumes primary energy to generate most of the electricity the other four sectors consume.

Energy sources are measured in different physical units: liquid fuels are measured in barrels or gallons, natural gas in cubic feet, coal in short tons, and electricity in kilowatts and kilowatt-hours. In the United States, British thermal units (Btu), a measure of heat energy, is commonly used for comparing different types of energy to each other.

Project Energy Consumption

The three (3) main types of energy expected to be consumed by the Project include electricity, natural gas and petroleum products in the form of gasoline and diesel fuel. Energy usage for the Project is calculated based on the *Scheu Business Center Air Quality and Greenhouse Gas Analysis*, prepared by RK Engineering, Inc., 4-23-2019 (**Appendix B**). The California Emissions Estimator Model Version 2016.3.2 (CalEEMod) is used to calculate energy usage from Project construction and operational activities.

- Electricity Consumption

The Project will use electricity for many different operational activities including, but not limited to, building heating and cooling, lighting, appliances, electronics, mechanical equipment, electric vehicle charging, and parking lot lighting. Indirect electricity usage is also required to supply, distribute, and treat water and wastewater for the Project. Electricity will be provided through Southern California Edison.

Temporary electricity usage for construction activities may include lighting, electric equipment and mobile office uses. CalEEMod does not calculate electricity usage during construction as electricity consumption during construction is short-term and relatively minor compared to the operational demand. Therefore, electricity usage during construction is not counted in this analysis.

Table 6-1, *Project Electricity Consumption*, shows the Project's estimated operational electricity consumption in kilowatt-hours per year (kWh/year) and millions of Btu per year.

Table 6-1
Project Electricity Consumption

Land Use/Activity	Electricity Consumption[1]	
	(kWhr/yr.)[2]	(MBtu/yr.)[2]
General Light Industry	2,436,610	8,313.713
Parking Lot	117,757	401.787
Water Supply and Treatment	795,131	2,712.987
Electric Vehicle Service Equipment (EVSE)[3]	169.170	577.208
Total	**3,519,688**	**12,005.695**

[1] Source: *Scheu Business Center Air Quality and Greenhouse Gas Analysis*, prepared by RK Engineering, Inc., 4-23-2019 (**Appendix B**).
[2] kWhr/yr. = Kilowatt Hours per Year; MBtu/yr. = Million British Thermal Units per Year.
[3] Water supply and treatment includes indirect electricity for supply, treatment and distribution of water and wastewater.
[4] EVSE electricity estimates based on U.S. Department of Energy Costs Associated with Non-Residential Electric Vehicle Supply Equipment, November 2015, Appendix C, Electricity Consumption Examples. https://afdc.energy.gov/files/u/publication/evse_cost_report_2015.pdf
[5] Assumes 15 charging spaces per CALGreen requirements, Section 5.106.5.3.3.

- Natural Gas Consumption

The Project will use natural gas for building heating and cooling, cooking and kitchen appliances and water heating. Natural gas is not expected to be used during construction in any significant quantities and is not included in the overall calculation of the Project's natural gas consumption. **Table 6-2, *Project Natural Gas Consumption***, shows the Project's estimated operational natural gas consumption in millions of Btu per year.

Table 6-2
Project Propane Consumption

Land Use/Activity	Propane Consumption[1] (MBtu/yr.)[2]
General Light Industry	7,799.550
Total	7,799.550

[1] Source: *Scheu Business Center Air Quality and Greenhouse Gas Analysis*, prepared by RK Engineering, Inc., 4-23-2019 (**Appendix B**).
[2] MBtu/yr = Million British Thermal Units per Year.

- Petroleum Consumption

The Project's energy consumption from petroleum products is primarily associated with transportation related activities. This includes gasoline and diesel fuel used for auto and truck trips and off-road equipment during construction and operation.

1. Construction

Construction of the Project is estimated last approximately 14 months and consist of site preparation, grading, building construction, paving, and architectural coating phases. Construction activities will consume energy in the form of motor vehicle fuel (gasoline and diesel) for off-road construction equipment and on-road vehicle trips. Vehicle trips include workers and vendors traveling to and from the job-site, as well as from truck trips associated with the hauling of approximately 33,500 cubic yards of soil to be imported during site grading.

Table 6-3, *Construction Off-Road Equipment Energy Consumption*, shows the Project's energy consumption for all off-road equipment during construction. For purposes of this analysis, all off-road equipment is assumed to run on diesel fuel. **Table 6-4, *Construction On-Road Trips Energy Consumption***, shows the Project's energy consumption from on-road vehicle trips during construction.

Table 6-3
Construction Off-Road Equipment Energy Consumption

Phase[1]	Phase Duration (Days)[1]	Equipment[1]	Amount[1]	Hours/ Day[1]	Horspower (HP)[1]	Load Factor[1]	HP-hrs[2]	Fuel Consumption Rate[3] (hp-hr/gal)	Diesel Fuel Consumption (gal.)	Diesel Fuel Consumption by Phase (gal.)	MBtu[4]
Site Preparation	10	Rubber Tired Dozers	3	8	247	0.40	23,712.0	18.5	1,281.7	1,902.5	261.371
		Tractors/Loaders/Backhoes	4	8	97	0.37	11,484.8		620.8		
Grading	30	Excavators	2	8	158	0.38	28,819.2		1,557.8	6,047.1	830.756
		Graders	1	8	187	0.41	18,400.8		994.6		
		Rubber Tired Dozers	1	8	247	0.40	23,712.0		1,281.7		
		Scrapers	2	8	367	0.48	84,556.8		1,281.7		
		Tractors/Loaders/Backhoes	2	8	97	0.37	17,227.2		931.2		
Building Construction	240	Cranes	2	7	231	0.29	225,086.4		12,166.8	49,792.1	6,840.487
		Forklifts	4	8	89	0.20	136,704.0		7,389.4		
		Generator Sets	2	8	84	0.74	238,694.4		12,902.4		
		Tractors/Loaders/Backhoes	4	7	97	0.37	241,180.8		13,036.8		
		Welders	2	8	46	0.45	79,488.0		4,296.6		
Paving	20	Pavers	2	8	130	0.42	17,472.0		944.4	2,292.2	314.910
		Paving Equipment	2	8	132	0.36	15,206.4		822.0		
		Rollers	2	8	80	0.38	9,728.0		525.8		
Architectural Coating	20	Air Compressors	1	6	78	0.48	4,492.8		242.9	242.9	33.364
								Total Energy Requirements		**60,276.8**	**8,280.887**

Source: *Energy Analysis* (**Appendix L**)
[1] Source: Scheu Business Center Air Quality and GHG Impact Study. (CalEEMod v.2016.3.2)
[2] HP-hrs = Horsepower Hours.
[3] Source: Carl Moyer Program Guidelines. 2017 Revisions. Table D-21. https://www.arb.ca.gov/msprog/moyer/guidelines/current.htm
[4] Mbtu = Millions of Btu; assuming 1 gallon of diesel fuel = 137,381 Btu.

6-4
Construction On-Road Trips Energy Consumption

Construction Phase[1]	Phase Duration (Days)[1]	Trips /Day[1]	Trip Length[1]	VMT/Phase	Vehicle Class[1]	Vehicle Mix[1]	Average Fuel Economy (MPG)[2]	Gasoline			Diesel			Total MBtu[3]
								Fuel Split[2]	Fuel Consumption by Class (gal.)	Fuel Consumption by Phase (gal.)	Fuel Split[2]	Fuel Consumption by class	Fuel Consumption by Phase	
Worker Trips														
Site Preparation	10	18	14.7	2,646	LDA LDT1 LDT2	0.50 0.25 0.25	28.57 23.26 20.73	0.9926 0.9991 0.9986	45.96 28.41 31.87	106.24	0.0074 0.0009 0.0014	0.34 0.03 0.04	0.41	12.85
Grading	30	20	14.7	8,820	LDA LDT1 LDT2	0.50 0.25 0.25	28.57 23.26 20.73	0.9926 0.9991 0.9986	153.22 94.71 106.22	354.15	0.0074 0.0009 0.0014	1.14 0.09 0.15	1.38	42.84
Building Construction	240	242	14.7	853,776	LDA LDT1 LDT2	0.50 0.25 0.25	28.57 23.26 20.73	0.9926 0.9991 0.9986	14,831.26 9,168.18 10,281.97	34,281.41	0.0074 0.0009 0.0014	110.57 8.26 14.41	133.24	4,146.78
Paving	20	15	14.7	4,410	LDA LDT1 LDT2	0.50 0.25 0.25	28.57 23.26 20.73	0.9926 0.9991 0.9986	76.61 47.36 53.11	177.07	0.0074 0.0009 0.0014	0.57 0.04 0.07	0.69	21.42
Architectural Coating	20	48	14.7	14,112	LDA LDT1 LDT2	0.50 0.25 0.25	28.57 23.26 20.73	0.9926 0.9991 0.9986	245.14 151.54 169.95	566.63	0.0074 0.0009 0.0014	1.83 0.14 0.24	2.20	68.54
Sub-Total Worker Trips Energy Consumption									Gasoline (gal.)	35,485.51		Diesel (gal.)	137.92	4,292.43
Vendor Trips														
Building Construction	240	94	6.9	155,664	MHDT HHDT	0.50 0.50	8.50 5.85	0.1403 0.0097	1,284.69 129.05	1,413.74	0.8597 0.9903	7,872.02 13,175.56	21,047.58	3,061.79
Hauling Trips														
Grading	30	4,188.00	20.0	2,512,800	HHDT	1.00	5.85	0.0097	4,166.52	4,166.52	0.9903	425,371.94	425,371.94	58,939.79
Total On-Road Construction Trips Energy Usage									**Gasoline (gal.)**	**41,065.77**		**Diesel (gal.)**	**446,557.44**	**66,294.02**

[1] Source: Scheu Business Center Air Quality and GHG Impact Study. (CalEEMod v.2016.3.2)
[2] Source: EMFAC2014 Web Database. https://www.arb.ca.gov/emfac/2014/. (See Appendix B for more details.)
[3] Mbtu = Millions of Btu; assuming 1 gallon of gasoline fuel = 120,429 Btu and 1 gallon of diesel fuel = 137,381 Btu

2. Operation

The Project is expected to consume energy from the generation of operational auto and truck trips based on the land use mix described in the *Scheu Business Center Update Traffic Impact Study,* prepared by RK Engineering Group, Inc., 9-18-2019 (**Appendix H**) and the *Scheu Business Center Air Quality and Greenhouse Gas Analysis*, prepared by RK Engineering, Inc., 4-23-2019 (**Appendix B**). Vehicle trips are associated with workers, customers and vendors/non-workers (i.e. delivery, service and maintenance vehicles, etc.) traveling to and from the site. **Table 6-5, *Operational Trips Energy Consumption***, shows the Project's energy consumption for all operational trips generated by the Project on an annual basis.

Table 6-5
Operational Trips Energy Consumption

Vehicle Class[1]	Vehicle Mix[1]	Average Fuel Economy (MPG)[2]	Annual VMT[1]	Gasoline		Diesel		MBtu/yr[3]
				Fuel Split[2]	Fuel Consumption (gal./yr)	Fuel Split[2]	Fuel Consumption (gal./yr)	
LDA	54.17%	28.57		0.9926	76,603.10	0.0074	571.09	9,303.69
LDT1	3.90%	23.26		0.9991	6,815.70	0.0009	6.14	821.65
LDT2	17.86%	20.73		0.9986	35,019.81	0.0014	49.10	4,224.15
MDV	12.68%	15.42		0.9875	33,057.99	0.0125	418.46	4,038.63
LHD1	1.97%	14.08		0.6650	3,794.91	0.3350	1,911.72	719.65
LHD2	0.57%	14.35		0.5100	820.29	0.4900	788.13	207.06
MHD	1.71%	8.50	4,069,972	0.1403	1,146.74	0.8597	7,026.72	1,103.44
HHD	6.01%	5.85		0.0097	405.36	0.9903	41,383.86	5,734.17
OBUS	0.13%	7.25		0.4732	352.24	0.5268	392.14	96.29
UBUS	0.17%	4.86		0.3269	469.50	0.6731	966.72	189.35
MCY	0.62%	35.36		1.0000	718.69	0.0000	0.00	86.55
SBUS	0.08%	8.10		0.2133	88.21	0.7867	325.32	55.32
MH	0.12%	7.88		0.8345	501.27	0.1655	99.41	74.02
Total Operational Energy Usage From Transportation				**Gasoline (gal.)**	**159,793.81**	**Diesel (gal.)**	**53,938.81**	**26,653.98**

[1] Source: *Scheu Business Center Air Quality and Greenhouse Gas Analysis*, prepared by RK Engineering, Inc., 4-23-2019 (**Appendix B**).
[2] Source: EMFAC2014 Web Database. https://www.arb.ca.gov/emfac/2014/. (See Appendix B of *ECA* for more details.)
[3] MBtu/yr = Millions of Btu per year; assuming 1 gallon of gasoline fuel = 120,429 Btu and 1 gallon of diesel fuel = 137,381 Btu

- **<u>Total Project Energy Consumption</u>**

The Project's total energy consumption is calculated in MBtu and shown in **Table 6-6, *Total Project Energy Consumption***. Total Project energy consumption includes electricity,

natural gas and petroleum usage during construction and operation.

Table 10-6
Total Project Energy Consumption

Activity	Energy Consumption (MBtu/yr)[1]
Construction[2]	**74,574.90**
Off-Road Equipment	8,280.89
On-Road Vehicle Trips	66,294.02
Operational	**46,459.22**
Electricity	12,005.70
Natural Gas	7,799.55
Petroleum	26,653.98

[1] MBtu/yr = Millions of Btu per year
[2] Assumes all construction activity will occur within one year time period.

The Project will be required to comply with the mandatory requirements of California's Building Energy Efficiency Standards (Title 24, Part 6) and Green Building Standards (CALGreen, Title 24, Part 11). California's building energy efficiency standards are some of the strictest in the nation and the Project's compliance with California's building code will ensure that wasteful, inefficient or unnecessary consumption of energy is minimized. The building standards code is designed to reduce the amount of energy needed to heat or cool a building, reduce energy usage for lighting and appliances and promote usage of energy from renewable sources.

In addition, the Project will be required to comply with the Project design features listed in the Project Description of this Initial Study. The Project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation. Any impacts would be reduced to a less than significant level.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

The project will purchase electricity through Southern California Edison which is subject to the requirements of California Senate Bill 100 (SB 100). SB 100 is the most stringent and current energy legislation in California; requiring that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045.

The Project will further comply with the mandatory requirements of California's Green Building and Building Energy Efficiency standards that promote renewable energy and energy efficiency.

Therefore, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Any impacts would be less than significant.

7. GEOLOGY AND SOILS.

Source(s): *Rancho Cucamonga General Plan, Chapter 8, Public Health and Safety Element,* Figure PS-2 *Fault Hazards*, (p. PS-13), adopted May 19, 2010; *Rancho Cucamonga 2010 General Plan Update Draft Program Environmental Impact Report Volume I SCH No. 2000061027 (City's General Plan EIR), Section 4.7, Geology and Soils*; *Geotechnical Investigation – Proposed Industrial/Warehouse Building, NEC Archibald Avenue & Seventh Street*, prepared by Sladden Engineering, April 30, 2013 (*Geo Investigation*, **Appendix E1**); and *Geotechnical Update* (Letter) – *Proposed Industrial/Warehouse Building, NEC Archibald Avenue & Seventh Street*, prepared by Sladden Engineering, September 10, 2018 (*Geo Update*, **Appendix E2**).

Note: Any tables or figures in this section are from the *Geo Investigation*, unless otherwise noted.

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.i) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				**X**

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone. There are no faults geologically mapped within or projecting toward the Project site. The Project site is not within the Rancho Cucamonga Special Study Zone, which is located along the Red Hill Fault, situated approximately one (1.0) mile northwest of the Project site. Therefore, the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.ii) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?			**X**	

Intense ground shaking at the Project site could occur during an earthquake event on the Cucamonga or Red Hill Fault. In addition, all development within the greater City of Rancho Cucamonga is susceptible to potential ground shaking due to the relative proximity to two of California's most active faults: the San Andreas and San Jacinto Faults. Ground-shaking hazards associated with earthquake faults in the City, major faults in the region, and other nearby faults could pose hazards to future development at the Project site.

The Red Hill Fault Zone, which extends northeast by southwest through the central portion of the City, is located approximately one (1) mile northwest of the Project site, and the Cucamonga Fault Zone, which extends east/west along the base of the San Gabriel Mountains in the City's sphere-of-influence (SOI), is approximately 5½ miles north of the Project site. These faults are reportedly both capable of producing earthquakes with a magnitude ranging from 6.0 – 7.0. In addition, the San Jacinto fault, with a 6.7 maximum magnitude event rating is located 10.8 miles northeast of the Project site and the San Andreas fault, with a maximum magnitude event rating of 7.5, is located approximately 14.9 miles northeast of the Project site. Each of these faults can produce strong ground shaking.

According to the *Geo Investigation* (p. 3), "we consider the most significant geologic hazard to the Project to be the potential for moderate to strong seismic shaking that is likely to occur during the design life of the project."

Furthermore, per the *Geo Investigation* (p. 4), the closest known active faults that were generated in part using the EQFAULT computer programs, as modified using the fault parameters from The Revised 2002 California Probabilistic Seismic Hazard Maps, are shown below in **Table 7-1, *Closest Known Active Faults***.

Table 7-1
Closest Known Active Faults[1]

Fault Name	Distance from Project Site		Maximum Event
	Kilometers	Miles	
Red Hill[2]	1.6	1.0	6.5
Cucamonga	8.7	5.4	6.9
San Jose	9.5	5.9	6.4
Sierra Madre	14.2	8.8	6.7
Chino – Central Ave. (Elsinore)	15.2	9.4	6.7
San Jacinto – San Bernardino	17.4	10.8	6.7
San Andreas – San Bernardino	24.0	14.9	7.5
San Andreas – Southern	24.0	14.9	7.2
San Andreas – Mohave	25.3	15.7	7.4

[1] **Table 7-1** does not identify the probability of reactivation or the on-site effects from earthquakes occurring on any of the other faults in the region.
[2] Red Hill Fault info and maximum event figure per the *Rancho Cucamonga 2010 General Plan Update Draft Program Environmental Impact Report*.

The Project site has been subjected to past ground shaking by faults that traverse through the region. Strong seismic shaking from nearby active faults is expected to produce high ground accelerations during the design life of the Project. As set forth in the *Geo Investigation* (p. 5), a probabilistic approach was employed to the estimate the peak ground acceleration (a_{max}) that could be experienced at the site. Based on the USGS Probabilistic Hazard Curves, the site could be subjected to ground accelerations on the order of 0.52g;

and the peak ground acceleration at the site is judged to have a 475 year return period and a 10 percent chance of exceedance in 50 years.

The Project will be required to adhere to the California Building Code and the recommendations related to seismic ground shaking contained in the *Geo Investigation* (**Standard Condition SC-GEO-1** and **Standard Condition SC-GEO-2**). Adherence to these standard conditions is required for every project and is not considered unique mitigation under CEQA.

SC-GEO-1 In accordance with City's Building Regulations, as contained in Title 15, Buildings and Construction of the Rancho Cucamonga Municipal Code, which includes adoption of the 2007 California Building Code (CBC), all construction shall comply with the CBC and the amendments and exemptions to the CBC that the City has adopted. This Title requires site-specific investigation and establishes construction standards and inspection procedures to ensure that development does not pose a threat to public safety.

SC-GEO-2 Prior to the issuance of a grading and/or building permit, the Project applicant shall submit plans that demonstrate compliance with the geotechnical conclusions and recommendations contained in the *Geo Investigation* as it pertains to:

- **Earthwork and Grading;**
- **Foundations: Conventional Shallow Spread Footings;**
- **Slabs-On-Grade;**
- **Preliminary Pavement Design;**
- **Soluble Sulfates;**
- **Utility Trench Backfill;**
- **Exterior Concrete Flatwork; and**
- **Drainage.**

With adherence to **Standard Condition SC-GEO-1** and **Standard Condition SC-GEO-2**, any exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, would be reduced to less than significant level.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.iii) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?			**X**	

As set forth in the *Geo Investigation* (p. 5-6), liquefaction is the process in which loose, saturated granular soil loses strength as a result of cyclic loading. The strength loss is a result of a decrease in granular sand volume and a positive increase in pore pressures. Generally, liquefaction can occur if all of the following conditions apply: liquefaction-susceptible soil, groundwater within a depth of 50 feet or less, and strong seismic shaking.

Based on the depth to ground water in the site vicinity (>100 ft.), risks associated with liquefaction are considered negligible.

Sladden Engineering performed the on-site soil exploration of the Project site on April 22, 2013 by drilling ten (10) borings to depths varying from approximately 4 to 51 feet below ground surface (bgs) in order to characterize the subsurface soil conditions.

Figure 7-1, *Regional Geologic Map*, depicts the Project site and the surrounding geologic units; and **Figure 7-2, *Borehole Location Aerial Photograph***, shows locations of the ten (10) borings conducted on the Project site.

According to the *Geo Investigation*, (p. 3), the Project site has been mapped by Morton and Miller to be immediately underlain by Quaternary-age alluvial fan deposits (Qyf_4).

During the field investigation, artificial fill/disturbed soil and native alluvial materials were encountered to the maximum explored depth of approximately 51.5 feet bgs. Artificial fill soil was encountered near the surface within each of the bores. The artificial fill soil was generally less than 2 to 3 feet in depth within the bores. The native soil consists primarily of silty sand (SM) and sand (SP-SW) with scattered gravels and cobbles.

Groundwater was not encountered within any of the ten (10) boreholes conducted onsite to a depth of 51.5 feet. Based upon the bores, the *Geo Investigation* states that it is their opinion that groundwater is at a sufficient depth as not to be a factor during construction of the proposed structure. However, following periods of heavy or prolonged rainfall, perched groundwater may be encountered.

Seismic settlement is often caused when loose granular soil densifies during seismic shaking, potentially resulting in damage to overlying structures and improvements. Based on the analysis set forth in the *Geo Investigation* (p. 5), the potential for differential settlements is expected to be negligible.

It is noted, however, that because of the somewhat soft and compressible condition of the near surface soil, remedial grading including over-excavation and re-compaction is recommended for the proposed building and foundation areas. Remedial grading within the proposed building areas is recommended to include over-excavation and/or re-compaction of the artificial fill soil and the primary foundation bearing soil. Specific recommendations for site preparation are presented in the Earthwork and Grading section of the *Geo Investigation.*

The Project will be required to adhere to the California Building Code and the recommendations related to seismic-related ground failure, including liquefaction contained in the *Geo Investigation* (**Standard Condition SC-GEO-1** and **Standard Condition SC-GEO-2**). Adherence to these standard conditions is required for every project and is not considered unique mitigation under CEQA.

With adherence to **Standard Condition SC-GEO-1** and **Standard Condition SC-GEO-2**, any potential impacts to the Project from seismic-related ground failure, including liquefaction, will be reduced to less than significant level.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.iv) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?				**X**

As set forth in the *Geo Investigation*, the Project site is relatively level with minimal surface gradients. According to the USGS 7.5' Guasti Quadrangle map (1981), the site is at an approximate elevation of 1,095 feet above mean sea level (AMSL).

The site is situated on relatively level ground and is not immediately adjacent to any slopes or hillsides that could be potentially susceptible to slope instability. No signs of slope instability in the form of landslides, rock falls, earthflows or slumps were observed at or near the Project site. Risks associated with slope instability is considered "negligible". No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?			**X**	

Site grading will create the potential for the Project to result in soil erosion or the loss of topsoil.

Based on the relatively level nature of the site, it appears that grading will consist of minor cuts and fills in order to achieve the final pad elevations and to provide adequate gradients for site drainage. This does not include remedial grading consisting of the removal and re-compaction of primary foundation bearing soil within the building areas.

The City of Rancho Cucamonga is within a designated Soil Erosion Control Area as set forth in Exhibit 4.7-4 of the General Plan EIR. The Rancho Cucamonga area is subject to strong Santa Ana wind conditions during September to April, which generates blowing sand and dust, and creates erosion problems. Construction activities may temporarily exacerbate the impacts of windblown sand, resulting in temporary problems of dust control; however, development of this project under the General Plan would help to reduce windblown sand impacts in the area as pavement, roads, buildings, and landscaping are established. Therefore, the following fugitive dust reduction measures shall be implemented:

1) **The Project site shall be treated with water or other soil-stabilizing agent (approved by SCAQMD and RWQCB) daily to reduce PM_{10} emissions, in accordance with SCAQMD Rule 403 or re-planted with drought resistant landscaping as soon as possible.**

2) **Frontage public streets shall be swept according to a schedule established by the City to reduce PM_{10} emissions associated with vehicle tracking of soil off-site. Timing may vary depending upon the time of year of construction.**

3) **Grading operations shall be suspended when wind speeds exceed 25 mph to minimize PM_{10} emissions from the site during such episodes.**

4) **Chemical soil-stabilizers (approved by SCAQMD and RWQCB) shall be applied to all inactive construction areas that remain inactive for 96 hours or more to reduce PM10 emissions.**

Lastly, water erosion will be prevented through the City's standard, mandated, erosion control practices required pursuant to the CBC, and the National Pollution Discharge Elimination System (NPDES), such as silt fencing, fiber rolls, or sandbags. Reference **Standard Condition SC-GEO-1**. Adherence to these standard conditions is required for every project and is not considered unique mitigation under CEQA.

Therefore, based on the required compliance with the fugitive dust reduction measures and standard conditions, impacts related to soil erosion or loss of topsoil would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			**X**	

The Project site is relatively level and generally at grade with adjacent streets and surrounding properties with an elevation of approximately 1,095 AMSL. As discussed previously, according to the *Geo Investigation*, the Project site is underlain by Quaternary-age alluvial fan deposits (Qyf4), and onsite borings revealed the presence of native alluvial materials and artificial fill/disturbed soil. The artificial fill/disturbed soil was present in all ten (10) of the borings located near the surface with depths generally less than two to three feet. The native soils consist primarily of silty sand (SM) and sand (SP-SW) with scattered gravels and cobbles.

Groundwater was not encountered in any of the borings to a depth of 51.5 feet while a previous study, indicates groundwater depth greater than 100 feet in the Project site vicinity.

The Project is not located on a geologic unit or soil that is unstable or would become unstable as a result of the Project. According to the *Geo Investigation* (p. 5), while the potential for moderate to strong seismic shaking is likely to occur at the Project site during the design life of the Project, given the depth of the ground water in the vicinity of the subject (>100') the risks associated with liquefaction are considered negligible. Furthermore, given the topography of the site and the surrounding vicinity, there are no risks associated with onsite or offsite landslides.

Seismic settlement is often caused when loose granular soil densifies during seismic shaking, potentially resulting in damage to overlying structures and improvements. Based

on the analysis set forth in the *Geo Investigation* (p. 5), the potential for differential settlements is expected to be negligible.

It is noted, however, that because of the somewhat soft and compressible condition of the near surface soil, remedial grading including over-excavation and re-compaction is recommended for the proposed building and foundation areas. Remedial grading within the proposed building areas is recommended to include over-excavation and/or re-compaction of the artificial fill soil and the primary foundation bearing soil. Specific recommendations for site preparation are presented in the Earthwork and Grading section of the *Geo Investigation.*

Standard Condition SC-GEO-1 and **Standard Condition SC-GEO-2**, require compliance with California Building Code (CBC) requirements as well as the recommendations contained within the *Geo Investigation*. CBC requirements pertaining to new development and construction will minimize the potential for structural failure or loss of life during earthquakes by ensuring that structures are constructed pursuant to applicable seismic design criteria for the region. Compliance with **Standard Condition SC-GEO-1** and **Standard Condition SC-GEO-2** is applicable to all development; therefore, it is not considered mitigation for CEQA implementation purposes.

Therefore, the Project being not 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse. Any impacts v be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			**X**	

According to the *Geo Investigation* (p. 6), the Project site has a “very low” expansion potential.

Expansion Index testing of select samples was performed in order to evaluate the expansive potential of the materials underlying the Project site. Based on the results of the laboratory testing (EI = 1), the materials present near the ground surface are considered to have a "very low" expansion potential. Accordingly, risk of structural damage caused by volumetric changes in the subgrade soil should be minimal. However, the surface soil should be tested subsequent to grading and final foundation and slab design should be based upon post-grading expansion test results. Specific expansive soil design criteria can be provided subsequent to building pad grading.

The Project will be required to adherence to the Uniform Building Code and the recommendations related to expansive soils contained in the *Geo Investigation* (**SC-GEO-1** and **SC-GEO-2**). Adherence to these standard conditions is required for every project and is not considered unique mitigation under CEQA.

Therefore, the Project would not create substantial risks to life or property due to expansive soils. Any impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				**X**

No portion of the Project proposes the use of septic tanks or alternative waste water disposal systems. The Project will tie into existing sanitary sewer facilities in 7th Street currently terminating approximately 200' east of Archibald Avenue and which can be extended east and on site to service all 4 parcels/buildings within the Project. streets.

Therefore, whether or not the Project has soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water, is not relevant. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			**X**	

Geographically, the Project site is situated on an alluvial fan emanating from the San Gabriel Mountains to the north. Topographically, the Project site is flat and devoid of significant relief. Elevations range from a maximum of 1,095 feet AMSL along the northern Project boundary to a minimum of approximately 1,085 feet along the southern Project boundary. The Project site is largely devoid of vegetation due to weed abatement although a sparse cover of exotic weeds and forbes exists. There are no standing structures within the Project boundaries although numerous piles of soil have been placed along the southern Project boundary.

Records Research

All available literature considered pertinent to the Project site, including previously recorded lists of fossils and paleontological fossil localities recorded for the general Project site vicinity, was reviewed. The purpose of the literature search was to determine: (1) pertinent geologic and paleontologic site information, and (2) the paleontologic sensitivity of identified and/or anticipated geologic units underlying the Project site.

A records search for the Project conducted by the Natural History Museum of Los Angeles County (LACM) shows no fossil localities mapped within the boundaries of the Project study area. LACM's closest fossil vertebrate locality in the older Quaternary deposits is LACM 7811, which is located to the south of the Project study area and west of Mira Loma along Sumner Avenue. A fossil specimen of whipsnake, *Masticophisis* was recovered at that site.

Located further to the south, the next closest locality is LACM 1207 which yielded a fossil specimen of deer, Odocoileus.

A review of other unpublished documents relating to regional and/or detailed geologic studies was also conducted. These were supplemented with an examination of the regional geologic map delineating the geology of the rock formations underlying the Project site. No additional recorded fossil localities, fossil lists, published or unpublished literature within the boundaries of the Project site were discovered during the additional research.

The Project study area is underlain by sediments that have been mapped as Quaternary Alluvium. The Quaternary Alluvium is variously mapped as Younger (Recent) and Older Quaternary Alluvium. The Older Quaternary Alluvium and Recent Alluvium are all deposited in the same alluvial fan environment and consist of unconsolidated to slightly consolidated silt, sand, and coarse- grained sand to bouldery alluvial-fan deposits having slightly to moderately dissected surfaces.

As a result of the low rates of sedimentation in broad flat valleys the sediments in areas mapped as Quaternary Alluvium are typically as old as Pleistocene in age. The Older Alluvium and some younger alluvium are known to contain significant fossil localities. The Quaternary Alluvium in this area is considered to be of low paleontologic sensitivity at the surface. This sensitivity increases to moderate to high with depth.

Many to most geologic maps indicate the broad valley areas as Quaternary Alluvium (Holocene to latest Pleistocene) when in fact these surfaces were largely formed sometime in the Pleistocene and were probably formed before the latest Pleistocene. The sediments in the active channels are Holocene while the surrounded surfaces are older. Many of these channels are incised into the surface indicating a lowering of base level, probably related to lowering of sea level. The deeper alluvium in these channels often contains a Pleistocene vertebrate fauna.

Field Reconnaissance

A pedestrian survey of the study area was conducted on September 8, 2018. The field survey was conducted to investigate and make visual observations of each geologic unit present on the surface of the site. No paleontologic resources were encountered during the field reconnaissance.

Conclusions and Recommendations

No published fossil localities are known to exist on the Project site. No fossil remains were encountered on the site during the field reconnaissance. The older alluvium was deposited by streams flowing across the study area during the Pleistocene Epoch. Fossils of land animals are known from the surrounding region. According to the *Geo Investigation,* artificial fill soil was present to a depth of 3 feet with native alluvium below.

The Older Quaternary Alluvium Deposits are considered to have a moderate to high potential for the discovery of significant fossils. The Younger (Recent) Quaternary Alluvium Deposits are considered to have a low potential for the discovery of significant fossils. Since paleontological resources are subsurficial, they may be encountered during grading

activities. Therefore, **Mitigation Measures MM-GEO-1**, and **MM-GEO-2** shall be implemented.

MM-GEO-1 **Paleontological Monitoring. The monitoring shall be conducted part-time during over-excavation of the building pads below 5-feet in the Older Quaternary Alluvium, increasing to full-time during excavation of the deeper utilities (e.g. deeper removals, storm drain and sewers) in the Older Quaternary Alluvium. Supervision by a Project paleontologist will be maintained during paleontologic grading observations when grading in the on-site geologic units. In the event that fossils are exposed, the Project paleontologist shall be allowed to divert or direct grading in the area of exposure to facilitate evaluation, and (if identified as potentially significant) to salvage significant fossils.**

MM-GEO-2 **Disposition of Fossils. All fossils collected shall be prepared and identified by a qualified paleontologist. Excavated significant fossil finds shall be offered to the City or its designee, on a first-refusal basis. These actions, as well as, final mitigation and disposition of the resources, shall be subject to City/County guidelines and regulations.**

With the incorporation of **Mitigation Measures MM-GEO-1**, and **MM-GEO-2**, the Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Impacts would be reduced to a less than significant level.

GEOLOGY AND SOILS FIGURES

Figure 7-1
Regional Geologic Map

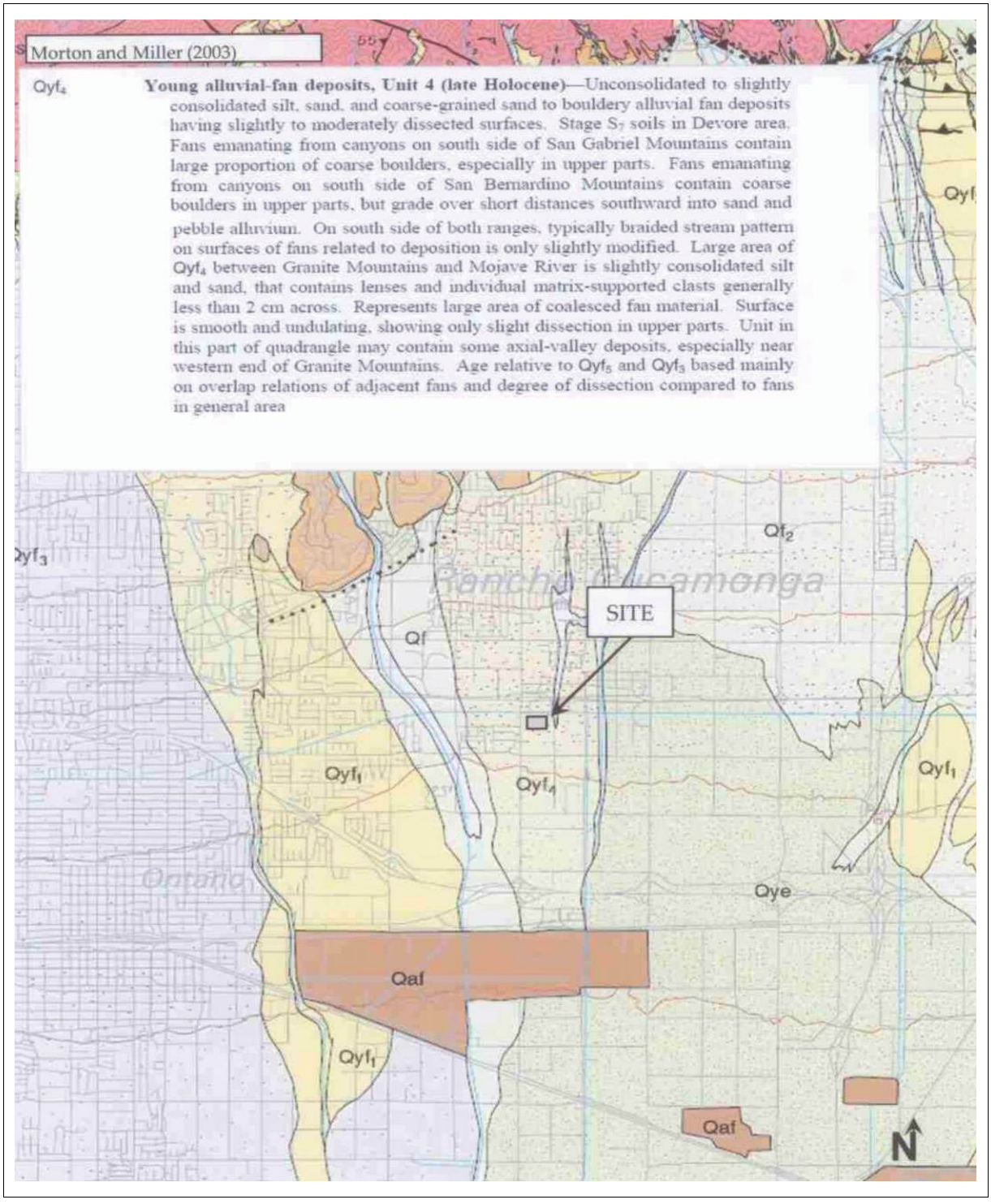
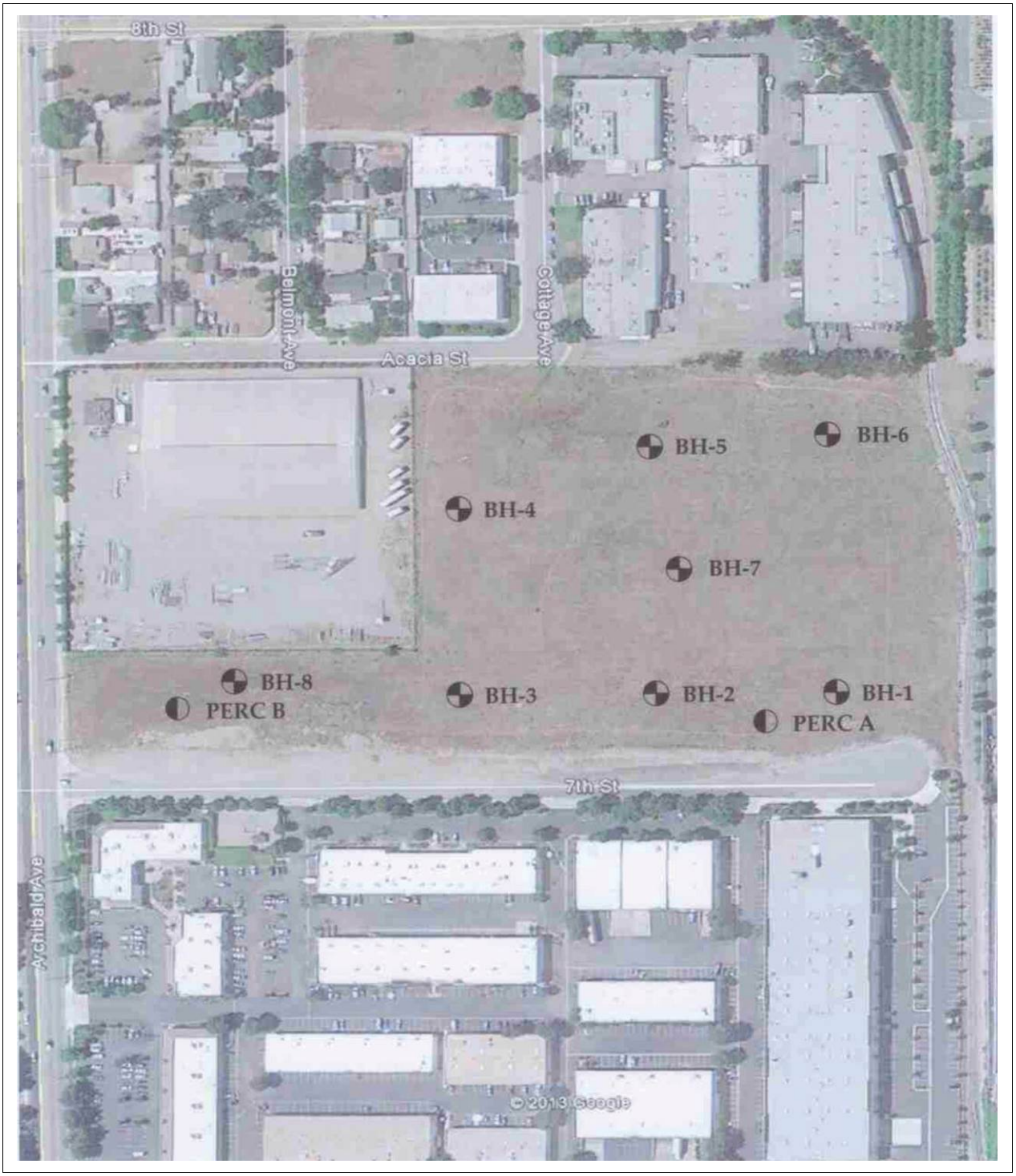


Figure 7-2
Borehole Location Aerial Photograph



8. GREENHOUSE GAS EMISSIONS.

Source(s): *Scheu Business Center Air Quality and Greenhouse Gas Impact Analysis, City of Rancho Cucamonga,* prepared by RK Engineering Group, Inc., 4-23-2019 (*AQ/GHG Analysis*, **Appendix B**).

Note: Any tables or figures in this section are from the *AQ/GHG Analysis*, unless otherwise noted.

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	

Greenhouse Gas (GHG) emissions for the Project were analyzed in the *AQ/GHG Analysis* to determine if the Project could have an impact related to GHG emissions. These impacts are analyzed on a cumulative basis, utilizing Carbon Dioxide Equivalent (CO_2e), measured in metric tons (MT) or, $MTCO_2e$. They are analyzed for both the construction and operational phases of the Project. The SCAQMD Tier 3 significance threshold of 3,000 $MTCO_2e$ emission threshold was utilized. The SCAQMD has published interim significance thresholds for greenhouse gases where the AQMD is the lead agency, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Thresholds*. This document describes a five-tiered draft GHG threshold which includes a 10,000 metric tons of CO_2e per year significance threshold for industrial projects. Tier 3 consists of screening values, which the lead agency can choose. The City does not have an adopted Climate Action Plan (CAP).

Construction Emissions

Construction activities are short-term and will cease to have any GHG emissions upon completion. In contrast, operational emissions are continuous year after year until operation of the use ceases. Because of this difference, SCAQMD recommends amortizing construction emissions over a 30-year operational lifetime. This normalizes construction emissions so that they can be grouped with operational emissions to generate a precise project-based GHG inventory.

Greenhouse gas emissions are estimated for on-site and off-site construction activity using CalEEMod. **Table 8-1, *Construction Greenhouse Gas Emissions***, shows the construction greenhouse gas emissions, including equipment and worker vehicle emissions for all phases of construction.

Table 8-1
Construction Greenhouse Gas Emissions

Activity	Emissions ($MTC0_2e$)[1]		
	On-site	Off-site	Total
Site Preparation	17.52	0.90	18.42
Grading	85.63	163.25	248.88
Building Construction	475.96	573.85	1,049.81
Paving	20.64	1.46	22.10
Architectural Coating	2.56	4.66	7.22
Total	602.31	744.12	1,346.43
Averaged over 30 years[2]	20.08	24.80	44.88

[1] $MTCO_2e$ = metric tons of carbon dioxide equivalents (includes carbon dioxide, methane, nitrous oxide, and/or hydrofluorocarbon).
[2] The emissions are averaged over 30 years and added to the operational emissions, pursuant to SCAQMD recommendations.

Greenhouse gas emissions include equipment and worker vehicle emissions for the Project would be 1,346.43 $MTCO_2e$. Amortized over a 30-year operational lifetime, this equates to approximately 44.88 $MTCO_2e$ per year.

Operational Emissions

Operational emissions associated with the Project would include GHG emissions from the following sources:

- Mobile sources (transportation);
- Energy;
- Water use and treatment;
- Waste disposal; and
- Area sources.

Mobile sources include emissions from the additional vehicle miles generated from the Project. Energy usage includes emissions from the generation of electricity and natural gas used on-site. Water use and treatment includes the water used for the interior of the building as well as for landscaping and is based on the GHG emissions associated with the energy used to transport and filter the water. Waste disposal includes the GHG emissions generated from the processing of waste from the Project as well as the GHG emissions from the waste once it is interred into a landfill. Area sources include emissions from consumer products, landscape equipment and architectural coatings.

Greenhouse gas emissions are estimated for on-site and off-site operational activity using CalEEMod. Greenhouse gas emissions from mobile sources, area sources and energy sources are shown in **Table 8-2, *Operational Greenhouse Gas Emissions***, below.

Table 8-2
Operational Greenhouse Gas Emissions

Emission Source	GHG Emissions ($MTCO_2e$)[1]
Mobile Source	1,941.03
Energy Source	1,235.47
Area Source	0.02
Water	326.42
Waste	149.70
Carbon Sequestration (New Trees)	-111.86
Construction (30year average)	44.88
Total Annual Emissions	**3,585.66**
SCAQMD Tier 3 Screening Threshold[2]	10,000
Exceed Tier 3 Threshold?	No

[1] $MTCO_2e$ = metric tons of carbon dioxide equivalents (includes carbon dioxide, methane, nitrous oxide, and/or hydrofluorocarbon).
[2] Per South Coast Air Quality Management District (SCAQMD) Draft Guidance Document - Interim CEQA Greenhouse Gas (GHG) Significance Threshold, October 2008.

The Project's GHG emissions were compared to the SCAQMD's Tier 3 approach, which limits GHG emissions to 10,000 $MTCO_2e$ for industrial projects. As shown in **Table 8-2**, Project GHG emissions are estimated to be 3,585.66 $MTCO_2e$, which is well below 10,000 $MTCO_2e$.

The Project will comply with the mandatory requirements of Title 24 Part 1 of the California Building Standards Code and Title 24 Part 6 Building and Energy Efficiency Standards. These are standard conditions and are not considered unique mitigation under CEQA.

Based on the thresholds set by the State of California and the SCAQMD, the Project's GHG emissions would not result, either directly or indirectly, in a significant impact on the environment. Furthermore, by complying with the SCAQMD thresholds of significance for GHG, the Project would not conflict with the adopted State plans, policies and regulation for reducing GHG. Project impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

The Project is required to comply with the goals and policies of the Rancho Cucamonga General Plan and the Rancho Cucamonga Sustainable Communities Action Plan (RCSCAP) for reducing GHG emissions.

Table 8-3, *Project Compliance with Rancho Cucamonga Sustainable Communities Action Plan*, demonstrates Project compliance with the goals and policies of the Rancho Cucamonga Sustainable Communities Action Plan for reducing GHG emissions.

Table 8-3
Project Compliance with Rancho Cucamonga Sustainable Communities Action Plan

Policy	Project Compliance
TM Policy 1: Promote Active Transportation Choices.	• The Project will include pedestrian sidewalks and access to the adjacent land uses and transit/circulation network. • The Project will provide bicycle parking/bicycle racks, per City of Rancho Cucamonga and State of California Building Code requirements. • The Project is located along Archibald Avenue which provides Class II bike lanes for access to the site.
TM Policy 2: Utilize Transportation Demand Management (TDM) strategies citywide.	• The Project will provide designated parking spaces for ride-sharing vehicles to promote ride-sharing programs that reduce the pollutants generated by the vehicle use. • The Project will provide bicycle parking/bicycle racks, per City of Rancho Cucamonga and State of California Building Code requirements.
TM Policy 3: Ensure safe and convenient transit options are available to all residents.	• The Project is located along the Archibald Avenue Secondary Transit Corridor (Regional Service). • The Project will participate in the City of Rancho Cucamonga's Development Impact Fee (DIF) program which supports the development and maintenance of transit amenities, bus stops, shade/weather protection, seats, and bus shelters, and encourages further transit use in the City.
TM Policy 4: Increase the use of alternative fuels and electric vehicles.	• The Project will provide charging and fueling station for alternative fuel vehicles. • The Project will provide designated clean air vehicle parking spaces.

	• The Project will provide solar ready infrastructure.
TM Policy 4: Facilitate efficient movement of vehicles throughout the City.	• The Project will participate in the City of Rancho Cucamonga's Development Impact Fee (DIF) program which is used for the development and maintenance of roadways and transportation infrastructure throughout the City.
LU Policy 1: Support development and redevelopment of land use patterns that promote clean, green, and healthy living.	• The Project is consistent with the land use designation and zoning for the site. • The Project will implement pedestrian and bicycle connections to the local transportation network. • The Project will incorporate smart growth practices which limits the impacts on natural resources, energy, air and water quality.
LU Policy 2: Provide for the preservation of parks, open space, and development.	• The Project will contribute towards the City of Rancho Cucamonga Development Impact Fee (DIF) program which helps in protecting and developing sensitive land resources, parks, open spaces and infrastructure throughout the city.
EE Policy 1: Reduce energy demand by improved efficiency and building design.	• The Project will promote green practices in conserving energy by implementing energy-efficient design for heating, cooling, and lighting. • The Project will comply the State of California Title 24 Building Standards (CalGreen) requirements. • The Project design will incorporate measures that reduce energy use through solar orientation by taking advantage of shade, prevailing winds, landscaping, and sunscreens.
EE Policy 2: Increase the amount of renewable energy use in Rancho Cucamonga.	• The Project will include solar ready infrastructure.
GB Policy 1: Facilitate the use of green building practices.	• The Project will meet the CalGreen building code requirements. • The Project will comply with the City of Rancho Cucamonga green building principles.
WW Policy 1: Support efforts to reduce potable water usage per capita in Rancho Cucamonga.	• The Project will incorporate low-flow fixtures and faucets to reduce water usage. • The Project will participate in the Cucamonga Valley Water District (CVWD) water conservation and recycling program.
WW Policy 2: Continue to expand water conservation efforts Citywide.	• The Project will install drought tolerant, native landscapes and minimize the amount of turf and sod installed. • The Project will install water efficient irrigation and provide efficient site maintenance. • The Project will participate in the Cucamonga Valley Water District (CVWD) water conservation and recycling program.
WR Policy 1: Expand programs to decrease	• The Project will comply with the City of Rancho

waste sent to landfills.	Cucamonga Environmental Programs regarding waste management.
WR Policy 2: Expand opportunities to recycle organic materials.	• The Project will work with City of Rancho Cucamonga and Burrtec Waste Industries to prepare a construction waste management plan.

Therefore, the Project would be consistent with the applicable plans, policies and regulation for the purpose of reducing GHG gases. Any impacts would be less than significant.

9. HAZARDS AND HAZARDOUS MATERIALS.

Source(s): *City General Plan EIR*, *Section 4.8 Hazards and Hazardous Materials*; Cucamonga School District website; Chaffey Joint Union High School District website; GEOTRACKER website; and the Department of Toxic Substances Control EnviroStor website.

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	

The Project could result in a significant hazard to the public if the project includes the routine transport, use, or disposal of hazardous materials or places housing near a facility which routinely transports, uses, or disposes of hazardous materials.

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1½ mile north of Interstate 10 in the City of Rancho Cucamonga. The Project site is zoned General Industrial and the Project proposes the construction of four (4) concrete tilt-up speculative warehouse buildings totaling approximately 240,710 square feet of building area.

The Project site is surrounded by general industrial land use to the north, south, east and west; with a pocket of seasoned low density residential (2-4 Dwelling Units/Acre) to the southwest.

The Project does not place housing near any hazardous materials facilities (no housing is proposed).

The routine use, transport, or disposal of hazardous materials is primarily associated with general industrial uses that require such materials for manufacturing operations or produce hazardous wastes as by-products of production applications.

A hazardous material, as defined in the Section 25501 of the California Health and Safety Code, is “any material that, due to quantity, concentration, or physical or chemical characteristics, poses a significant potential hazard to public health and safety or to the environment, if released into the workplace or the environment.”

The Project operation (warehouse) does not propose or facilitate any activity involving significant use, routine transport, or disposal of hazardous substances as part of the proposed light industrial warehouse use. The Project is designed as a multi-tenant warehouse distribution facility appealing to small distributors of finished goods, industrial supplies, and other businesses similar in nature; these types of tenants typically do not use or store hazardous materials. Furthermore, according to the owner, each tenant must sign a

standard American Industrial Real Estate Association (AIR) Lease which prohibits the usage and/or storage of any materials that are considered "hazardous". The Lease also provides detailed paragraphs for Lessor Termination Option, Lessee Remediation, and Lessee's Compliance with Applicable Requirements. Property inspections are performed weekly. Additionally, each tenant will be required to supply a Hazardous Materials information sheet to the Rancho Cucamonga Fire Department as part of the tenant improvement permit and occupancy process and the Fire Department's annual inspection process.

Common use of hazardous materials associated with small business operations, and maintenance activities like paints, cleaning solvents, fertilizers, among other items, in *limited* quantities may be present in association with operations conducted at the Project site. However, no underground fuel or petroleum storage is proposed for the Project site, and as set forth above, the Project operation does not propose *significant* use, transport, or disposal of hazardous substances as a part of the light industrial warehouse use.

During construction, there would be a minor level of transport, use, and disposal of hazardous materials and wastes that are typical of construction projects. This would include fuels and lubricants for construction machinery, coating materials, etc. Routine construction control measures and best management practices for hazardous materials storage, application, waste disposal, accident prevention and clean-up, etc. would be sufficient to reduce potential impacts to a less than significant level.

Rough grading of the Project site will consist of approximately 2,800 cubic yards net cut and 36,300 cubic yards net fill, resulting in approximately 33,500 cubic yards of import (excluding subexcavation quantities). The imported fill material will be coming from within a 5-mile radius of the Project site. For air emissions modeling purposes a haul distance of 20 miles is assumed. Dirt is assumed to be hauled in heavy-heavy duty trucks (GWR>26,000lbs) and the total number of trips required for import would be 4,188 trips. The fill material will be clean (not containing contaminated soil), and the export site will have all the requisite environmental clearances.

It is anticipated that the Storm Water Pollution Prevention Plan (SWPPP) prepared for the Project can reduce such hazards to a less than significant level through best management practices (BMPs) incorporated into the SWPPP design. The City of Rancho Cucamonga Building and Safety Department would place conditions of approval on the Project, as they pertain to Hazards and Hazardous Materials.

The requirement for a SWPPP is a standard condition for the County of San Bernardino and is not considered mitigation for CEQA implementation purposes. With the inclusion of this standard condition, any impacts from implementation of the Project construction related to significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials, are considered less than significant.

With regard to Project operation, the proposed light industrial warehouse use would not be expected to transport, use, store, or dispose of substantial amounts of hazardous materials. Widely used hazardous materials common at light industrial warehouse facilities include cleaners and pesticides, among other items. The remnants of these and other products are disposed of as commercial hazardous waste that are prohibited or discouraged from being disposed of at local landfills. Regular operation and cleaning of the warehouse facilities

would not result in significant impacts involving use, storage, transport or disposal of hazardous wastes and substances.

Use of common commercial hazardous materials and their disposal does not present a substantial health risk to the community and impacts associated with the routine transport and use of these aforementioned hazardous materials or wastes would be less than significant.

Hazardous materials must be stored in designated areas designed to prevent accidental release to the environment. California Building Code requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards.

Hazardous materials regulations are codified in Titles 8, 22, and 26 of the California Code of Regulations, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code, were established at the state level to ensure compliance with federal regulations and to reduce the risk to human health and the environment from the routine use of hazardous substances.

Based on the various light industrial warehouse uses that would be a part of the Project combined with the state and local regulatory codes in place, the Project would not cause a threat to public safety during project construction or operation.

Therefore, because the transport, use, storage, and disposal of hazardous materials pertaining to the Project would be relatively minor and subject to extensive regulatory oversight, the impact is considered less than significant. Use of common small business hazardous materials and their disposal does not present a substantial health risk to the community. Impacts associated with the routine transport and use of hazardous materials or wastes would be less than significant.

Would the Project?	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	

Please refer to Section 9.a, above. The Project site's proposed light industrial warehouse development plan does not include an above ground or below ground fuel / petroleum, or petroleum related products storage or transport component. The potential for a significant release of hazardous materials is not applicable.

Therefore, the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment and impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			**X**	

The Project site is located within the Cucamonga School District boundary (Grade: K-8) and the Chaffey Joint Union High School District boundary (Grade: 9-12). In addition, residents of Rancho Cucamonga are served by various private Charter and religious education providers.

The Project site consists of a vacant in-fill land parcel located in an industrial neighborhood surrounded by existing development, there are no proposed schools within one-quarter mile of the Project.

The closest existing schools to the Project site, listed below by proximity, are:

- Springs Charter School – Rancho Cucamonga Personalized Learning Center (Grade: K-12) is located at 8968 Archibald Avenue approximately one-tenth (0.1) of a mile northwest of the Project site;
- Cucamonga School District's - Rancho Cucamonga Middle School is located at 10022 Feron Boulevard approximately one-quarter (±¼) mile northeast of Project site;
- Southwestern Vocational College is located in a light industrial business park at 9852 Crescent Center Drive approximately one-half (±½) mile south of the Project site;
- Cucamonga School District's - Cucamonga Elementary School is located at 8677 Archibald Avenue approximately one-half (±½) mile north of Project site;
- American Christian Military Academy of Excellence is located in the Abundant Living Business Park at 9229 Utica, #130 approximately one (±1) mile east/southeast of the Project site;
- Chaffey Joint Union High School District's – Rancho Cucamonga High School is located at 11801 Lark Drive approximately 3½ miles northeast of the Project site.

Based on the above, it is evident that there are two existing schools within one-quarter mile of the Project site, namely the Springs Charter School, and the Rancho Cucamonga Middle School.

The City of Rancho Cucamonga's 2010 General Plan Update, Environmental Impact Report (GPEIR) acknowledges that "while most schools are or would be located near residential areas where hazardous materials use would be limited, future development and redevelopment pursuant to the proposed 2010 General Plan Update may be located within 0.25 mile of an existing or proposed school." The GPEIR further states: "Developments that emit hazardous emissions or handle hazardous or acutely hazardous materials may pose hazards to nearby school children in the event of an accidental release or spill."

It is noted, the General Plan land use designation for the Project site is General Industrial, and the Project site is zoned General Industrial. The General Plan and Zoning for the Project site are consistent.

It is further noted that the Project site's proposed light industrial warehouse use is in compliance with permitted land uses set forth under the existing General Plan and Zoning land use regulations. The Project is not requesting a general plan amendment (GPA) or a change of zone (CZ).

Lastly, as anticipated and set forth in the GPEIR, with respect to existing and proposed land use development within one-quarter mile of an existing or proposed school "compliance with existing hazardous material regulations would prevent undue hazards." These include:

- Hazardous Material Transportation Act (SC 4.8-1),
- Resource Conservation and Recovery Act (4.8-2),
- California Hazardous Waste Control Act (SC 4.8-3),
- Certified Unified Program Agency (CUPA) (SC 4.8-4), and
- California Accidental Release Prevention Program (SC 4.8-5).

Therefore, based on the above, impacts related to the exposure of school-aged children to hazardous emissions, materials, substances, or wastes would be less than significant assuming compliance with applicable standard conditions.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) 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?				**X**

The Project is not located on a site listed on the state Cortese List, a compilation of various sites throughout the state that have been compromised due to soil or groundwater contamination from past uses.

Based upon review of the Cortese List, the Project site is not:

- Listed as a hazardous waste and substance site by the Department of Toxic Substances Control (DTSC);
- Listed as a leaking underground storage tank (LUST) site by the State Water Resources Control Board (SWRCB);
- Listed as a hazardous solid waste disposal site by the SWRCB;
- Currently subject to a Cease and Desist Order (CDO) or a Cleanup and Abatement Order (CAO) as issued by the SWRCB; or
- Developed with a hazardous waste facility subject to corrective action by the DTSC.

Reference **Figure 9-1, *Geotracker*** and **Figure 9-2, *Envirostor***.

No impacts will occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?				**X**

The Project site is located in an area which is governed by an airport master plan. The closest airport is the LA/Ontario International Airport located approximately 1.8 miles to the south of the Project site.

The Project site is located in the Airport Influence Area of the LA/Ontario International Airport. The Airport influence area includes the area in which current or future airport-related safety, noise, airspace protection, or overflight factors may significantly affect land uses or necessitate restrictions on those uses.

With respect to the Project site, it is not located within a Safety Zone (Zone 1 through Zone 5) or a Noise Impact Zone (outside of 60-65 dB CNEL contour); it is, however, located within the Airspace Protection Zone and the Overflight Notification Zone.

- Based on a review of the Compatibility Policy Map: Airspace Protection Zones, the Project site is bisected by two building height restriction zones. The south portion of the Project site is shown as being located in the 70' to 100' above ground level (AGL) zone, while the north portion is shown as being located in the 100' to 150' AGL zone. Given the proposed concrete tilt-up industrial warehouse use, the height restrictions will have no material effect on the Project.
- Based on a review of the Compatibility Policy Map: Overflight Notification Zones, the Project site is located in the Real Estate Transaction Disclosure Policy Area. The Real Estate Transaction Disclosure policy area applies within the entire Airport Influence Area (AIA) including areas requiring avigation Easement Dedication and Recorded Overflight Notification. Given the proposed use of the Project site, the policy will have a less than significant impact on the Project site.

Therefore, implementation of the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	

The City has a developed roadway network that provides emergency access and evacuation routes to existing development.

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1½ mile north of Interstate 10 in the City of Rancho Cucamonga.

The Project proposes the on-site construction of four (4) concrete tilt-up speculative warehouse buildings totaling approximately 240,710 square feet of building area, plus associated parking and site improvements. Offsite improvements include half-width street improvements along 7th Street, the extension of storm drains in 7th Street and utility (water and sewer) connections.

A limited potential exists to interfere with an emergency response or evacuation plan during construction, primarily along 7th Street. Control of access will ensure emergency access to the site and Project area during construction through the submittal and approval of a traffic control plan (TCP). The TCP is designed to mitigate any construction circulation impacts.

Following construction, emergency access to the Project site and area will remain as was prior to the Project. Therefore, implementation of the Project would not impair implementation of, or physically interfere, with an adopted emergency response plan or an emergency evacuation plan. Impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				**X**

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1½ mile north of Interstate 10 in the City of Rancho Cucamonga.

According to the Wildland Fire Background Report prepared for the City's 2010 General Plan Update, wildland fires pose a major risk to mountainous and hillside Southern California communities. A wildfire that consumes hundreds to thousands of acres of vegetated property can overwhelm local emergency response resources. Therefore,

planning, preparedness, and education are required to reduce the potential for fire hazards and to limit the devastation caused by fires.

The northern portions of the City of Rancho Cucamonga and its 11-square mile sphere-of-influence (SOI) at the base of the San Bernardino National Forest are susceptible to these wildland hazardous fire conditions given the hilly terrain and dried vegetation.

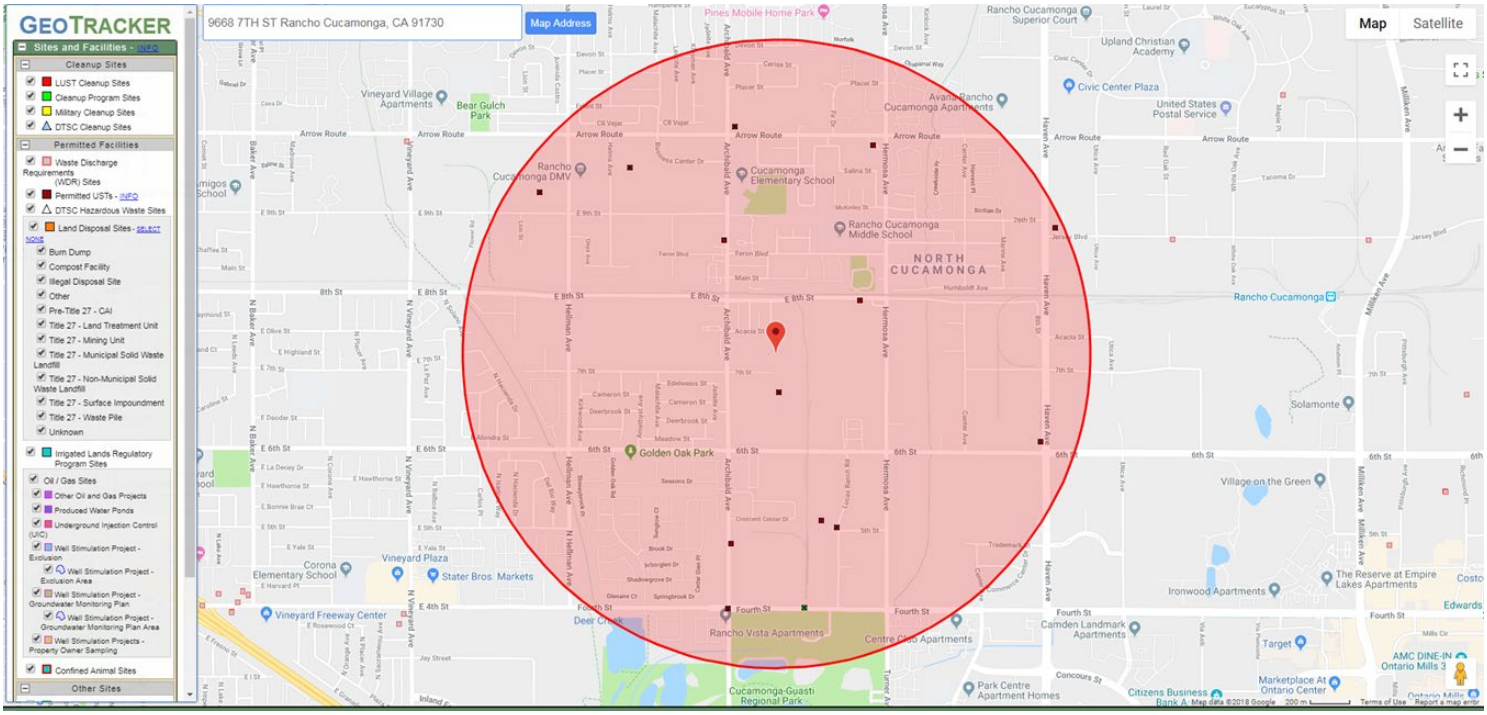
The Project site and surrounding vicinity in the southern portion of the City is not located in a Fire Hazard Severity Zone.

The Project site is served by the Rancho Cucamonga Fire Protection District (RCFPD). The closest station to the Project site is the San Bernardino Road Fire Station 172, located at 9612 San Bernardino Road, Rancho Cucamonga, CA 91730. This station is located approximately 1¼ mile north of the Project site. Fire Station 172 is staffed with a full-time, 24-hour constant staffing crew of a captain paramedic, engineer, and firefighter paramedic. They respond on a Type I engine and are capable of providing the full range of fire suppression, rescue, and advanced life support services.

The Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. No impacts would occur.

HAZARDS AND HAZARDOUS MATERIALS FIGURES

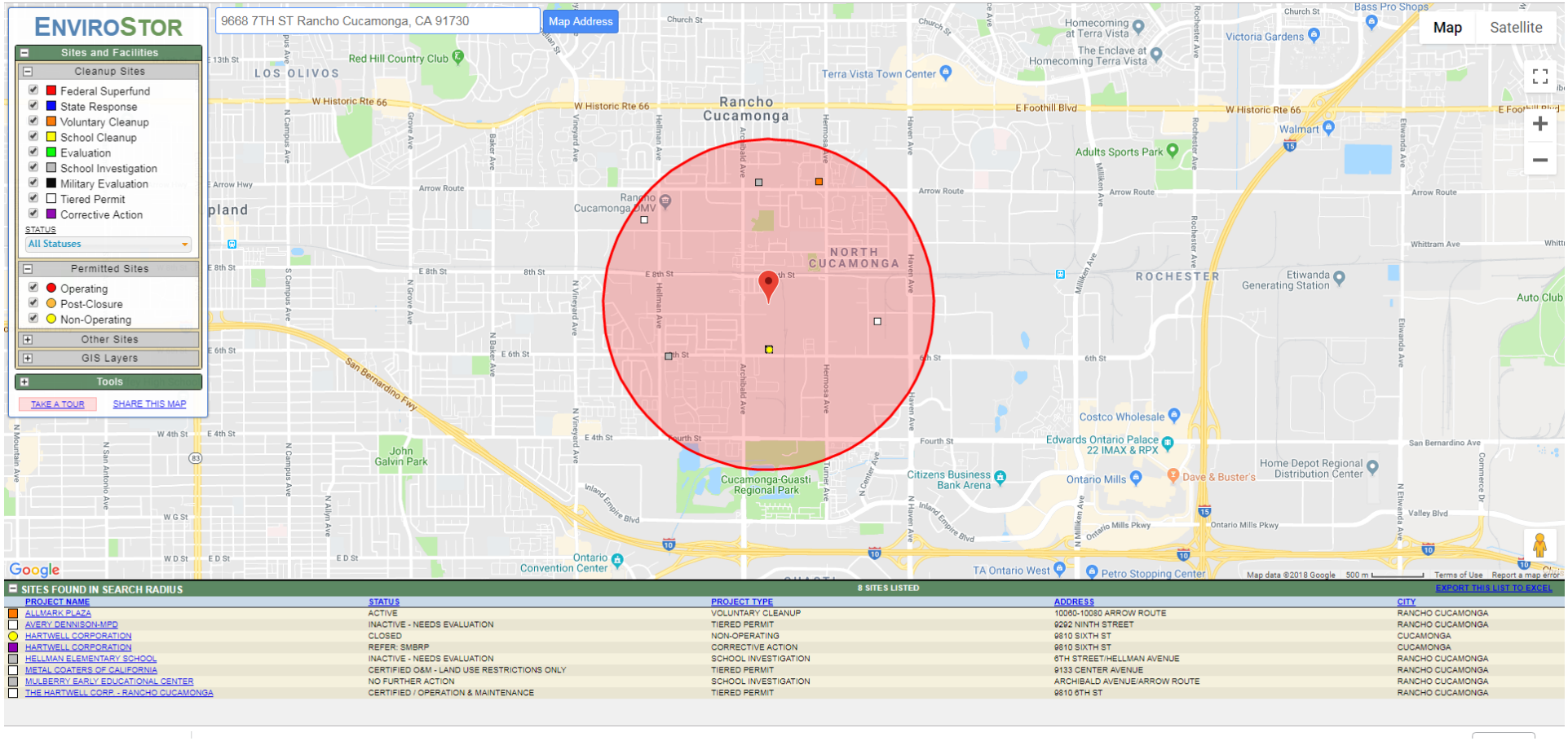
Figure 9-1
GEOTRACKER



SITE NAME	GLOBAL ID	FAC ID	SITE_TYPE	STATUS	ADDRESS
Aqua Blue Car Wash		FA0003723			8777 Haven Ave
Arco 42487 (WRR 6188)		FA0008071			9280 Haven Ave
Cucamonga Sch Dist		FA0005969			8776 Archibald Ave
Cumberland Swan	T0607100230		Lust Cleanup Site	Completed - Case Closed	9817 7th St
Fasson - Avery Dennison	T0607100288		Lust Cleanup Site	Completed - Case Closed	9292 9th St
Frito Lay North America, Inc.		FA0005619			9535 Archibald Ave
General Dynamics Facility	T0607199035		Cleanup Program Site	Completed - Case Closed	10900 4th St Bldg#600
Laird Construction Company	T0607100587		Lust Cleanup Site	Completed - Case Closed	9460 Lucas Ranch Rd
Mizkan America, Inc.		FA0004927			10037 E 8th St
Mobil #18 -AJ6	T0607101726		Lust Cleanup Site	Completed - Case Closed	8477 Archibald Ave
Pneu-Draulies	T0607100092		Lust Cleanup Site	Completed - Case Closed	8575 Helms Ave
Rancho Car Wash		FA0001118			10075 Arrow Rte
Unocal #5281	T0607100058		Lust Cleanup Site	Completed - Case Closed	705 N Archibald Ave
Yellow Jacket Drilling		FA0015682			9460 Lucas Ranch Rd

Source: GEOTRACKER http://geotracker.waterboards.ca.gov

Figure 9-1
ENVIROSTOR



PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY
ALLMARK PLAZA	ACTIVE	VOLUNTARY CLEANUP	10060-10080 ARROW ROUTE	RANCHO CUCAMONGA
AVERY DENNISON-MPD	INACTIVE - NEEDS EVALUATION	TIERED PERMIT	9292 NINTH STREET	RANCHO CUCAMONGA
HARTWELL CORPORATION	CLOSED	NON-OPERATING	9810 SIXTH ST	CUCAMONGA
HARTWELL CORPORATION	REFER: SMBRP	CORRECTIVE ACTION	9810 SIXTH ST	CUCAMONGA
HELLMAN ELEMENTARY SCHOOL	INACTIVE - NEEDS EVALUATION	SCHOOL INVESTIGATION	6TH STREET/HELLMAN AVENUE	RANCHO CUCAMONGA
METAL COATERS OF CALIFORNIA	CERTIFIED O&M - LAND USE RESTRICTIONS ONLY	TIERED PERMIT	9133 CENTER AVENUE	RANCHO CUCAMONGA
MULBERRY EARLY EDUCATIONAL CENTER	NO FURTHER ACTION	SCHOOL INVESTIGATION	ARCHIBALD AVENUE/ARROW ROUTE	RANCHO CUCAMONGA
THE HARTWELL CORP. - RANCHO CUCAMONGA	CERTIFIED / OPERATION & MAINTENANCE	TIERED PERMIT	9810 6TH ST	RANCHO CUCAMONGA

Source: EnviroStor http://www.envirostor.dtsc.ca.gov

10. HYDROLOGY AND WATER QUALITY.

Source(s): *Rancho Cucamonga Municipal Code, Chapter 19.12 Floodplain Management Regulations; Chapter 19.20 Storm Water and Urban Runoff Management and Discharge Control (adopted to comply with the CWA, the California Porter-Cologne Water Quality Control Act, and the City's NPDES permit); City of Rancho Cucamonga General Plan EIR, Section 4.9 Hydrology and Water Quality Element*; Exhibit 4.9-3 Flood Hazard *Zones*; *Scheu Business Center Air Quality and Greenhouse Gas Analysis,* prepared by RK Engineering Group, Inc., 4-23-2019 (**Appendix B**); *Preliminary Drainage Study Scheu Industrial Park*, prepared by Encompass Associates, Inc., March 22, 2018 (*Drainage Study,* **Appendix F**); and *Cucamonga Valley Water District's 2015 Urban Water Management Plan*, *(CVWD 2015 UWMP)*.

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			**X**	

A project normally would have an impact on surface water quality if discharges associated with the project would create pollution, contamination, or nuisance as defined in Water Code Section 13050, or that cause regulatory standards to be violated as defined in the applicable National Pollutant Discharge Elimination System (NPDES) storm water permit or Water Quality Control Plan for a receiving water body.

For the purpose of this specific issue, a significant impact could occur if the Project would discharge water that does not meet the quality standards of the agencies which regulate surface water quality and water discharge into storm water drainage systems. Significant impacts could also occur if the Project does not comply with all applicable regulations with regard to surface water quality as governed by the State Water Resources Control Board (SWRCB). These regulations include preparation of a Water Quality Management Plan (WQMP) to reduce potential post-construction water quality impacts.

Construction Impacts

Three general sources of potential short-term, construction-related storm water pollution associated with the Project include: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth- moving activities which, when not controlled, may generate soil erosion via storm runoff or mechanical equipment.

Operational Impacts

Proposed construction of the Project (four concrete tilt-up speculative warehouse buildings totaling approximately 240,710 square feet of building area, with associated utility, parking, loading, and flatwork improvements) will increase impervious areas by replacing the vacant property with associated paving and rooftops. Landscaping is proposed as part of Project design in the form of landscaped planters containing a variety of drought tolerant trees, shrubs, and ground covers.

The Project proponent has submitted a Water Quality Management Plan (WQMP) for review and approval. The WQMP identifies post-construction BMPs in addressing increases in impervious surfaces, methods to decrease incremental increases in off-site storm water flows, and methods for decreasing pollutant loading in off-site discharges as required by the applicable NPDES requirements. This standard condition is applicable to all development; therefore, they are not considered mitigation for CEQA implementation purposes.

Any impacts from implementation of the Project, such that the Project would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, would be considered less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			**X**	

The Cucamonga Valley Water District (CVWD) provides water to the Project site. CVWD's potable water supply comes from two primary sources: local groundwater and imported water. CVWD manages its supply and demand with careful analysis regarding customer need and population estimates to ensure there will be an adequate supply of clean, reliable water into the future. CVWD, like most other agencies, creates an Urban Water Master Plan every five years that helps guide CVWD in their operations and water supply investments.

CVWD has a diverse water supply portfolio that helps decrease dependence on imported water. Finding new sources of water is critical to ensuring water supply reliability CVWD's customers. CVWD has been building a network of wells to take advantage of local groundwater supplies. This helps to ensure reliability at a reasonable cost. The District's diversified supply ensures a reliable water supply during times of drought, regulatory constraints and other emergencies. CVWD maintains 34 reservoirs with a total capacity to store 95 million gallons of water in their service area.

Groundwater

Approximately 48 percent (48%) of CVWD's overall water supply comes from local groundwater wells in the Chino Groundwater Basin and the Cucamonga Basin, located hundreds of feet below the earth's surface. Groundwater is pumped out through a system of

wells maintained by CVWD, disinfected, flows into storage reservoirs, and ultimately makes its way into the distribution system to consumers. CVWD currently operates twenty (20) groundwater wells throughout the district service area.

Local Canyon and Tunnel Water

Three percent (3%) of the water delivered to CVWD consumers is local canyon and tunnel water that flows out of canyons and foothills within the service area, often a combination of surface and groundwater. These sources include Cucamonga Canyon, Day Canyon, Deer Canyon, East Etiwanda Canyon, and a number of tunnels in the local mountains. This water is treated at CVWD's Arthur H. Bridge or Lloyd W. Michael Treatment Plants, flows into storage reservoirs, and then into the distribution system to consumers.

Imported Water

CVWD purchases 46 percent (46%) of its water through the Inland Empire Utilities Agency (IEUA), who purchases water from the Metropolitan Water District of Southern California (MWD), a regional water wholesaler that delivers imported water from the State Water Project. State Water Project water originates in Northern California in the Sacramento-San Joaquin Delta and makes a 400 mile journey to the CVWD service area. This water is treated at CVWD's Lloyd W. Michael Water Treatment Plant, the largest conventional treatment plant in the region. The treated water is stored in reservoirs until it is needed by consumers.

The State Water Project, also known as the California Aqueduct, transports water 600 miles from Northern California to the southern portion of the state. It is owned and operated by the State of California and is the longest aqueduct system in the world, featuring 23 dams and reservoirs, 22 pumping plants that lift water to heights of 3,500 feet, and six power plants. The aqueduct is comprised of 473 miles of canals, 175 miles of pipeline and 20 miles of tunnels.

Recycled Water

The IEUA treats all the wastewater from the CVWD service area. The IEUA currently receives over 50 million gallons per day of wastewater from its regional treatment plants. This water is treated to Title 22 regulations set forth by the State Water Resources Control Board and distributed throughout the service area. IEUA delivers recycled water for agriculture, municipal irrigation, industrial uses and for groundwater replenishment. CVWD provides recycled water for landscape irrigation purposes to parks, medians and parkways, schools, golf courses, and other non-potable needs.

The Project site and the greater City of Rancho Cucamonga are located within the Santa Ana River watershed. Runoff from the City drains into Reach 3 of the Upper Santa Ana River, which is the segment located between Prado Dam and Mission Boulevard in Riverside County. The Santa Ana River drains a 2,620-square-mile area located south of the east-west ridges of the San Gabriel and San Bernardino Mountains and north of the Santa Margarita River watershed. The 100-mile long river generally runs southwesterly from the San Bernardino Mountains north of Seven Oaks Dam toward the San Bernardino and Chino valleys, cutting through the Santa Ana Mountains, and flowing down into the Orange

County coastal plain before its outlet at the Pacific Ocean in Huntington Beach.

The City of Rancho Cucamonga is underlain by the Chino and Cucamonga groundwater basins, with the Cucamonga basin underlying the area located generally north of the Red Hill inferred fault and the Chino basin underlying the area south of the fault. The Red Hill Fault acts as a hydrological barrier between the two groundwater basins.

The Project site is located within the Chino Groundwater Basin. The Chino Ground Water Basin is located under approximately 235 square miles of the upper Santa Ana River Watershed, and is bound by the Red Hill Fault, the San Gabriel Mountains, and the Cucamonga Basin to the north; the Rialto-Colton Fault to the northeast; the groundwater divide to the Rialto-Colton Basin to the east; Jurupa Hills, Pedley Hills, and the Riverside Narrows to the southeast; La Sierra Hills and the Temescal Basin to the south; Chino Hills and Puente Hills to the southwest; the groundwater divide to the Pomona and Claremont Groundwater Basins to the west; and the San Jose Fault to the northwest.

Water sources in the Chino Basin include water flow infiltration within unlined stream channels overlying the Basin; infiltration of storm water and municipal wastewater discharges within the Santa Ana River channel; underflow from the saturated sediments and fractures within the nearby mountains and hills; artificial recharge at storm water spreading grounds; imported water; recycled water; underflow from seepage across the Red Hill Fault (from the Cucamonga Basin), the San Jose Fault (from the Claremont Heights and Pomona basins), and the Rialto-Colton Fault (from the Rialto-Colton Basin); intermittent underflow from the Temescal Basin; and percolation of rainfall and returns from irrigation use.

As set forth in the City's 2010 GPEIR, an average of approximately 154,000 acre-feet/year of water was pumped from this basin between 1985 and 2005 (MWD 2007). In 2006/2007, approximately 171,491 acre-feet was pumped from the basin. In 2007/2008, 137,427 acre-feet was pumped from the basin (Chino Basin Watermaster 2008). Amounts in excess of the safe yield were accompanied by basin recharge with imported water and recycled water.

In the existing condition, the Project site is vacant, unimproved land with seasonal vegetation. The Project site development plan proposes four speculative light-industrial warehouse buildings with associated parking, loading, and flatwork that will result an impervious site area of 90%. As such, three infiltration basins (Subsurface Trenches) are proposed onsite in conjunction with the Project site development plan. In addition, a 10% landscape component is proposed along the site perimeter and various smaller locations adjacent to the building areas throughout the Project site. Runoff from roof and hardscape areas will be directed to the infiltration basins and to the landscaped portions when feasible to allow for maximum retention time before being picked up by the storm drain system.

According to Table 16, Operational Water Usage and Waste Generation of the *AQ/GHG Analysis*, the Project will have a total of annual water usage of 61,065,263 gallons of water (187.40 acre feet per year). This equates to 0.28% of the 67,500 acre feet of water available from CVWD. This amount is consistent with the assumptions contained in the *Cucamonga Valley Water District's 2015 Urban Water Management Plan*, *(CVWD 2015 UWMP)*, as the Project is consistent with the City General Plan Land Use designation and zoning classifications, which were utilized in the *CVWD 2015 UWMP* assumptions. Impacts will be incremental, yet, they were anticipated in the *CVWD 2015 UWMP*.

No component of the Project will deplete groundwater supplies. The Project design, which incorporates three infiltration basins (Subsurface Trenches) and a 10% landscaping component, as depicted on the Project plans and Project-specific WQMP, will allow for water to percolate back into the ground and allow for groundwater recharge. This will offset any impacts from the other non-pervious elements contained in the Project.

Therefore, implementation of the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.

Any impacts would be considered less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c.i) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site?			**X**	

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1½ mile north of Interstate 10 in the City of Rancho Cucamonga.

Currently, the Project site consists of approximately 13.45 gross acres of generally flat, vacant unimproved land. Upon development, the site will consist of approximately 12.24 net acres due to the proposed widening of 7th Street along the site's southern boundary and the widening of Acacia Street along the westerly portion of the site's northern boundary.

The Project site elevation ranges from approximately 1,096 feet AMSL at the northeast corner to approximately 1083 feet AMSL at the southwest corner.

The Project proposes the on-site construction of four (4) concrete tilt-up speculative warehouse buildings totaling approximately 240,710 square feet of building area, plus associated parking and site improvements. Offsite improvements include half-width street improvements along 7th Street, the extension of storm drains in 7th Street and utility (water and sewer) connections.

The Project site is currently vacant with seasonal vegetation, and is tributary to the Archibald Avenue Storm Drain, Cucamonga Creek Channel (Primary Hydrologic Basin No. 801.21) with the downstream waters being Mill Creek/Prado Area (Primary Hydrologic Basin No. 801.21) and Santa Ana River Reach 3. The Cucamonga Creek Channel is listed for pathogens, bacteria, nutrients and suspended solids and Santa Ana River Reach 3 is listed for pathogens and bacteria.

A public storm drain system will be installed in 7th Street contiguous to the Project site's southern boundary connecting to the Archibald Storm Drain and will provide catch basin

filters and perforated sub surface storm drain chambers to address water quality issues from the development.

Rough grading of the Project site will consist of approximately 2,800 cubic yards net cut and 36,300 cubic yards net fill, resulting in approximately 33,500 cubic yards of import (excluding sub excavation quantities).

Figure 10-1, *Hydrology Map* and **Figure 10-2, *Site and Drainage Plan*** identify the proposed on-site drainage system for the Project site.

The Project Specific WQMP delineates three Drainage Areas / Drainage Management Areas for the Project site, DA 1 / DMA A, DA 2 / DMA B, and DA 3 / DMA-C:

- DA 1 / DMA A is comprised of 39,389 square feet (0.90 acre) located at the east end of the Project site, contiguous east of proposed Buildings 3 and 4, consisting of proposed paved parking, access drive, and strip landscaped planting areas. DA 1 / DMA A will be served by the underground Subsurface Infiltration Trench "A;"
- DA 2 / DMA B consists of 432,711 square feet (9.93 acres) comprising the bulk of the Project site, all of Building 3 and Building 4, inclusive of the paved parking, loading, access drives, and perimeter landscaping along the north and south boundaries of the site. DA 2 / DMA B will be served by the underground Subsurface Infiltration Trench "B;"
- DA 3 / DMA C is comprised of 85,096 square feet (1.95 acres) located at the west end of the Project site fronting along both Archibald Avenue and 7th Street, consisting of proposed Buildings 1 and 2, paved parking, loading, access drives, and strip landscaped planting areas along the street frontages. DA 3 / DMA C will be served by the underground Subsurface Infiltration Trench "C."

<u>On-Site Drainage and Infiltration Trenches</u>

As discussed in the *Drainage Study*, Project site drainage is overland and by sheet flow generally in a southwesterly direction. The Project site is not subject to off-site runoff.

Upon completion of development, the Project site's surface area will be 90% covered with impervious materials (paving, flatwork, and building roof-tops). Storm water within each of the three drainage areas will surface flow into the three bio-retention Subsurface Trenches.

- Proposed Subsurface Infiltration Trench "A" will be located at the south end of DA 1 / DMA A. Infiltration Trench "A" consists of an 80-foot long 84-inch diameter perforated Corrugated Metal Pipe (CMP) Pipe in an 8' x 8' gravel trench. A subsurface lateral pipe will connect the infiltration trench to the proposed public storm drain at the east end of the 7th Street cul-de-sac.
- Proposed Subsurface Infiltration Trench "B" will be located at the south end of DA 2 / DMA B. Infiltration Trench "B" consists of two 425-foot long (850' total) 84-inch diameter perforated CMP Pipes in two side by side 8' x 8' gravel trenches. A subsurface lateral pipe will connect the to the west end of the infiltration trench(s) to the proposed public storm drain to be extended in 7th Street in conjunction with the Project site development.
- Proposed Subsurface Infiltration Trench "C" will be located at the south end of DA 3 / DMA C. Infiltration Trench "C" consists of two 84-foot long 84-inch diameter perforated CMP Pipes in two side by side 8' x 8' gravel trenches. A subsurface lateral pipe will

connect to the east end of the infiltration trench(s) to the proposed public storm drain at the to be extended in 7th Street in conjunction with the Project site development.

Offsite Drainage

The Project site is tributary to an existing storm drain in Archibald Avenue. A storm drain in 7th Street will be constructed to collect runoff from the three on-site subareas (DA 1 / DMA A, DA 2 / DMA B, and DA 3 / DMA C) in conjunction with development of the Project site.

The 100-year storm event was modeled in the rational method hydrology calculations in the *Drainage Study*. The rational method hydrologic model, as defined by Flood Control for San Bernardino County, was followed in the determination of storm runoff. Advanced Engineering Software (AES) was utilized for hydrology calculations and some street flow depth analysis.

The three proposed bio-retention water quality Infiltration Trenches will accept and allow the 100-year flows generated from the area it serves to bypass into the Storm Drain system. The on-site runoff will be detained for a specific duration based on low impact development (LID) requirements.

The results show that the drainage plan is sized with sufficient capacity to handle 100-year storm events.

Conclusion

A net increase in runoff flow rates and volumes from the Project site is anticipated in the developed condition due to the addition of impervious surface areas; however, the proposed extension of a public storm drain in 7th Street and the existing public storm drain system in Archibald Street are designed to handle the runoff from the Project site development. Hydraulic calculations also indicate that all inlets and storm drain lines proposed in conjunction with development of the Project site are sized adequately to handle the 100-year storm event.

Based on the results set forth in the *Drainage Study*, the Project site facilities, with ultimate development and adequate maintenance, will convey flows safely through the region in accordance with City of Rancho Cucamonga requirements.

Water erosion will be prevented through the City's standard, mandated, erosion control practices required pursuant to the CBC, and the National Pollution Discharge Elimination System (NPDES), inclusive of silt fencing, fiber rolls, and/or sandbags. These standard conditions are applicable to all development; therefore, they are not considered mitigation for CEQA implementation purposes.

With the inclusion of these standard conditions, any impacts from implementation of the Project relative to substantially altering the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would result in substantial erosion or siltation on- or off-site, would be considered less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c.ii) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?			**X**	

Please reference the discussion set forth in Section 10.c.i. The Project site currently consists of approximately 13.45 gross acres of generally flat, vacant unimproved land. Upon development, the site will consist of approximately 12.24 net acres due to the proposed widening of 7th Street along the site's southern boundary and the widening of Acacia Street along the westerly portion of the site's northern boundary. The Project proposes the on-site construction of four (4) concrete tilt-up speculative warehouse buildings totaling approximately 240,710 square feet of building area, plus associated parking and site improvements. Upon completion of development, the Project site's surface area will be 90% covered with impervious materials (paving, flatwork, and building roof-tops).

The on-site drainage plan provides for three drainage areas / drainage management areas, each of which will be served by three separate subsurface Infiltration Trenches which will capture drainage via surface flow. The net increase in runoff flow rates and volumes from the Project site is anticipated in the developed condition due to the addition of impervious surface areas; however, the proposed extension of a public storm drain in 7th Street and the existing public storm drain system in Archibald Street are designed to handle the runoff from the Project site development. As summarized above, and set forth in the *Drainage Study*, hydraulic calculations indicate that all inlets and storm drain facilities proposed in conjunction with development of the Project site are sized adequately to handle the 100-year storm event.

Any impacts from implementation of the Project relative to substantially altering the existing drainage pattern of the site or area, including the alteration of the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces,, or substantially increasing the rate or amount of surface runoff in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite, would be considered less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c.iii) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would 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?			**X**	

Please reference the discussions set forth in Section 10.c.i.

The Project site development shall meet all applicable City of Rancho Cucamonga requirements to capture and manage the discharge of surface runoff without any substantial change in the rate or amount.

The Project has been reviewed and conditioned by the City of Rancho Cucamonga Engineering Department, to mitigate any potential impacts, as listed above, through site design, preparation of a WQMP, and adherence to the requirements of the NPDES. These are standard conditions for the City of Rancho Cucamonga and are not considered mitigation for CEQA implementation purposes.

With the inclusion of these standard conditions, any impacts from implementation of the Project that would create or contribute runoff water that would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would 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, would be considered less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c.iv) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?			**X**	

Reference Sections 10.a, 10.b, 10.c.i, 10.c.ii and 10.c.iii. The Project has been reviewed and conditioned by the City of Rancho Cucamonga Engineering Department, to mitigate any potential impacts through site design, preparation of a WQMP, and adherence to the

requirements of the NPDES. These are standard conditions for the City of Rancho Cucamonga and are not considered mitigation for CEQA implementation purposes.
With the inclusion of these standard conditions, any impacts from implementation of the Project that would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows, would be considered less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?				X

The Project site is located approximately 38 miles northeast from the nearest coastline (Pacific Ocean/Huntington Beach). The Project site elevation ranges from approximately 1,083 to 1,096 feet AMSL.

The closest bodies of water include the Santa Ana River located over nine (9) miles to the south/southeast and Lytle Creek located approximately eleven (11) miles to the northeast; followed by the Puddingston Reservoir (San Dimas) approximately twelve (12) miles to the west, and the Prado Basin/Prado Dam located approximately fourteen (14) miles to the south/southwest. Lake Matthews (unincorp. southeast Corona) is located approximately nineteen (19) miles to the south/southeast, and Lake Arrowhead is located over twenty-five (25) miles to the northwest.

According to the *Geo Investigation*, Geologic Hazards, Section IV (p. 6), because the site is situated at an elevated inland location and is not immediately adjacent to any impounded bodies of water, risk associated with tsunamis and seiches is considered negligible.

There are no volcanic hazards in proximity of the Project site and the potential hazard from a mudflow is virtually nonexistent.

Based on the above, the Project would not result in a flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation. No impacts would occur.

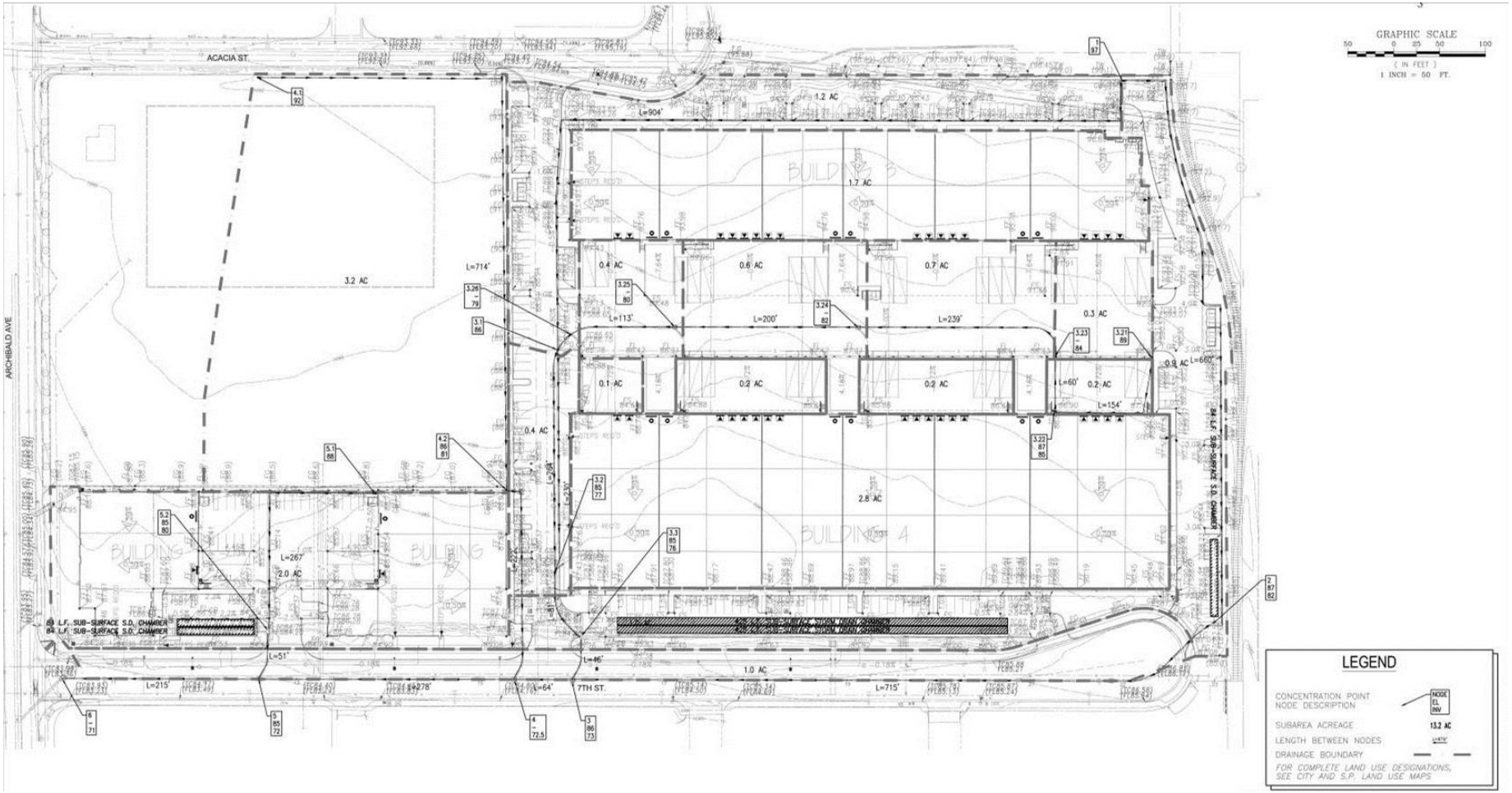
Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Reference the discussion in 10.a. A Project *WQMP* has been prepared specifically to comply with the requirements of the City of Rancho Cucamonga.

The Project site is located in the Santa Ana Region Watershed. With adherence to, and implementation of the conclusions and recommendations set forth in the *WQMP* the Project site development plan would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Any impacts would be less than significant.

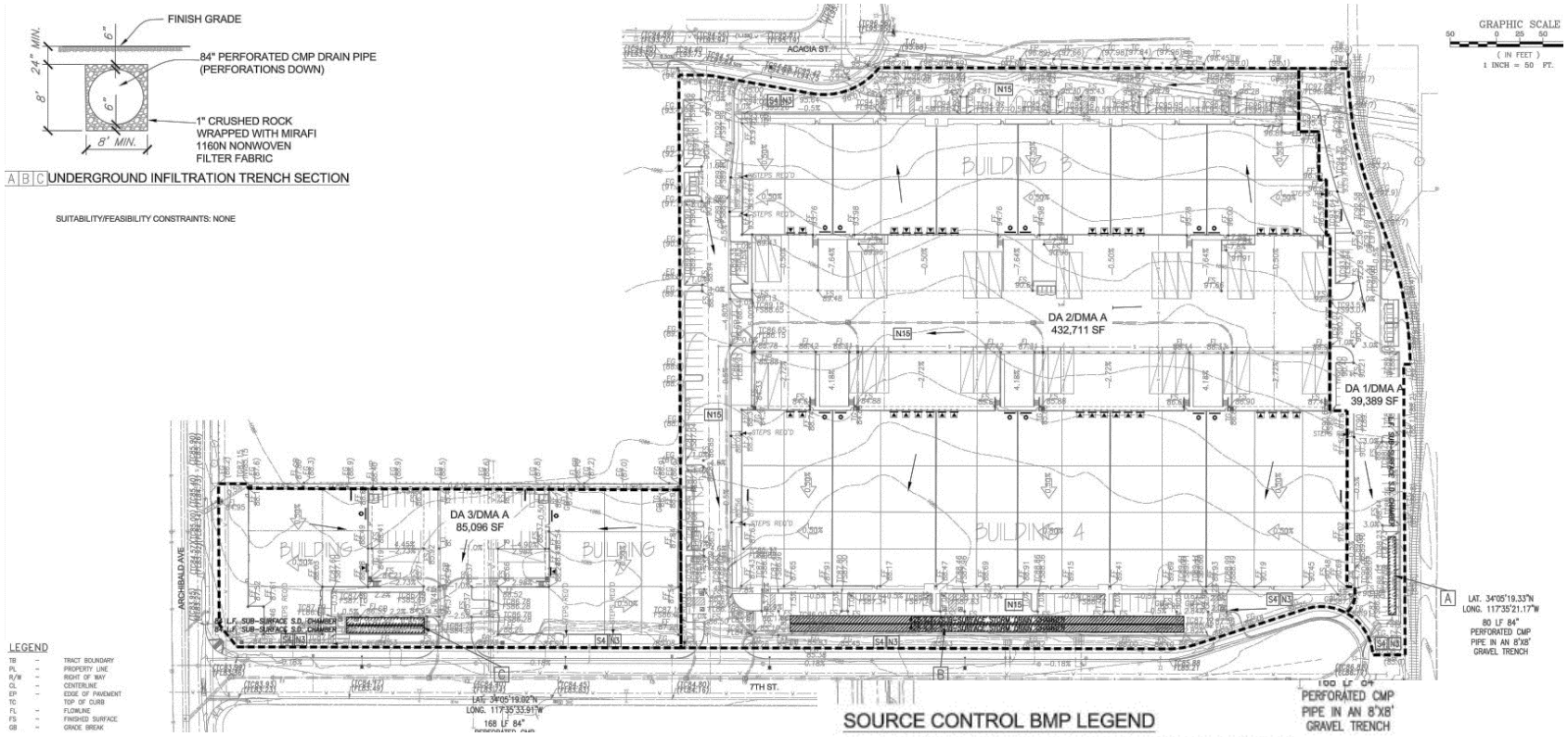
HYDROLOGY AND WATER QUALITY FIGURES

Figure 10-1
Hydrology Map



Source: Project Plans (**Appendix J**)

Figure 10-2
Site and Drainage Plan



WQMP BMP MAINTENANCE				
REF.	DESCRIPTION	TASK	SCHEDULE	BY
A/B/C	INFILTRATION TRENCH	INSPECT/ CLEAN	QUARTERLY	OWNER

Source: Project Plans (**Appendix J**)

11. LAND USE AND PLANNING.

Source(s): *City of Rancho Cucamonga 2010 General Plan*, *Chapter 2 Managing Land Use, Community Design, and Historic Resources, Figure LU-2 Land Use Plan; City of Rancho Cucamonga Zoning Map*; Rancho Cucamonga Development Code, Article III, Chapter 17.24, Table 17.24.020-1 Rancho Cucamonga Zoning Districts; Rancho Cucamonga Municipal Code, Chapter 17.36.040, Development Standards For Industrial Districts, Table 17.36.040-1 Development Standards For Industrial Zoning Districts and Table 17.36.040-2 *Streetscape Setback Requirements; Habitat Assessment for the Approximately 13-Acre Greenfield Property, Located on the Northeast Corner of Archibald Avenue and 7th Street in the City of Rancho Cucamonga, San Bernardino County, California,* prepared by ELMT Consulting, 4-17-2019 (*Habitat Assessment*, **Appendix C**).

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				**X**

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1.5 miles north of Interstate 10 in the City of Rancho Cucamonga.

The Project site is surrounded by general industrial land use to the north, south, east and west; with a pocket of seasoned low-density residential use (2-4 Dwelling Units/Acre) to the southwest. It is further noted that the properties adjacent north of Acacia Street are improved with older single family residences which have an underlying General Plan Land Use designation and zoning classification of General Industrial. Any single-family uses within these houses would be considered legal non-conforming.

The Project proposes the on-site construction of four (4) concrete tilt-up speculative warehouse buildings totaling approximately 240,710 square feet of building area, plus associated parking and site improvements.

The Project site's proposed light-industrial warehouse use conforms with the underlying General Plan Land Use designation (General Industrial) and Zoning classification (General Industrial; GI). Furthermore, the proposed development plan is in balance with surrounding land use adjacent to the site.

Therefore, the Project would not physically divide and established community. There would be no impacts.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction adopted for the purpose of avoiding or mitigating an environmental effect?				**X**

Please reference the discussion set forth in Section 11.a. In summary, the City of Rancho Cucamonga, General Plan land use designation and Zoning for the Project site are:

- General Plan Land Use designation: General Industrial
- Zoning classification: General Industrial (GI)

The Project site is not located within or proximate to a local coastal program or district.

Industrial areas in Rancho Cucamonga benefit from their strategic location near the I-10 and I-15 freeways, the Metrolink station, and railway lines.

A variety of light industrial, business park, office, manufacturing, heavy industrial, and similar business and industrial uses have been established within the City of Rancho Cucamonga, providing diverse employment opportunities for residents throughout the Inland Empire. The City has established three (3) designations for the varying industrial use types within the city, namely 1) Industrial Park, 2) General Industrial (Project site designation), and 3) Heavy Industrial.

The General Plan Land Use designation of General Industrial permits a wide range of industrial activities that include warehousing, manufacturing, assembling, fabrication, wholesale supply, heavy commercial, green technology, and office uses. Where adjacent to residential uses, properties designated General Industrial should be designed for office uses, or site planning should incorporate buffering techniques to minimize noise and traffic impacts associated with the industrial activity.

As set forth in the City of Rancho Cucamonga Development Code, the GI (General Industrial) zoning classification applies to areas within the City that will accommodate the widest possible range of light and medium industrial activity, including manufacturing, assembling, fabrication, wholesaling, heavy commercial, and office uses. The district may be employed as a buffer between nonindustrial uses and heavy industrial uses.

The development standards and setback requirements within the GI zone are summarized in **Table 11-1, *General Industrial Zone Development Standards*** and **Table 11-2, *General Industrial Zone Streetscape Setback Requirements***, respectively.

Table 11-1
General Industrial Zone Development Standards

Lot area (minimum)	0.5 ac
Lot width (minimum)	100 ft.
Setback (minimum distance between structure and property line in feet)	
Front yard	See table below
Side yard	5 ft.(1)
Street side yard (and rear yard abutting street)	See table below
Rear yard	0 f.t(1)
Distance Between Buildings	
Primary buildings	Must meet bldg. code req's
Accessory buildings	Must meet bldg. code req's
Building Height (maximum in feet)	
Primary buildings	35 ft. at the front setback; Maximum height is 75 feet
Accessory buildings	18 ft.
Floor Area Ratio (maximum ratio of building to lot square footage)	
Floor area ratio	50—60%
Open Space Requirement (min. percentage of O.S. per parcel or project)	
Open space/landscape area	10%

Table notes:
(1) See table below for parcels abutting special boulevards (Special Streetscape Requirements).
Source: *City of Rancho Cucamonga Municipal Code*, Chapter 17.36.040, *Development standards for Industrial Districts, http://qcode.us/codes/ranchocucamonga/view.php?topic=17-iii-17_36-17_36_040&frames=on*.

Table 11-2
General Industrial Zone Streetscape Setback Requirements

Street Type	*Average Depth of Landscape(1, 2)*	*Building Setback(2, 3, 4, 6)*	*Parking Setback(5)*
Major Arterial & Special Boulevard	45 ft	45 ft.	25 ft.
Secondary	35 ft.	35 ft.	20 ft.
Local/Collector	25 ft.	25 ft.	15 ft.

Table notes:
(1) The average depth shall be uninterrupted from the face of curb, except for sidewalks, pedestrian hardscape, plazas and courtyards, and monument signs.
(2) Parcels less than 225 feet in depth from the ultimate curb face on special boulevards are not required to provide an average depth of landscaping or building setback greater than 25 feet or 20% the depth of the property, whichever is greater.
(3) As determined from ultimate face of curb.
(4) Average depth of landscaping must still be provided.
(5) Street frontage walls and fences over 3 feet in height are subject to building setbacks.
(6) Setback may be increased based on building height. See Table 17.36.040-1.
Source: *City of Rancho Cucamonga Municipal Code*, Chapter 17.36.040, *Development standards for Industrial Districts, http://qcode.us/codes/ranchocucamonga/view.php?topic=17-iii-17_36-17_36_040&frames=on*.

The Project has been designed to meet the GI zoning requirements set forth in the Development Code. The Project does not require a General Plan Amendment (GPA), a Change of Zone (CZ), a Conditional Use Permit (CUP), or Variance (Var.) for approval as proposed.

Therefore, the Project would not cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect. There would be no impacts.

12. MINERAL RESOURCES.

Source(s): *City General Plan, Resource Conservation Element, Mineral Resources, Figure RC-2, Regionally Significant Aggregate Resources (p. RC-9) and Table RC-1, Areas of Designated Regionally Significant Aggregate Resources (p. RC-11)*.

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				**X**

The Project site is not designated as a State Aggregate Resources Area according to the City General Plan, Figure RC-2 and Table RC-1. Therefore, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. No impacts would occur.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**

The site is not designated by the General Plan, Figure RC-2 and Table RC-1, as a valuable mineral resource recovery site. Therefore, the Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. No impacts would occur.

13. NOISE.

Source(s): *Scheu Business Center Acoustic Study,* prepared by RK Engineering Group, Inc., 4-23-2019 (*Acoustic Study*, **Appendix G**); *General Plan Environmental Impact Report* Section 4.12 (*GPEIR*, Noise); and Google Maps.

Note: Any tables or figures in this section are from the *Acoustic Study*, unless otherwise noted.

SUBSTANTIATION:

Would the Project result in?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		**X**		

Fundamentals of Noise

This section of the report provides basic information about noise and presents some of the terms used in this Section.

- ***Sound, Noise, and Acoustics***

The sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. The sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic or stationary noise, the medium of concern is air. *Noise* is defined as sound that is loud, unpleasant, unexpected, or unwanted.

- ***Frequency and Hertz***

A continuous sound is described by its *frequency* (pitch) and its *amplitude* (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting out at 20 Hz all the way to the high pitch of 20,000 Hz.

- ***Sound Pressure Levels and Decibels***

The *amplitude* of a sound determines its loudness. The loudness of sound increases or decreases, as the amplitude increases or decreases. Sound pressure amplitude is measured in units of micro-Newton per square inch meter (N/m2), also called micro-Pascal (µPa). One µPa is approximately one hundred billionths (0.00000000001) of normal atmospheric

pressure. Sound pressure level (SPL or L_p) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels and abbreviated as dB.

- ***Addition of Decibels***

Because decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two (2) sounds or equal SPL are combined, they will produce an SPL 3 dB greater than the original single SPL. In other words, sound energy must be doubled to produce a 3dB increase. If two (2) sounds differ by approximately 10 dB the higher sound level is the predominant sound.

- **Human Response to Changes in Noise Levels**

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, (A-weighted scale) and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. The A-scale weighing is typically reported in terms of A-weighted decibel (dBA). Typically, the human ear can barely perceive the change in the noise level of 3 dB. A change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g. doubling the volume of traffic on a highway), would result in a barely perceptible change in sound level.

- ***Noise Descriptors***

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant, while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels. Following are the most commonly used noise descriptors along with brief definitions.

A-Weighted Sound Level

The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise Level

The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Community Noise Equivalent Level (CNEL)

The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

Decibel (dB)

A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A)

A-weighted sound level (see definitionabove).

Equivalent Sound Level (LEQ)

The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sampleperiod.

Habitable Room

Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

L(n)

The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly, L50, L90, and L99, etc.

Noise

Any unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

Outdoor Living Area

Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually notincluded in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not

typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

Percent Noise Levels

See L(n).

Sound Level (Noise Level)

The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

Sound Level Meter

An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL)

The dBA level which, if it lasted for one (1) second, would produce the same A-weighted sound energy as the actual event.

- Traffic Noise Prediction

Noise levels associated with traffic depends on a variety of factors: (1) volume of traffic, (2) speed of traffic, (3) auto, medium truck (2 – 6 wheels) and heavy truck percentage (3 axles and greater), and sound propagation. The greater the volume of traffic, higher speeds and truck percentages equate to a louder volume of noise. A doubling of the Average Daily Traffic (ADT) along a roadway will increase noise levels by approximately 3 dB; reasons for this are discussed in the sections above.

- ***Sound Propagation***

As sound propagates from a source it spreads geometrically. The sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use the hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt or landscaping attenuate noise at an additional rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuation of 4.5 dB per doubling of distance for a line source and 6.0 dB per

doubling of distance for a point source.

Research has demonstrated that atmospheric conditions can have a significant effect on noise levels when noise receivers are located 200 feet from a noise source. Wind, temperature, air humidity, and turbulence can further impact how far sound can travel.

City of Rancho Cucamonga Noise Regulations

The City of Rancho Cucamonga outlines their noise regulations and standards within the General Plan Public Health and Safety Element and Section 17.66 of the Municipal Code. The noise standards from the General Plan and Municipal Code are provided in Appendix A of the *Acoustic Study*.

- Noise/Land Use Compatibility

The City of Rancho Cucamonga establishes planning criteria for determining a development's noise/land use compatibility based on the community noise equivalent level (CNEL). **Table 13-1, *Noise/Land Use Compatibility Guidelines***, summarizes the City's Noise/Land Use Compatibility guidelines for land uses applicable to the Project:

Table 13-1
Noise/Land Use Compatibility Guidelines

Land Use	Noise Limit (CNEL)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential	<50 – 60	55 – 65	65 – 75	>75
Industrial	<75	70 - 80	- -	75 to 85

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 detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice. The outdoor environment will seem noisy.

Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable: New construction or development should generally not be undertaken. Construction costs to make the indoor

environment acceptable would be prohibitive and the outdoor environment would not be usable.

- Municipal Code Residential Noise Standards

The Rancho Cucamonga Municipal Code Chapter 17.66.050 -- Noise Standards describes the noise regulations for controlling unnecessary, excessive and annoying sounds in residential areas. The Project must not exceed the residential noise limit at the nearest adjacent residential property line.

Table 13-2, *City of Rancho Cucamonga Residential Noise Limits*, shows the Rancho Cucamonga Residential Noise Limits.

Table 13-2
City of Rancho Cucamonga Residential Noise Limits

Location	Time Period	Noise Standard	L25 (15-min)	L17 (10-min)	L8 (5-min)	LMAX (any time)
Residential	Daytime (7am - 10pm)	65 dBA	65 dBA	70 dBA	79 dBA	80 dBA
	Nighttime (10pm – 7am)	60 dBA	60 dBA	65 dBA	74 dBA	75 dBA

- Municipal Code Industrial Noise Standards

The Rancho Cucamonga Municipal Code Chapter 17.66.110 -- Special Industrial Performance Standards establishes noise standards to allow industrial uses to operate consistent with the overall characteristics of the land use category. The Project is zoned for General Industrial (GI) uses and is therefore required to follow the Class B performance standards. **Table 13-3, *City of Rancho Cucamonga Industrial Performance Standards***, shows the General Industrial (GI) Zoning District Class B performance standards in the City of Rancho Cucamonga.

Table 13-3
City of Rancho Cucamonga Industrial Performance Standards

Land Use	Noise Standard[1]
General Industrial (Class B)	80 dBA

[1] Noise level anywhere on the lot. Noise caused by motor vehicles and trains is exempted from this standard.

- Construction Noise Regulation

Section 17.66.050(D)(4) of the City's municipal code states that the following activities shall be exempted from the provisions of the noise code;

Noise sources associated with, or vibration created by, construction, repair, remodeling, or grading of any real property or during authorized seismic surveys, provided said activities:

a. When adjacent to a residential land use, school, church or similar type of use, the noise generating activity does not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday, and provided noise levels created do not exceed the noise standard of 65 dBA when measured at the adjacent property line.

b. When adjacent to a commercial or industrial use, the noise generating activity does not take place between the hours of 10:00 p.m. and 6:00 a.m. on weekdays, including Saturday and Sunday, and provided noise levels created do not exceed the noise standards of 70 dBA at the when measured at the adjacent property line.

Study Method and Procedures

The following discussion describes the measurement procedures, measurement locations, and noise modeling procedures and assumptions used in the noise analysis.

- *Measurement Procedures and Criteria*

Noise measurements are taken to determine the existing noise levels. A noise receiver or receptor is any location in the noise analysis in which noise might produce an impact. The following criteria are used to select measurement locations and receptors:

- Locations expected to receive the highest noise impacts, such as the first row of houses;
- Locations that are acoustically representative and equivalent of the area of concern;
- Human land usage; and
- Sites clear of major obstruction and contamination.

Sound level measurements were conducted in accordance with Caltrans technical noise specifications. All measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA).

A Larson Davis 712 Type 2 sound level meter was used to conduct short-term (10-minute) noise measurement.

The Leq, Lmin, Lmax, L2, L8, L25, and L50 statistical data were recorded over the measurement time period intervals and the information was utilized to define the noise characteristics for the Project. L17 statistical data was interpolated using a linear trendline analysis. The following gives a brief description of the Caltrans Technical Noise Supplement procedures for sound level measurements:

- Microphones for sound level meters were placed five (5) feet above the ground for all short-term noise measurements;
- Sound level meters were calibrated before and after each measurement;
- Following the calibration of equipment, a windscreen was placed over the microphone;

- Frequency weighting was set on "A" and slow response;
- Results of the short-term noise measurements were recorded on field data sheets;
- During any short-term noise measurements, any noise contaminations such as barking dogs, local traffic, lawn mowers, or aircraft fly-overs were noted; and
- Temperature and sky conditions were observed and documented in Appendix B of the *Acoustic Study* includes photos, field sheets, and measured noise data.

- *Traffic Noise Modeling*

Traffic noise from vehicular traffic was projected using a version of the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA model arrives at the predicted noise level through a series of adjustments to the key input parameters. The following outlines the key adjustments made to the computer model for the roadway inputs:

- Roadway classification – (e.g. freeway, major arterial, arterial, secondary, collector, etc.);
- Roadway Active Width – (distance between the center of the outer most travel lanes on each side of the roadway);
- Average Daily Traffic (ADT) Volumes, Travel Speeds, Percentages of automobiles, medium trucks, and heavy trucks;
- Roadway grade and angle of view;
- Site Conditions (e.g. soft vs. hard); and
- Percentage of total ADT which flows each hour throughout a 24-hour period.

The following outlines key adjustments to the computer model for the Project site parameter inputs:

- Vertical and horizontal distances (Sensitive receptor distance from noise source);
- Noise barrier vertical and horizontal distances (Noise barrier distance from sound source and receptor);
- Traffic noise source spectra; and
- Topography.

Traffic noise levels are projected at 100 feet from the centerline of the roadway. The noise levels were calculated using traffic volumes presented in the *Scheu Business Center Update Traffic Impact Study,* prepared by RK Engineering Group, Inc., 9-18-2019 (*TIS*, **Appendix H**). The traffic noise levels do not take into account the effect of any noise barriers or topography that may reduce traffic noise levels.

Table 13-4, *Roadway Parameters*, indicates the roadway parameters utilized in the Acoustic Study.

Table 13-4
Roadway Parameters[1]

No.	Class.	Lanes	Site Condition	Average Daily Traffic (ADT)				
				Existing	Project Only	Existing Plus Project	Opening Year Without Project	Opening Year With Project
1.	Archibald Avenue: 8th Street to 6th Street							
	Major Arterial	4	Soft	29,523	302	29,825	32,213	32,515
2.	Acacia Street: East of Archibald Avenue							
	Local	2	Soft	253	529	782	259	788
3.	7th Street: East of Archibald Avenue							
	Collector	2	Soft	1,137	982	2,119	1,160	2,142

[1] Roadway parameters based on *TIS* (**Appendix H)**.

Table 13-5, *Vehicle Distribution (Truck Mix)*, indicates the vehicle distribution and truck mix utilized for all surface streets in the Project study area. The vehicle distribution is based on the Noise Assessment for the Rancho Cucamonga General Plan Update (2010).

Table 13-5
Vehicle Distribution (Truck Mix)

Motor-Vehicle Type	Daytime % (7 AM - 7 PM)	Evening % (7 PM - 10 PM)	Night % (10 PM - 7 AM)	Total % of Traffic Flow
Automobiles	75.54	14.02	10.43	92.00
Medium Trucks	48.00	2.00	50.00	3.00
Heavy Trucks	48.00	2.00	50.00	5.00

- Stationary Noise Modeling

The stationary noise was projected using a computer program that replicates the FHWA Noise Prediction Model (FHWA-RD-77-108). The FHWA model arrives at the predicted noise level through a series of adjustments to the reference energy noise level. For each stationary source, the referenced noise level was applied to the model. The model outputs the projected noise level

based on the following key parameters:

- Measured referenced noise level – (e.g. how loud a source is at a specific distance);
- Vertical and horizontal distances (sensitive receptor distance from noise source);
- Noise barrier vertical and horizontal distances (noise barrier distance from sound source and receptor);
- Typical noise source spectra; and
- Topography.

Table 13-6, *Reference Stationary Noise Level Measurements*, indicates the measured referenced noise level measurements. The noise measurement data indicates the distance the microphone was placed from the noise source and the statistical data. Measurements were taken over a 10-minute interval.

Table 13-6
Reference Stationary Noise Level Measurements

Source	Distance from Source (feet)	Noise Levels (dBA)					
		Leq	Lmax	L_2	L_8	L25	L50
Loading Dock Activity	6.0	79.3	97.0	91.5	81.0	74.5	71.5
Parking Lot Noise	6.0	63.8	79.5	68.5	65.5	64.5	63.0
HVAC Condenser Unit	3.0	88.5	88.5	88.5	88.5	88.5	88.5

To estimate the future noise levels during typical conditions, the reference noise levels were adjusted to the nearest sensitive receptor location property line (south and west of the project site). Adjusted noise levels are based on the distance of the receptor location relative to the noise source, local topography and the recommended parapet wall shielding wall for the equipment. The noise levels assume that the stationary sources are operating continuously when in reality all noise sources will operate intermittently throughout the daily operation.

- Construction Noise Modeling

The construction noise analysis utilizes the Federal Highway Administration (FHWA) Roadway Construction Noise Model Version 1.1, together with several key construction parameters, to estimate future construction noise impacts. Key inputs include distance to the sensitive receiver, equipment usage, and baseline parameters for the Project site.

Construction noise impacts are analyzed for each phase of construction anticipated for the Project. Noise levels are calculated based on the average distance of equipment over an 8-hour period to the property line.

Existing Noise Environment

The existing noise environment for the Project site and surrounding areas has been established based on collected noise measurement data. Existing roadway noise has also been modeled based on existing roadway characteristics and traffic volume. Noise measurement data indicates that traffic noise propagating from the adjacent roadways, as well as activities from the surrounding commercial land uses, are the main sources of ambient noise at the Project site and surrounding area.

- *Short-Term (10-Minute) Noise Measurement Results*

Using a Larson Davis 712 Type 2 sound level meter, two (2) short-term 10-minute noise measurements were recorded at the adjacent property lines. The noise monitoring locations were selected based on locations that are representative of the existing noise environment and exposure to sensitive noise areas. Short-term noise measurements are conducted during normal daytime hours and considered samples of typical ambient conditions. The Leq, Lmin, Lmax, L8, L17, and L25, statistical data were reported over the 10-minute period. The information was utilized to define the noise characteristics for the Project.

The following details and observations are provided for the short-term noise measurements. The results of the short-term (ST) measurements are presented in **Table 13-7, *Short-Term Noise Measurement Results***.

Table 13-7
Short-Term Noise Measurement Results[1]

Site No.	Time Started	Leq	Lmax	Lmin	L_8	$L17^2$	L_{25}
ST-1	11:51 AM	56.0	72.5	46.1	60.0	58.2	52.0
ST-2	12:09 PM	55.7	73.0	43.3	58.6	57.7	51.7

[1] Noise measurements conducted for 10-minute intervals during normal daytime conditions.
[2] L17 statistical data has been interpolated using a linear trend line analysis.

ST-1 Measurement taken along the sidewalk of Acacia Street and adjacent to the nearest residential property to the Project site, approximately 50 feet from the site. Ambient noise includes traffic noise from Archibald Avenue and Acacia Street, pedestrians and barking dogs.

ST-2 Measurement taken at the nearest industrial P/L to the south of 7th Street. Ambient noise includes traffic noise from Archibald Avenue, 7th street and the commercial property parking lot and operationalactivities.

Figure 13-1, *Noise Measurement Locations*, shows the noise measurement locations. Appendix B of the *Acoustic Study* includes photos, field sheets, and measured noise data.

- Existing Roadway Noise Levels

Table 13-8, *Existing Roadway Noise Levels (dBA CNEL)*, shows the modeled existing traffic related CNEL noise levels calculated at 100 feet from the centerline of roadway segments adjacent to the site. The distances to the 55, 60, 65, and 70 dBA CNEL noise contours are also shown. The noise levels were calculated using traffic volumes presented in the *TIS*. The traffic noise levels do not take into account the effect of any noise barriers or topography that may reduce traffic noise levels. The existing roadway noise levels provide a baseline of the existing traffic noise environment.

Table 13-8
Existing Roadway Noise Levels (dBA CNEL)

Roadway	Segment	CNEL at 100 ft.	Distance to Contour (Ft)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Archibald Avenue	8th Street to 6th Street	72.0	136	293	632	1,362
Acacia Street	East of Archibald Avenue	47.8	3	7	15	33
7th Street	East of Archibald Avenue	57.0	14	29	63	136

Construction Noise Impacts

Temporary construction noise impacts were assessed from the Project site to the surrounding adjacent land uses. The *Acoustic Study* assumed that there would be no pile driving activities as part of the Project.

- Construction Noise

Table 13-9, *Typical Construction Noise Levels* shows typical construction noise levels for different types of equipment. This data was compiled by the Environmental Protection Agency.

Table 13-9
Typical Construction Noise Levels

Type	Noise Levels (dBA) at 50 Feet
Earth Moving	
Compactors (Rollers)	73 - 76
Front Loaders	73 - 84
Backhoes	73 - 92
Tractors	75 - 95
Scrapers, Graders	78 - 92
Pavers	85 - 87
Trucks	81 - 94
Materials Handling	
Concrete Mixers	72 - 87
Concrete Pumps	81 - 83
Cranes (Movable)	72 - 86
Cranes (Derrick)	85 - 87
Stationary	
Pumps	68 - 71
Generators	71 - 83
Compressors	75 - 86
Impact Equipment	
Pneumatic Wrenches	82 - 87
Jack Hammers, Rock Drills	80 - 99
Pile Drivers (Peak)	95-105
Other	
Vibrators	68 - 82
Saws	71 - 82

The degree of construction noise will vary for different areas of the Project site and also vary depending on the construction activities. The *Acoustic Study* analyzed potential noise impacts during site preparation, grading, building construction, paving, and architectural coating. Noise levels are calculated based on a minimum average distance of equipment over an 8-hour period at 100 feet from property line.

During the construction period, the contractors would be required to comply with the Rancho Cucamonga noise standards in the Municipal Code. Section 17.66.050(D)(4) of the Rancho Cucamonga Municipal Code states that the following activities shall be exempted from the provisions of the noise code;

"Noise sources associated with, or vibration created by, construction, repair,

remodeling, or grading of any real property or during authorized seismic surveys, provided said activities:

a. When adjacent to a residential land use, school, church or similar type of use, the noise generating activity does not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday, and provided noise levels created do not exceed the noise standard of 65 dBA when measured at the adjacent property line.

b. When adjacent to a commercial or industrial use, the noise generating activity does not take place between the hours of 10:00 p.m. and 6:00 a.m. on weekdays, including Saturday and Sunday, and provided noise levels created do not exceed the noise standards of 70 dBA at the when measured at the adjacent property line."

This is a standard condition and is not considered unique mitigation under CEQA.

Table 13-10, *Construction Noise Impact Analysis* shows the estimated construction noise levels calculated using the Federal Highway Administration Roadway Construction Noise Model Version 1.1.

As shown in **Table 13-10**, the Project has the potential to exceed the residential and industrial noise standards for construction activities.

Table 13-10
Construction Noise Impact Analysis

Phase	Equipment	Quantity	Calculated Noise Level at 100 ft. (dBA)		Combined 8-hr Noise Level (dBA)
			Lmax	Leq	Leq
Site Preparation	Rubber Tired Dozers	3	75.6	71.7	81.6
	Tractors/Loaders/Backhoes	4	78.0	74.0	
Grading	Excavators	2	74.7	70.7	82.2
	Graders	1	79.0	75.0	
	Rubber Tired Dozers	1	75.6	71.7	
	Scrapers	2	77.6	73.6	
	Tractors/Loaders/Backhoes	2	78.0	74.0	
Building Construction	Cranes	1	74.5	66.6	80.3
	Forklifts	3	69.0	65.0	
	Generator Sets	1	74.0	71.6	
	Tractors/Loaders/Backhoes	3	78.0	74.0	
	Welders	1	68.0	64.0	
Paving	Pavers	2	71.2	68.2	78.7
	Paving Equipment	2	78.0	74.0	
	Rollers	2	74.0	67.0	
Architectural Coating	Air Compressors	1	71.6	67.7	67.7
Maximum Construction Phase Noise Level - Leq (dBA)					82.2
City of Rancho Cucamonga Construction Noise Standards – Residential					65
City of Rancho Cucamonga Construction Noise Standards – Industrial					70
Potentially Significant Short-Term Noise Impact (Yes/No?)					Yes

In order to mitigate the short-term construction noise levels, **Mitigation Measure MM-NOI-1** shall be implemented.

MM-NOI-1 The Project applicant shall implement a noise monitoring program during construction. The monitoring program will alert construction

management personnel when noise levels approach the upper limits of the 8-hour Leq exceedance threshold (65 dBA) along the adjacent residential uses and 70 dBA at the adjacent industrial uses. Construction activity should cease prior to noise levels exceeding the 8-hour threshold.

In addition, **Mitigation Measure MM-NOI-2** shall also be implemented to mitigate the short-term construction noise levels.

MM-NOI-2 The Project applicant shall install a temporary noise barrier along the northwest corner of the property to shield the residential units from the line of sight of the construction activity (in conformance with Exhibit D of the *Acoustic Study*).

With adherence to Municipal Code Noise requirements and implementation of **Mitigation Measures MM-NOI-1** through **MM-NOI-2**, any short-term construction impacts would be reduced to a less than significant level. Reference **Figure 13-2, *Mitigation and Design Feature Locations***.

Operational Noise Impacts

This section analyzes the change in the ambient environment as a result of operational noise impacts generated by the Project. The main sources of noise generated by the Project would include increases in auto/truck traffic along adjacent roadways and on-site operational activities. Noise level impacts are compared to the City of Rancho Cucamonga noise standards in the General Plan Noise Element and Municipal Code.

- Traffic Source Noise

The potential off-site noise impacts caused by the increase in vehicular traffic from the operation of the Project on the nearby roadways were calculated for direct and cumulative project conditions.

1. *Existing Plus Project Conditions*

The direct impact of Project traffic added to the surrounding roadway network is shown in **Table 13-11, *Roadway Noise Impact Analysis – Existing Plus Project Conditions*** for existing plus project conditions.

Table 13-11
Roadway Noise Impact Analysis - Existing Plus Project Conditions

Roadway	Segment	CNEL at 100 Feet (dBA)			Does Project Generate a Significant Impact?
		Existing Conditions	Existing Plus Project Conditions	Change as a Result of Project	
Archibald Avenue	8th Street to 6th Street	72.0	72.1	0.1	NO
Acacia Street	East of Archibald Avenue	47.8	52.7	4.9	NO
7th Street	East of Archibald Avenue	57.0	59.7	2.7	NO

Table 13-11 shows that the Project has the potential to increase traffic noise along Acacia Street by 4.9 dBA CNEL. Typically, a noise level increase of 3 dBA or more is perceptible to the human ear and the change as a result of the project would be considered a noticeable increase. However, because the noise levels along Acacia Street would still be within the normally acceptable residential noise limits, the Project impact would be less than significant.

2. *Project Opening Year Conditions*

The cumulative impact of Project traffic added to the surrounding roadway network with the addition of other potential cumulative development projects and area-wide growth is shown in **Table 13-12, *Roadway Noise Impact Analysis – Project Opening Year Conditions*** for Project opening year conditions.

Table 13-12
Roadway Noise Impact Analysis – Project Opening Year Conditions

Roadway	Segment	CNEL at 100 Feet (dBA)			Does Project Generate a Significant Impact?
		Opening Year Without Project Conditions	Opening Year With Project Conditions	Change as a Result of Project	
Archibald Avenue	8th Street to 6th Street	72.4	72.4	0	NO
Acacia Street	East of Archibald Avenue	47.9	52.8	4.9	NO
7th Street	East of Archibald Avenue	57.1	59.8	2.7	NO

Table 13-12 shows that the Project has the potential to increase traffic noise along Acacia Street by 4.9 dBA CNEL. Typically, a noise level increase of 3 dBA or more is perceptible to the human ear and the change as a result of the project would be considered a noticeable increase. However, because the noise levels along Acacia Street would still be within the

normally acceptable residential noise limits, the Project impact would be less than significant.

- Stationary Source Noise

The main sources of potential on-site stationary noise impacts to adjacent land uses would be noise from the truck loading areas, parking lot noise, and rooftop HVAC units.

Loading and delivery activities are expected to take place in the designated loading dock areas of the Project site. The nearest loading docks to the adjacent residential homes to the north would be located approximately 260 feet away. The nearest loading docks to the adjacent industrial properties to the south are approximately 330 feet away. Loading dock activities would include noise from the tractor-trailers, truck idling, lift gates, backup alarms, forklifts and other mechanicalequipment.

Parking lot noise would occur from vehicle engine idling and exhaust, doors slamming, tires screeching, people talking, and the occasional horn honking. Parking lot noise would occur throughout the site and is conservatively assessed from the first parking space to adjacent uses; approximately 70 feet from the nearest adjacent residential property and 158 feet from the industrial uses to the south.

HVAC equipment will be located on the roof of each building. Building-1 and Building-2 are expected to have one (1) five-ton HVAC unit each. Building-3 and Building-4 are expected to have (six) 6 five-ton HVAC units each. The closest HVAC units will be located approximately 415 feet from the nearest residential property line and approximately 280 feet to the industrial property line to the south.

1. *Residential Land Use to the North - Daytime*

Table 13-13, *Stationary Noise Impact Analysis – Daytime Residential* shows the stationary noise impact analysis results for all sources operating simultaneously during daytime hours (7 a.m. to 10 p.m.) at the nearest residential homes to the north of the site.

Table 13-13
Stationary Noise Impact Analysis – Daytime Residential

	Source	Noise Level (dBA)				
		Leq	Lmax (max)	L_8 (5 min)	L17 (10 min)	L25 (15 min)
Daytime (7:00 AM - 10:00 PM)	Building 3 - Loading Dock	35.4	53.1	47.6	37.4	30.6
	Building 4 - Loading Dock	42.7	60.4	54.9	44.7	37.9
	Parking Lot Noise	42.8	58.5	47.5	44.8	43.5
	Building 3 - HVAC	52.4	52.4	52.4	52.4	52.4
	Building 4 - HVAC	43.3	43.3	43.3	43.3	43.3
	Existing Ambient Measurement	56.0	72.5	60.0	58.2	52.0
	Total Combined Exterior Noise Impact	56.5	73.0	65.7	58.7	52.8
	City of Rancho Cucamonga Noise Level Criteria	65.0	80.0	79.0	70.0	65.0
	Noise Level Exceeds Standard (?)	No	No	No	No	No

As shown in **Table 13-13**, the noise level impacts from the Project would be below the City's daytime noise standard for residential uses. The Project impact would be considered less than significant.

2. *Residential Land Use to the North - Nighttime*

Table 13-14, *Stationary Noise Impact Analysis - Nighttime Residential* shows the stationary noise impact analysis results for all sources operating simultaneously during nighttime hours (10 p.m. to 7 a.m.) at the nearest residential homes to the north of the site.

Table 13-14
Stationary Noise Impact Analysis - Nighttime Residential

	Source	Noise Level (dBA)				
		L_{eq}	L_{max} (max)	L_8 (5 min)	L_8 (10 min)	L_{25} (15 min)
Nighttime (10:00 PM - 7:00 AM)	Building 3 - Loading Dock	35.4	53.1	47.6	37.4	30.6
	Building 4 - Loading Dock	42.7	60.4	54.9	44.7	37.9
	Parking Lot Noise	42.8	58.5	47.5	44.8	43.5
	Building 3 - HVAC	52.4	52.4	52.4	52.4	52.4
	Building 4 - HVAC	43.3	43.3	43.3	43.3	43.3
	Existing Ambient Measurement	51.0	67.5	55.0	53.2	47.0
	Total Combined Exterior Noise Impact	52.3	68.8	55.8	54.8	49.2
	City of Rancho Cucamonga Noise Level Criteria	60.0	75.0	74.0	65.0	60.0
	Noise Level Exceeds Standard (?)	No	No	No	No	No

As shown in **Table 13-14**, the noise level impacts from the Project would be below the City's nighttime noise standard for residential uses. Impacts would be less than significant.

3. *Industrial Land Use to the South*

Table 13-15, *Stationary Noise Impact Analysis - Industrial* shows the stationary noise impact analysis results for all sources operating simultaneously during daytime hours (7 a.m. to 10 p.m.) at the adjacent industrial property line to the south of the site.

Table 13-15
Stationary Noise Impact Analysis – Industrial

	Source	Noise Level (dBA)				
		L_{eq}	L_{max} (max)	L_{eq}	L_{17} (10 min)	L_{eq}
Daytime (7:00 AM - 10:00 PM)	Building 1 - HVAC	34.4	34.4	34.4	34.4	34.4
	Building 2 - HVAC	47.7	47.7	47.7	47.7	47.7
	Building 3 - HVAC	50.9	50.9	50.9	50.9	50.9
	Building 4 - HVAC	47.8	47.8	47.8	47.8	47.8
	Building 3 - Loading Dock	33.1	50.8	45.3	35.1	28.3
	Building 4 - Loading Dock	36.2	53.9	48.4	38.2	31.4
	Parking Lot Noise	37.2	52.9	41.9	39.2	37.9
	Existing Ambient Measurement	55.7	73.0	58.6	57.7	51.7
	Total Combined Exterior Noise Impact	55.9	73.1	65.7	57.9	52.0
	City of Rancho Cucamonga Noise Level Criteria	80.0	80.0	80.0	80.0	80.0
	Noise Level Exceeds Standard (?)	No	No	No	No	No

The noise level impact from the Project would be below the City's industrial noise standard for Class B industrial uses. No impacts would occur.

As demonstrated above, there will be no significant operational noise impacts. Still the **Design Features DF-1** through **DF-10** (see Project Description) shall be incorporated as best management practices:

*** DF-1 Provide an eight (8) foot high CMU block or tilt-up concrete wall along both ends of the loading docks/back of building area for buildings 3 and 4.**

*** DF-2 Provide an eight (8) foot high CMU block or tilt-up concrete wall along the southern edge of the loading docks area for building 1.**

*** DF-3 All rooftop mounted HVAC equipment shall be fully shielded or enclosed from the line of sight of adjacent residential uses. Shielding/parapet wall shall be at least as high as the equipment.**

DF-4 Truck deliveries, loading/unloading activity, and trash pick-up shall be limited to daytime (7 a.m. – 10 p.m.) hours only.

DF-5 Limit engine idling time for all trucks to 5 minutes or less.

DF-6 Construction-related noise activities shall comply with the requirements set forth in the City of Rancho Cucamonga Municipal Code Section 17.66.050(D)(4) for adjacency to a residential land use, school, church or

similar type of use, adjacency to a commercial or industrial use.

DF-7 **No impact pile driving activities shall be allowed on the Project site.**

DF-8 **During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices and equipment shall be maintained so that vehicles and their loads are secured from rattling and banging. Idling equipment should be turned off when not in use.**

DF-9 **Locate staging area, generators and stationary construction equipment as far from the northwest property line, as reasonably feasible.**

DF-10 **Obtain a construction work permit from the City of Rancho Cucamonga prior to starting construction.**

***** Reference **Figure 13-2, *Mitigation and Design Feature Locations***.

With adherence to Municipal Code Noise requirements implementation of **Mitigation Measures MM-NOI-1** through **MM-NOI-2**, and adherence to Project Design Features **DF-1** through **DF-10**, the Project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Any impacts would be reduced to a less than significant level.

Would the Project result in?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?			**X**	

Vibration Descriptors

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude.

- PPV: Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.
- RMS: Known as the root mean squared (RMS) can be used to denote vibration amplitude.
- VdB: A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.

Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration. To counter the effects of ground-borne vibration, the Federal Transit Administration (FTA) has published guidance relative to vibration impacts. According to the FTA, fragile buildings can be exposed to ground-borne vibration levels of 0.3 inches per second without experiencing structural damage.

Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. These are discussed below:

- Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wavefront, similar to ripples produced by throwing a rock into a pool of water.
- P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wavefront. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves.
- S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wavefront. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. This drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

Construction Related Vibration Level Prediction

Operational activities are separated into two different categories. The vibration can be transient or continuous in nature. Each category can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the project area site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. The thresholds from Caltrans Transportation and Construction Induced Vibration Guidance Manual shown **Table 13-16, *Vibration Annoyance Potential Criteria***, below, provides general guidelines as to the maximum vibration limits for when vibration becomes potentially annoying.

Table 13-16
Vibration Annoyance Potential Criteria

Human Response	PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.90	0.10
Severe	2.00	0.40

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo- stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

The Caltrans Transportation and Construction Induced Vibration Guidance Manual provides general thresholds and guidelines as to the vibration damage potential from vibratory impacts. **Table 13-17, *Vibration Damage Potential Threshold Criteria***, provides general vibration damage potential thresholds.

Table 13-17
Vibration Damage Potential Threshold Criteria

Structure and Condition	PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings ruin ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Soil conditions have an impact on how vibration propagates through the ground. The Caltrans Transportation and Construction Induced Vibration Guidance Manual provides suggested “n” values based on soil class. **Table 13-18, *Suggested “n” Values Based on Soil Classes***, outlines the manual’s suggested values and description.

Table 13-18
Suggested "n" Values Based on Soil Classes

Soil Class	Description of Soil Material	Suggested Value of "n"
I	Weak or soft soils: loose soils, dry or partially saturated peat and muck, mud, loose beach sand, and dune sand.	1.4
II	Most sands, sandy clays, silty clays, gravel, silts, weathered rock.	1.3
III	Hard soils: densely compacted sand, dry consolidated clay, consolidated glacial till, some exposed rock.	1.1
IV	Hard, component rock: bedrock, freshly exposed hard rock.	1.0

Construction Vibration Modeling

The construction vibration assessment utilizes referenced worst-case vibration levels and methodology set-forth within the Caltrans Transportation and Construction Induced Vibration Guidance Manual.

The main sources of vibration impacts during construction of the project would be from bulldozer activity during site preparation, loading trucks during excavation, and vibratory rollers during paving. The vibratory activity required to comply with the applicable guidance thresholds criteria.

Vibration impacts are assessed from the property line to the nearest adjacent structures to the south and west of the site. Residential structures are located approximately 56 feet southwesterly of the property line and industrial structures are located approximately 100 feet north, south, east and west of the Project site. All adjacent buildings are considered to be new residential structures and/or modern commercial buildings. No historical or fragile buildings are known to be located within the vicinity of the Project site.

Vibratory impacts were calculated using the reference vibration levels, soil conditions and the reference equation PPV= PPV ref (25/D)^n (in/sec) (from Caltrans Manual) where:

- PPV = reference measurement at 25 feet from the vibration source D = distance from equipment to the property line.
- n= vibration attenuation rate through the ground (n=1.0 was utilized for the analysis)

Construction Vibration

To determine the vibratory impacts during construction, reference construction equipment vibration levels were utilized and then extrapolated to the façade of the nearest adjacent structure.

The construction of the Project would not require the use of substantial vibration inducing equipment or activities, such as pile drivers or blasting. The main sources of vibration impacts during construction of the Project would be from bulldozer activity during site preparation and grading, loading trucks during excavation, and vibratory rollers during paving.

The construction vibration assessment utilizes the referenced vibration levels and methodology set-forth within the Caltrans Transportation and Construction Induced Vibration Guidance Manual. **Table 13-19, *Typical Construction Vibration Levels***, shows the referenced vibration levels.

Table 13-19
Typical Construction Vibration Levels[1]

Equipment	Peak Particle Velocity (PPV) (inches/second) at 25 feet	Approximate Vibration Level (LV) at 25 feet
Piledriver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Piledriver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

[1] Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006.

Table 13-20, *Construction Vibration Impact Analysis*, shows the Project's construction-related vibration analysis at the residential structures to the southwest.

Table 13-20
Construction Vibration Impact Analysis

Construction Activity	Distance to Nearest Structure (ft.)	Duration	Calculated Vibration Level - PPV (in/sec)	Damage Potential Level	Annoyance Criteria Level
Vibratory Roller	56 ft.	Continuous/Frequent	0.086	Ruins and Ancient Monuments	Distinctly Perceptible
Large Bulldozer	56 ft.	Continuous/Frequent	0.037	No Impact	Barely Perceptible
Loaded Trucks	56 ft.	Continuous/Frequent	0.031	No Impact	Barely Perceptible

The estimated vibration noise levels at the nearest sensitive receptors are compared to the Caltrans Vibration Manual thresholds. The worst-case vibratory impact from the site is estimated to be 0.086 PPV (in/sec) at the residential structures to the southwest. The annoyance potential of vibration from construction activities would range from "barely perceptible" to "distinctly perceptible" and the damage potential to the nearest structures would be "ruins and ancient monuments" category. No potential damage would be expected to the newer residential structures and modern commercial/industrial buildings in the nearby vicinity. Any impacts from construction vibrations would be less than significant.

Operational Vibration

The Project is not expected to generate significant operational groundborne vibration, such as that which might occur from heavy impact equipment. Truck circulation and loading dock activity may generate some vibration, however the impact would be localized to the source of the occurrence and not of a magnitude that could cause structural damage to adjacent sensitive receptors. For example, loaded trucks may cause vibration occurrences of up to 0.076 PPV at 25 feet (FTA Transit Noise and Vibration Impact Assessment, 2006), and which would be well below the damage potential of 0.5 PPV for newer structures. Any impacts from operational vibrations would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				**X**

The Project site is located approximately 1.84 miles northerly of the Ontario International Airport.

According to Table 4.12-4, City of Rancho Cucamonga Industrial Performance Standards of the *GPEIR*, the maximum noise levels that are deemed "tolerable" in the GI (General Industrial) zone is 75 Ldn (exterior) and 65 Ldn (interior). Per pp. 4.12-26 and -27 of the *GPEIR*:

> "*The City of Rancho Cucamonga is well outside the LA/Ontario International Airport's 65 dBA CNEL noise contour, which is generally along Airport Drive at the northern boundary of the airport. With a distance of approximately one mile from the City's southern boundary to the 65-dB CNEL, noise levels in Rancho Cucamonga are not expected to be exceeding the 55 to 60 dB CNEL exterior noise standard for residential uses. Aircraft noise does not significantly impact the City of Rancho Cucamonga.*
>
> *Projected noise levels from airport operations show that in year 2030 the 65-dB CNEL noise contour would move to just south of the I-10 Freeway, with the 60-dB CNEL noise contour generally along Inland Empire Boulevard, or 0.5 mile from the City's southern boundary.*"

The Project site is located northerly of the I-10 Freeway. Based on this information, the Project would not expose people working in the Project area to excessive noise levels. The nearest private airstrip, Cable Airport, is located approximately 5.25 miles to the northwesterly of the Project site, in the City of Upland. Due to this distance, the Project would not expose people working in the Project area to excessive noise levels within the vicinity of a private airstrip. No impacts would occur.

NOISE FIGURES

Figure 13-1
Noise Measurement Locations

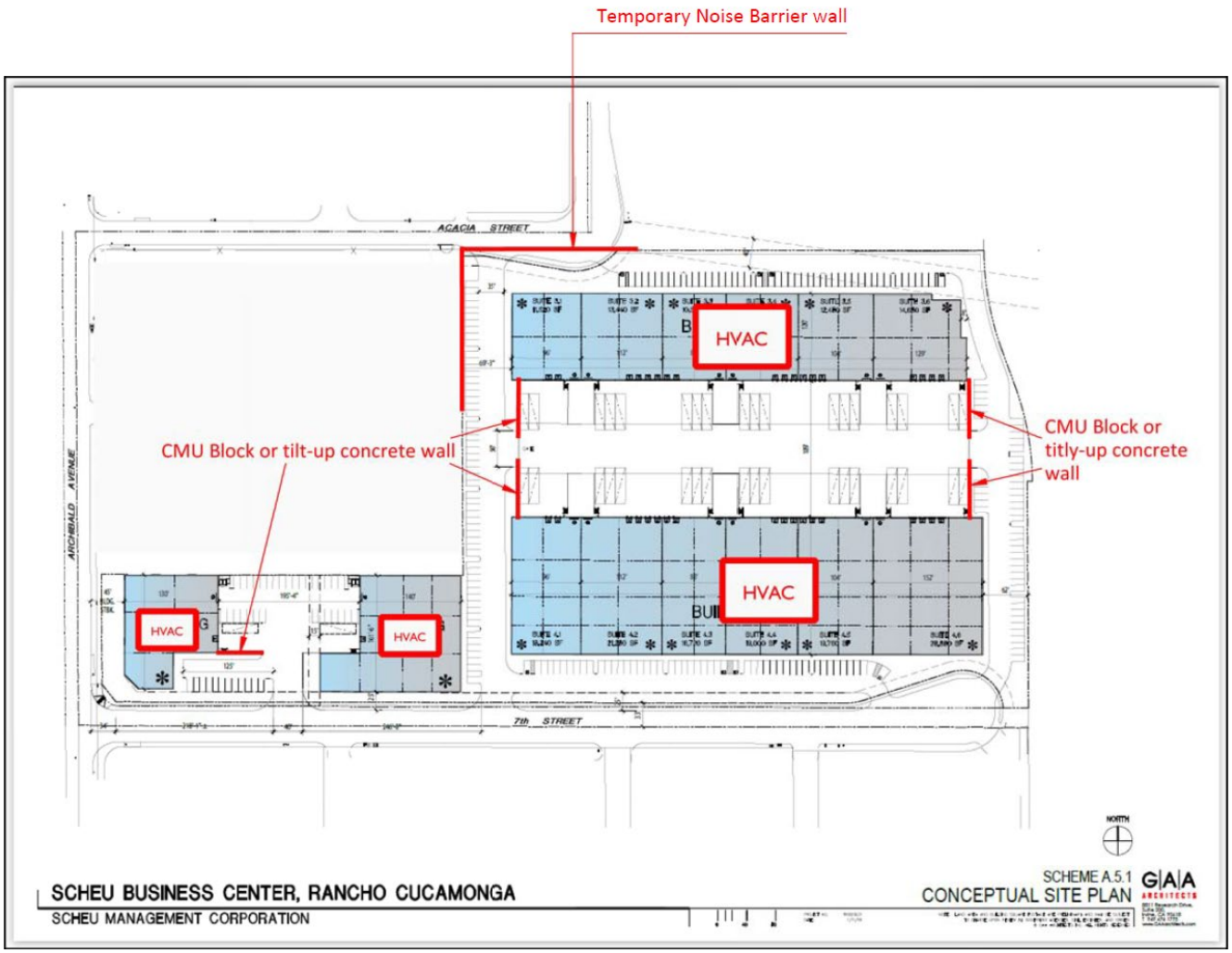


Legend:

1 = Short Term (10-min) Noise Monitoring Location

Source: Noise Study (**Appendix G**)

Figure 13-2
Mitigation and Design Feature Locations



Legend:

HVAC = Rooftop HVAC equipment should be shielded by parapet wall

= Noise Barrier Wall

Source: Noise Study (**Appendix G**)

14. POPULATION AND HOUSING.

Source(s): Google Maps.

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			**X**	

The Project is located in a predominantly developed area and will not induce population growth. Construction activities at the site will be short-term and will not attract new employees to the area. Once constructed, the Project will have a limited number of employees. The Project would not Induce substantial unplanned population growth and create a demand for additional housing as a majority of the employees will likely be hired from within the City or surrounding communities. Any impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				**X**

The Project site is currently vacant. There are no existing people or housing on the Project site. Therefore, the Project would not displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere. No impacts would occur.

15. PUBLIC SERVICES.

Source(s): *City General Plan, Chapter 8, Public Health and Safety Element*; *City General Plan EIR, Section 4.14, Public Services, Exhibit 4.14-1 Public Facilities*; *Ordinance No. 865*; *Cucamonga School District-Commercial/Industrial Development School Fee Justification Study*, February 16, 2018; Rancho Cucamonga Municipal Code; and Google Earth.

SUBSTANTIATION:

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Fire protection?			**X**	

The Project site is served by the Rancho Cucamonga Fire Protection District (RCFPD). The closest station to the Project site is the San Bernardino Road Fire Station 172, located at 9612 San Bernardino Road, Rancho Cucamonga, CA 91730. This station is located approximately 1¼ mile north of the Project site. Fire Station 172 is staffed with a full-time, 24-hour constant staffing crew of a captain paramedic, engineer, and firefighter paramedic. They respond on a Type I engine and are capable of providing the full range of fire suppression, rescue, and advanced life support services.

The Project will not require the construction of any new facilities or alteration of any existing facilities or cause a decline in the levels of service, which could cause the need to construct new facilities. Therefore, there would be no adverse impacts.

The RCFPD is a subsidiary of the City of Rancho Cucamonga and is funded through the ad-valorem tax assessment process included as a part of the property tax bill. The RCFPD maintains a strategic plan to ensure that public safety, one of the City's core values, is maintained. In addition, standard conditions of approval from the Uniform Building and Fire Codes will be placed on the project to lessen the future demand and impacts to fire services.

Impacts from implementation of the Project that would result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 services, would be considered incremental, and less than significant.

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
b) Police protection?			**X**	

The City of Rancho Cucamonga contracts with the San Bernardino County Sheriff's Department for law enforcement services. The closest station to the Project site is the Rancho Cucamonga Patrol Station located at 10510 Civic Center Drive, Rancho Cucamonga, CA 91730. This station is located approximately 1¼ mile northeast of the Project site.

As part of the Project approval(s), standard conditions are assessed on the Project to reduce impacts from the Project to police/sheriff services. This is reflected in the Rancho Cucamonga Municipal Code, Title 3 Revenue and Finance, Chapter 3.64 Police Impact fee, and Ordinance No. 865.

The Project applicant shall comply with the provisions of Ordinance No. 865 establishing Development Impact Fees for Community and Recreation Center, Library, Animal Center, Police, and Park In-Lieu/Park Impact Fees. Furthermore, the Project must comply with Ordinance No. 865 to prevent any potential effects to sheriff services from rising to a level of significance. Ordinance No. 865 establishes the Police Impact Fee applicable to all projects to reduce incremental impacts to these services. This is a standard Condition of Approval and pursuant to CEQA, is not considered mitigation.

Impacts from implementation of the Project that would result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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 sheriff services, would be considered incremental, and less than significant.

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
c) Schools?			**X**	

The Project site is located within the Cucamonga School District (CSD) boundary (Grade: K-8) and the Chaffey Joint Union High School District (CJUHSD) boundary (Grade: 9-12). The closest schools to the Project site include 1) Cucamonga Elementary School located at 8677 Archibald Avenue (<½ mile north of Project site), and 2) Rancho Cucamonga Middle School located at 10022 Feron Boulevard (±¼ mile northeast of Project site).

The Project proposes the development and construction of four (4) concrete tilt-up speculative warehouse buildings totaling approximately 240,710 square feet of building area, plus associated parking and site improvements.

No housing, which could potentially increase the demand for school services, is being proposed. However, due to indirect impacts upon school facilities, the Applicant would pay the applicable Commercial/Industrial Development (CID) School Fee prior to the issuance of a building permit.

As set forth in the CSD, Commercial/Industrial Development School Fee Justification Study, dated February 26, 2018:

> "*On January 24, 2018, the State Allocation Board ("SAB") increased the maximum CID School Fee authorized by Section 17620 of the Education Code from $0.56 to $0.61 per square foot for unified school districts. Pursuant to the School District's revenue sharing agreement with Chaffey Joint Union High School District ("CJUHSD"), the maximum the School District can receive from new CID is approximately 69 percent of the School Fees, or $0.42 per square foot of CID constructed within its boundaries. Justification of the CID School Fee is based on a comparison of net school facilities cost impacts with the School District's portion of the maximum commercial/industrial School Fee revenues per 1,000 square feet. The amounts the School District is justified in levying by category are listed below for reference:*
>
> *Retail and Services - $0.068*
> *Office - $0.102*
> *Research and Development - $0.088*
> ***Industrial/Warehouse/Manufacturing - $0.079***
> *Hospital - $0.083*
> *Hotel/Motel - $0.033*
> *Self-Storage - $0.001*"

Payment of the Developer Fee is a standard condition and is not considered unique mitigation under CEQA.

Impacts from implementation of the Project that would result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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, would be considered incremental, and less than significant.

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
d) Parks?				**X**

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1½ mile north of Interstate 10 in the City of Rancho Cucamonga. The nearest park is Old Town Park located on the north side of 8th Street, west of Hermosa Avenue, approximately one-quarter (¼) mile northeast of the Project site.

The Project site is zoned General Industrial and the Project proposes the construction of four (4) concrete tilt-up speculative warehouse buildings totaling approximately 240,710 square feet of building area. The Project does not include a recreation/park element.

The Project does not include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. This is reflected in Ordinance No. 865, approved on June 4, 2014, which amended the City's Municipal Code to include Chapter 3.52 (Community and Recreation Center Impact Fee) and Chapter 3.68 (Park In-Lieu/Park Impact Fees), among other public service development impact fees. It is noted, both Chapter 3.52 and Chapter 3.68 pertain exclusively to residential development projects. They are not applicable to the Project site's proposed industrial warehouse use.

The proposed industrial warehouse use does not create impacts to recreation/park facilities. No impacts would occur.

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
e) Other public facilities?			**X**	

The Project site consists of a vacant in-fill land parcel located at the northeast corner of Archibald Avenue and 7th Street in an industrial neighborhood approximately 1½ mile north of Interstate 10 in the City of Rancho Cucamonga.

The Project's industrial warehouse use will not substantially impact other public services, notably library services and animal center services which are principally attributed to residential development. This is reflected in Ordinance No. 865, approved on June 4, 2014, which amended the City's Municipal Code to include Chapter 3.56 (Library Impact Fee) and Chapter 3.60 (Animal Center Impact Fee), among other public service development impact fees (including Community and Recreation Center Impact Fee, Police Impact Fee, and Park In-Lieu/Park Impact Fees, previously discussed herein). It is noted, both Chapter 3.56 and Chapter 3.60 pertain exclusively to residential development projects. They are not applicable to the Project site's proposed industrial warehouse use.

The closest public library is the Archibald Library located at 7368 Archibald Avenue approximately two (2) miles north of the Project site; the Rancho Cucamonga Animal Care and Adoption Center is located at 11780 Arrow Route approximately 2½ miles northwest of the Project site. No housing, which could potentially increase the demand for library services and animal services, is being proposed in conjunction with the Project.

The project will not require the construction of any new facilities or alteration of any existing facilities or cause a decline in the levels of service, which could cause the need to construct new facilities.

Any impacts from implementation of the Project that would result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for library services and animal services, would be considered less than significant.

16. RECREATION.

Source(s): Rancho Cucamonga Municipal Code Chapter 3.68 (Park In-Lie/Park Impact Fees); and Rancho Cucamonga Municipal Code Chapter 3.52 (Community and Recreation Center Impact Fee).

SUBSTANTIATION:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X

Demand for park and recreational facilities are generally the direct result of residential development. The Project is industrial. Therefore, the Project would not increase the use of existing neighborhood and regional parks, or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated. No impacts would occur.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Demand for park and recreational facilities are generally the direct result of residential development. The Project is industrial. Therefore, the Project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No impacts would occur.

17. TRANSPORTATION.

Source(s): *Scheu Business Center Update Traffic Impact Study,* prepared by RK Engineering Group, Inc., 9-18-2019 (*TIS*, **Appendix H**)

Note: Any tables or figures in this section are from the *TIS*, unless otherwise noted.

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?		**X**		

Pursuant to City of Rancho Cucamonga requirements, a traffic study was prepared for the Project (*TIS*, **Appendix H**). The purpose of the *TIS* is to evaluate the Project from a traffic circulation standpoint.

The Project is projected to generate approximately 1,511 total Passenger Car Equivalence (PCE) trip-ends per day, with 213 PCE trips during the AM peak hour and 192 PCE trips during the PM peak hour.

The *TIS* objectives include the following:

1. Documentation of Existing traffic conditions in the vicinity of the site;
2. Evaluation of traffic conditions in the Opening Year (2019) With and Without Project traffic conditions and With Project and Cumulative traffic conditions;
3. Evaluation of traffic conditions in Year 2040 conditions With and Without Project traffic conditions; and
4. Determination of on-site and off-site improvements and system management actions needed to achieve City of Rancho Cucamonga Level of Service requirements.

Figure 17-1, Location Map illustrates the site location and TIS study area. **Table 17-1, *Study Area Intersections***, shows the study area intersections:

Table 17-1
Study Area Intersections

No.	North-South Street	East-West Street
1	Archibald Avenue	Foothill Boulevard
2	Archibald Avenue	Arrow Route
3	Archibald Avenue	9th Street
4	Archibald Avenue	8th Street
5	Archibald Avenue	Acacia Street
6	Archibald Avenue	7th Street
7	Archibald Avenue	6th Street
8	Archibald Avenue	4th Street
9	Archibald Avenue	East Inland Empire
10	Archibald Avenue	I-10 Freeway Ramps
Project Access Driveways		
11	Project Access Driveway 1	Acacia Street
12	Project Access Driveway 2	Acacia Street
13	Project Access Driveway 3	7th Street
14	Project Access Driveway 4	7th Street
15	Project Access Driveway 5	7th Street
16	Project Access Driveway 6	7th Street

Traffic Analysis Methodology

The *TIS* follows the methodologies described by the Guidelines for Congestion Management Program (CMP) Traffic Impact Analysis Reports in San Bernardino County, for the preparation of a traffic impact analysis. The current technical guide to the evaluation of traffic operations is the Highway Capacity Manual (HCM). The HCM defines Level of Service as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

- Level of Service

The definitions of Level of Service (LOS) for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control.

The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the Level of Service at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. The LOS is determined in this study by using the HCM methodology.

For signalized intersections, average control delay per vehicle is used to determine LOS. Levels of Service at signalized study intersections have been evaluated using the HCM intersection analysis program. LOS is defined in **Table 17-2, *LOS***.

Table 17-2
LOS

LOS	Average Total Control Delay Per Vehicle (Seconds)	
	Signalized	Unsignalized
A	0.00 - 10.00	0.00 - 10.00
B	10.01 - 20.00	10.01 - 15.00
C	20.01 - 35.00	15.01 - 25.00
D	35.01 - 55.00	25.01 - 35.00
E	55.01 - 80.00	35.01 - 50.00
F	>80.01	>50.01

The LOS analysis for signalized intersections has been performed using optimized signal timing. A maximum cycle length of 130 seconds was used for the signalized intersections. A minimum green time of 10 seconds was used for each movement at all signalized intersections. Adjustment factors for elements such as lane width, trucks, grade, obstructions, parking or pedestrians are as stated in the HCM. The observed peak hour factor was used in the traffic analysis for existing and opening year conditions. A peak hour factor of 0.95 was used for Long Range Year conditions.

Saturation flow rates of 1,800 vehicles per hour of green (vphg) for through and right turn lanes and 1,700 vehicles for single left turn lanes, and 1,600 vehicles per lane for dual left turn lanes and 1,500 vehicles per lane for triple left turn lanes have been assumed for the existing and opening year conditions. Saturation flow rates of 1,900 vphg for through and right turn lanes and 1,800 vehicles for single left turn lanes, and 1,700 vehicles per lane for dual left turn lanes and 1,600 vehicles per lane for triple left turn lanes have been assumed for the Long Range Year conditions.

- Performance Criteria

The City of Rancho Cucamonga's performance standard is described in the City's General Plan Community Mobility Element. The Level of Service standard in the City of Rancho Cucamonga is LOS D or better. Therefore, any study area intersections operating at LOS E or F will be considered deficient and require mitigation.

However, the study area intersections of Archibald Avenue at East Inland Empire Boulevard and Archibald Avenue at the Interstate 10 freeway ramps are under the jurisdiction of the City of Ontario. The Level of Service standard for the City of Ontario is LOS E or better. Therefore, these two intersections will be considered deficient and will require mitigation if they operate at LOS F.

Existing Level of Service

Existing intersection Level of Service calculations are shown in **Table 17-3, *Intersection Analysis for Existing Conditions***, and are based upon manual AM and PM peak hour turning movement counts. The City of Rancho Cucamonga requires Level of Service D or better (Intersections 1-8). The City of Ontario requires Level of Service E or better (Intersections 9 & 10).

Table 17-3
Intersection Analysis for Existing Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Delay[2] (Seconds)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Archibald (NS) / Foothill Blvd (EW)	TS	1.0	1.5	0.5	1.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	35.6	50.1	D	D
2	Archibald (NS) / Arrow Route (EW)	TS	1.0	2.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	69.0	60.8	**E**	**E**
3	Archibald (NS) / 9th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	0.0	1.0!	0.0	54.8	30.5	D	C
4	Archibald (NS) / 8th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	17.2	16.7	B	B
5	Archibald (NS) / Acacia Street (EW)	CSS	1.0	1.5	0.5	1.0	1.5	0.5	0.0	1.0!	0.0	0.0	1.0!	0.0	78.2	130.1	**F**	**F**
6	Archibald (NS) / 7th Street (EW)	CSS	1.0	1.5	0.5	1.0	1.5	0.5	0.5	0.5	1.0	0.0	1.0!	0.0	545.3	442.8	**F**	**F**
7	Archibald (NS) / 6th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	23.1	37.2	C	D
8	Archibald (NS) / 4th Street (EW)	TS	1.0	1.5	0.5	1.0	2.0	1.0	2.0	1.5	0.5	2.0	3.0	1.0	31.8	47.7	C	D
9	Archibald (NS) / E. Inland Empire Blvd (EW)	TS	2.0	3.0	1.0	2.0	3.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	28.9	37.5	C	D
10	Archibald (NS) / I-10 Freeway Ramps (EW)	TS	2.0	4.0	0.0	2.0	3.0	1.0	0.0	2.0	2.0	0.0	2.0	2.0	33.3	30.8	C	C
11	Project Access Driveway 1 (NS) / Acacia Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	Project Access Driveway 2 (NS) / Acacia Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13	Project Access Driveway 3 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	Project Access Driveway 4 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	Project Access Driveway 5 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	Project Access Driveway 6 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

[2] Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS= Traffic Signal CSS = Cross Street Stop

All study area intersections are currently operating at an acceptable Level of Service during Existing peak hour conditions with the exception of the following study intersections:

- Archibald Avenue / Arrow Route (both AM and PM peak hours);
- Archibald Avenue / Acacia Street (both AM and PM peak hours); and
- Archibald Avenue / 7th Street (both AM and PM peak hours).

Public Transit Service

OmniTrans currently serves the study area with regular bus service in the City of Rancho Cucamonga, and surrounding areas. As shown on **Figure 17-2, *OmniTrans Routes***, the following bus routes serve the Project site:

- Bus Route 66 (Foothill Boulevard);
- Bus Route 85 (Arrow Highway);
- Bus Route 61 (Inland Empire Boulevard); and
- Bus Route 290 (I-10 Freeway).

Bicycle Plan

Part of the City of Rancho Cucamonga's General Plan Community Mobility Strategies is to provide a system of complete streets that accommodates safe and convenient access and travel for all users and to promote a healthy and sustainable transportation throughout the community. As part of the Community Mobility Strategy, the City of Rancho Cucamonga provides a system of bicycle paths and lanes. The City's Bicycle Plan is shown on **Figure 17-3, *Bicycle Plan***. The following bicycle facilities are located near the Project site:

- Archibald Avenue – Class II (Bike Lane)
- Foothill Boulevard – Class II (Bike Lane)
- Arrow Highway – Class II (Bike Lane)
- 6th Street – Class II (Bike Lane)
- 4th Street – Class II (Bike Lane)

Project Traffic Conditions

- Trip Generation

Trip generation represents the amount of traffic that is attracted and produced by a development. The trip generation for the Project is based upon the specific land uses that have been planned for the development (240,060 square foot light industrial project).

The *Institute of Transportation Engineers (ITE) Trip Generation*, 10th Edition 2017 was utilized to provide the trip generation rates for the proposed land uses. In addition, the *Fontana Truck Trip Generation Study for Light Industrial Uses* (August 2003) was used to determine the Passenger Car Equivalents (PCE) for any truck trips generated by the Project. The trip generation rates in PCE's are shown in **Table 17-4, *Trip Generation Rates***.

Table 17-4
Trip Generation Rates

Land Use	Units[1]	Peak Hour						Daily
		AM			PM			
		In	Out	Total	In	Out	Total	
Light Industrial	TSF							
Trip Generation Rates[2]		0.62	0.08	0.70	0.08	0.55	0.63	4.96
PCE Inbound/Outbound Splits[3]		88%	12%	100%	13%	87%	100%	--
Passenger Car Equivalent Rates Calculations								
Passenger Cars								
Recommended Mix (%)[4]		78.60%	78.60%	78.60%	78.60%	78.60%	78.60%	78.60%
PCE Factor[5]		1.0	1.0	1.0	1.0	1.0	1.0	1.0
PCE Rates		0.484	0.066	0.550	0.064	0.431	0.495	3.899
2-Axle Trucks								
Recommended Mix (%)[4]		8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
PCE Factor[5]		1.5	1.5	1.5	1.5	1.5	1.5	1.5
PCE Rates		0.074	0.010	0.084	0.010	0.066	0.076	0.595
3-Axle Trucks								
Recommended Mix (%)[4]		3.90%	3.90%	3.90%	3.90%	3.90%	3.90%	3.90%
PCE Factor[5]		2.0	2.0	2.0	2.0	2.0	2.0	2.0
PCE Rates		0.048	0.007	0.055	0.006	0.043	0.049	0.387
4-Axle Trucks								
Recommended Mix (%)[4]		9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
PCE Factor[5]		3.0	3.0	3.0	3.0	3.0	3.0	3.0
PCE Rates		0.176	0.024	0.200	0.023	0.156	0.180	1.414
Final Rates (In Passenger Car Equivalents)								
Passenger Cars		0.484	0.066	0.550	0.064	0.431	0.495	3.899
2-Axle Trucks		0.074	0.010	0.084	0.010	0.066	0.076	0.595
3-Axle Trucks		0.048	0.007	0.055	0.006	0.043	0.049	0.387
4-Axle+ Trucks		0.176	0.024	0.200	0.023	0.156	0.180	1.414

[1] TSF = Thousand Square Feet
[2] Trip Generation Source: ITE Trip Generation, 10th Ed., 2017
[3] Inbound/Outbound Splits per ITE Trip Generation, 10th Ed., 2017
[4] Recommended Vehicle Mix Percentages per City of Fontana Truck Trip Generation Study for Light Industrial uses, August 2003 (Page 22)
[5] Recommended PCE Factor per San Bernardino County CMP, 2016 Update

The daily and peak-hour trip generation for the proposed development are shown in **Table 17-5, *Trip Generation (Passenger Car Equivalents)***. The Project is projected to generate approximately 1,511 total PCE trip-ends per day, with 213 PCE trips during the AM peak hour and 192 PCE trips during the PM peak hour.

Table 17-5
Trip Generation (Passenger Car Equivalents)

ITE TRIP GENERATION									
Land Use	Quantity	Units[1]	Weekday Peak Hour						Daily
			AM			PM			
			In	Out	Total	In	Out	Total	
Light Industrial	240.060	TSF	148	20	168	20	132	152	1,191

ITE TRIP GENERATION IN PASSENGER CAR EQUIVALENTS							
Vehicle Mix	Weekday Peak Hour						Daily
	AM			PM			
	In	Out	Total	In	Out	Total	
Passenger Cars	116	16	132	15	103	119	936
2-Axle Trucks	18	2	20	2	16	18	143
3-Axle Trucks	12	2	13	2	10	12	93
4-Axle+ Trucks	42	6	48	6	37	43	339
(In Passenger Car Equivalents)	**188**	**26**	**213**	**25**	**167**	**192**	**1,511**

[1] TSF = Thousand Square Feet

- Trip Distribution and Assignment

Trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is heavily influenced by the geographical location of the site, the location of residential, employment, and recreational opportunities, and the proximity to the regional freeway system. The directional orientation of traffic was determined by evaluating existing and proposed land uses, and highways within the community.

Trip distribution patterns for the *TIS* were based upon near-term conditions, based upon those highway facilities that are either in place or will be completed over the next few years, which represents the Opening Year occupancy for the Project. The trip distribution patterns for the Project are graphically depicted on **Figure 17-4, *Trip Distribution***.

The assignment of traffic from the Project site to the adjoining roadway system has been based upon the Project's trip generation, trip distribution, and proposed arterial highway and local street systems that would be in place by the time of initial occupancy of the Project.

- Modal Split

Modal split denotes the proportion of traffic generated by a project that would use any of the transportation modes, namely buses, cars, bicycles, motorcycles, trains, carpools, etc. The traffic reducing potential of public transit and other modes is significant. However, the traffic projections used in the *TIS* were "conservative" in that public transit and alternative transportation may be able to reduce the traffic volumes. Thus, no modal split reduction was applied to the projections. With the implementation of transit service and provision of alternative transportation ideas and incentives, the automobile traffic demand can be reduced significantly.

Background Traffic

- Background Traffic Growth Rate

Based on conversations with City of Rancho Cucamonga staff, a one percent (1%) compound annual growth rate was identified to be representative of the area. Therefore, a two percent (2%) compound annual growth rate was applied to the Existing traffic volumes to develop the Opening Year (2019) Conditions ambient background traffic volumes.

- Cumulative Projects Traffic

Table 17-6, *Cumulative Projects Trip Generation*, lists the proposed land uses for the nearby cumulative projects, for Opening Year (2017) conditions, known by the City of Rancho Cucamonga at the time the *TIS* was prepared. Development projects that have been approved or are currently pending approval within a two-mile radius of the Project site are illustrated on **Figure 17-5, *Cumulative Projects Location Map***.

Table 17-6 shows the peak hour and daily vehicle trips generated by the cumulative projects being processed concurrently in the Project study area. It should be noted these volumes have been calculated to include the Passenger Car Equivalents (PCE) for applicable land uses.

Table 17-6
Cumulative Projects Trip Generation

ID No.	Jurisdiction	Case Number	Land Use	ITE Trip Code	Quantity	Units	Peak Hour						Daily
							AM			PM			
							In	Out	Total	In	Out	Total	
TAZ 1													
6	Rancho Cucamonga	SUBTT20080	Single Family Homes	210	20	DU	4	11	15	12	7	19	189
TAZ 2													
5	Rancho Cucamonga	DRC2018-00023	Church	560	1,000	Seats	5	5	10	12	18	30	440
TAZ 3													
12	Rancho Cucamonga	DRC2018-00257	Recreational Com. Center	495	9	TSF	10	5	15	10	11	21	259
TAZ 4													
3	Rancho Cucamonga	DRC2015-00682	Gasoline/Service Station	944	8	FP	41	41	82	56	56	112	1,376
TAZ 5													
1	Rancho Cucamonga	DRC2017-00141	General Light Industrial	110	48.16	TSF	37	4	41	4	34	38	304
TAZ 6													
2	Rancho Cucamonga	DRC2016-00695	General Light Industrial	110	150	TSF	117	17	134	16	104	120	944
4	Rancho Cucamonga	DRC2018-00119	Warehousing	150	174.745	TSF	29	9	38	12	30	42	386
						TAZ 6 Total	**146**	**26**	**172**	**28**	**134**	**162**	**1,330**
TAZ 7													
8	Rancho Cucamonga	DRC2018-00326	Warehousing	150	55	TSF	10	3	13	3	10	13	122
9	Rancho Cucamonga	DRC2016-00670	General Light Industrial	110	230	TSF	179	25	204	23	160	183	1,448
10	Rancho Cucamonga	DRC2017-00402	General Light Industrial	110	300	TSF	234	32	266	31	209	240	1,889
						TAZ 7 Total	**423**	**60**	**483**	**57**	**379**	**436**	**3,459**
TAZ 8													
7	Rancho Cucamonga	DRC2017-00448	Warehousing	150	40	TSF	6	1	7	3	6	9	88
11	Rancho Cucamonga	DRC2017-00654	Shopping Center Rate	820	14	TSF	8	5	13	26	28	54	529
			Multifamily Housing (Low-Rise)	220	207	DU	22	73	95	73	43	116	1,515
						TAZ 8 Total	**36**	**79**	**115**	**102**	**77**	**179**	**2,132**
						Total Cumulative Project Trip Generation	***702***	***231***	***933***	***281***	***716***	***997***	***9,489***

Traffic Analysis

This section provides a discussion on the study intersection peak hour level of service analysis and findings.

Opening Year (2019) Without Project Conditions LOS

As shown on **Table 17-7, *Intersection Analysis for Opening Year 2019 Without Project Conditions***, for Opening Year (2019) Without Project Conditions, all study area intersections are projected to operate at acceptable levels of service during the peak hours with the exception of the following study intersections which are forecast to continue to operate at a deficient LOS:

- Archibald Avenue / Arrow Route (both AM and PM peak hours);
- Archibald Avenue / 9th Street (AM peak hour only);
- Archibald Avenue / Acacia Street (both AM and PM peak hours); and
- Archibald Avenue / 7th Street (both AM and PM peak hours).

Table 17-7
Intersection Analysis for Opening Year 2019 Without Project Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Delay[2] (Seconds)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Archibald (NS) / Foothill Blvd (EW)	TS	1.0	1.5	0.5	1.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	37.3	52.5	D	D
2	Archibald (NS) / Arrow Route (EW)	TS	1.0	2.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	72.7	64.0	**E**	**E**
3	Archibald (NS) / 9th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	0.0	1.0!	0.0	57.3	31.0	**E**	C
4	Archibald (NS) / 8th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	17.8	17.3	B	B
5	Archibald (NS) / Acacia Street (EW)	CSS	1.0	1.5	0.5	1.0	1.5	0.5	0.0	1.0!	0.0	0.0	1.0!	0.0	86.3	149.1	**F**	**F**
6	Archibald (NS) / 7th Street (EW)	CSS	1.0	1.5	0.5	1.0	1.5	0.5	0.5	0.5	1.0	0.0	1.0!	0.0	664.6	497.3	**F**	**F**
7	Archibald (NS) / 6th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	23.7	39.0	C	D
8	Archibald (NS) / 4th Street (EW)	TS	1.0	1.5	0.5	1.0	2.0	1.0	2.0	1.5	0.5	2.0	3.0	1.0	33.1	49.2	C	D
9	Archibald (NS) / E. Inland Empire Blvd (EW)	TS	2.0	3.0	1.0	2.0	3.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	30.0	39.3	C	D
10	Archibald (NS) / I-10 Freeway Ramps (EW)	TS	2.0	4.0	0.0	2.0	3.0	1.0	0.0	2.0	2.0	0.0	2.0	2.0	33.9	31.0	C	C
11	Project Access Driveway 1 (NS) / Acacia Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	Project Access Driveway 2 (NS) / Acacia Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13	Project Access Driveway 3 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	Project Access Driveway 4 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	Project Access Driveway 5 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	Project Access Driveway 6 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.
L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

[2] Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS= Traffic Signal CSS = Cross Street Stop

Opening Year (2019) With Project Conditions LOS

As shown on **Table 17-8, *Intersection Analysis for Opening Year (2019) With Project***, for Opening Year (2019) With Project Conditions, all study area intersections are projected to operate at acceptable levels of service during the peak hours with the exception of the following study intersections which are forecast to continue to operate at a deficient LOS:

- Archibald Avenue / Arrow Route (both AM and PM peak hours);
- Archibald Avenue / 9th Street (AM peak hour only);
- Archibald Avenue / Acacia Street (both AM and PM peak hours); and
- Archibald Avenue / 7th Street (both AM and PM peak hours).

Table 17-8
Intersection Analysis for Opening Year (2019) With Project

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Delay[2] (Seconds)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Archibald (NS) / Foothill Blvd (EW)	TS	1.0	1.5	0.5	1.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	37.0	54.0	D	D
2	Archibald (NS) / Arrow Route (EW)	TS	1.0	2.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	78.1	67.0	**F**	**F**
3	Archibald (NS) / 9th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	0.0	1.0!	0.0	62.4	32.0	**E**	C
4	Archibald (NS) / 8th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	18.8	17.7	B	B
5	Archibald (NS) / Acacia Street (EW)	CSS	1.0	1.5	0.5	1.0	1.5	0.5	0.0	1.0!	0.0	0.0	1.0!	0.0	122.1	262.0	**F**	**F**
6	Archibald (NS) / 7th Street (EW)	CSS	1.0	1.5	0.5	1.0	1.5	0.5	0.5	0.5	1.0	0.0	1.0!	0.0	750.2	2137.0	**F**	**F**
7	Archibald (NS) / 6th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	25.5	38.8	C	D
8	Archibald (NS) / 4th Street (EW)	TS	1.0	1.5	0.5	1.0	2.0	1.0	2.0	1.5	0.5	2.0	3.0	1.0	35.1	51.3	D	D
9	Archibald (NS) / E. Inland Empire Blvd (EW)	TS	2.0	3.0	1.0	2.0	3.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	30.1	39.5	C	D
10	Archibald (NS) / I-10 Freeway Ramps (EW)	TS	2.0	4.0	0.0	2.0	3.0	1.0	0.0	2.0	2.0	0.0	2.0	2.0	34.5	31.1	C	C
11	Project Access Driveway 1 (NS) / Acacia Street (EW)	CSS	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	8.9	8.9	A	A
12	Project Access Driveway 2 (NS) / Acacia Street (EW)	CSS	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.0	0.5	0.0	0.0	0.0	8.5	8.6	A	A
13	Project Access Driveway 3 (NS) / 7th Street (EW)	CSS	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.0	0.5	0.5	8.4	9.1	A	A
14	Project Access Driveway 4 (NS) / 7th Street (EW)	CSS	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.0	0.5	0.5	8.4	9.0	A	A
15	Project Access Driveway 5 (NS) / 7th Street (EW)	CSS	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.0	0.5	0.5	8.4	8.9	A	A
16	Project Access Driveway 6 (NS) / 7th Street (EW)	CSS	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	A	A

1 When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.
L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

2 Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

3 TS= Traffic Signal CSS = Cross Street Stop

4 Mitigation includes modification of traffic signal phasing.

Based on the agency-established thresholds of significance, the above listed study intersections are forecast to be significantly impacted for Opening Year (2019) With Project Conditions.

Mitigation will be required in order to reduce impacts for the Opening Year with Project Conditions to the intersection of Archibald Avenue and Arrow Route. **Mitigation Measure MM-TR-1** shall be implemented.

MM-TR-1 **Intersection 2 – Archibald Ave / Arrow Route: Prior to the issuance of certificate of occupancy, the Project Applicant shall implement the following:**

a. Restripe the eastbound Arrow Route approach from one left-turn lane, one through lane and one shared through/right- turn lane to consist of one left-turn lane, two through lanes and one right-turn lane.
b. Restripe the westbound Arrow Route approach from one left-turn lane, one through lane and one shared through/right- turn lane to consist of one left-turn lane, two through lanes and one right-turn lane.
c. Implement right-turn overlap phasing at the westbound Arrow Route approach.
d. Change the westbound and eastbound left- turn signal phasing from protected to protected/permitted. The protected left-turn phase will utilize a green left-turn arrow. The permitted left-turn phase will utilize and be identified by flashing left-turn arrow. Based on various guidelines including guidelines set by the Federal Highway Administration (FHWA) and Orange County Traffic Engineering Council (OCTEC), the protected/permitted left-turn can be implemented since the intersection and approach meets the following criteria:

- **Left-turn lanes are limited to a single lane (no double or triple left-turn lanes);**
- **Opposing through traffic has 2 or less lanes;**
- **Speed limit does not exceed 45 miles per hour; and**
- **Sight distance is adequate since no roadway curvature or obstacles affecting visibility for the left-turning vehicles are present.**
- **Based on collision history information provided by the City from 2014 to end of 2018, the table below summarizes the number of reported collisions which would be attributed to the eastbound/westbound left-turn movement at the intersection:**

Year	Total Collisions	Collisions Attributed to Eastbound/Westbound Left-Turn Movement
2014	**5**	**0**
2015	**8**	**0**
2016	**5**	**0**
2017	**18**	**3**
2018	**12**	**0**

With the incorporation of **MM-TR-1**, Project impacts to this intersection will below thresholds, and will be reduced to a less than significant level.

In addition, mitigation will be required in order to reduce impacts for the Opening Year with Project Conditions to the intersection of Archibald Avenue and 9th Street. **Mitigation Measure MM-TR-2** shall be implemented.

MM-TR-2 **Intersection 3 – Archibald Ave / 9th Street: Prior to the issuance of certificate of occupancy, the Project Applicant shall implement the following:**

a. Maintain the existing split signal phasing for the east/west movements and restripe the eastbound 9th Street approach from one left- turn lane and one shared through/right-turn lane to consist of one shared left-turn/through lane and one right-turn lane.
b. Implement right-turn overlap phasing at the eastbound 9th Street approach.

With the incorporation of **MM-TR-2**, Project impacts to this intersection will below thresholds, and will be reduced to a less than significant level.

Mitigation will be required in order to reduce impacts for the Opening Year with Project Conditions to the intersection of Archibald Avenue and Acacia Street. **Mitigation Measure MM-TR-3** shall be implemented.

MM-TR-3 **Intersection 4 – Archibald Ave / Acacia Street: The Project Applicant shall implement the following:**

- **Install signage to restrict movements from Acacia Street onto Archibald Avenue to right- turns only during peak hours. This restriction might only be applicable to the westbound approach since the eastbound approach serves private property. Based on discussions with the City, considering the traffic volume for the eastbound approach and the proportional delay it adds to the overall intersection operation, it would be acceptable to**

implement mitigation to only the East approach to relieve delay to all public approaches.

With the incorporation of **MM-TR-3**, Project impacts to this intersection will below thresholds, and will be reduced to a less than significant level.

Lastly, mitigation will be required in order to reduce impacts for the Opening Year with Project Conditions to the intersection of Archibald Avenue and 7th Street. **Mitigation Measure MM-TR-4** shall be implemented.

MM-TR-4 Intersection 5 – Archibald Ave / 7th Street: The Project Applicant shall implement the following:

- **Install signage to restrict movements from 7th Street onto Archibald Avenue to right-turns only during peak hours.**

With the incorporation of **MM-TR-4**, Project impacts will be reduced to a less than significant level.

Table 17-9, *Intersection Analysis for Mitigated Opening Year With Project Conditions* shows the level of service of the study intersections assuming implementation of the identified recommendation measures for Opening Year With Project Conditions. The level of service calculations reflect redistribution of the traffic volumes associated with restricting left and through movements at Archibald Avenue / Acacia Street and Archibald Avenue / 7th Street.

Table 17-9
Intersection Analysis for Mitigated Opening Year With Project Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Delay[2] (Seconds)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Archibald (NS) / Foothill Blvd (EW)	TS	1.0	1.5	0.5	1.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	37.0	54.0	D	D
2	Archibald (NS) / Arrow Route (EW) - MITIGATED[4]	*TS*	*1.0*	*2.0*	*1.0*	*1.0*	*1.5*	*0.5*	*1.0*	*2.0*	*1.0*	*1.0*	*2.0*	*1>*	53.2	38.6	D	D
3	Archibald (NS) / 9th Street (EW) - MITIGATED	*TS*	*1.0*	*1.5*	*0.5*	*1.0*	*1.5*	*0.5*	*0.5*	*0.5*	*1>*	*0.0*	*1.0!*	*0.0*	42.1	25.8	D	C
4	Archibald (NS) / 8th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	20.8	19.8	C	B
5	Archibald (NS) / Acacia Street (EW) - MITIGATED	*CSS*	*1.0*	*1.5*	*0.5*	*1.0*	*1.5*	*0.5*	*0.0*	*1.0!*	*0.0*	*0.0*	*1.0!*	*0.0*	15.7	16.2	C	C
6	Archibald (NS) / 7th Street (EW) - MITIGATED	*CSS*	*1.0*	*1.5*	*0.5*	*1.0*	*1.5*	*0.5*	*0.5*	*0.5*	*1.0*	*0.0*	*1.0!*	*0.0*	15.2	16.5	C	C
7	Archibald (NS) / 6th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	26.4	38.8	C	D
8	Archibald (NS) / 4th Street (EW)	TS	1.0	1.5	0.5	1.0	2.0	1.0	2.0	1.5	0.5	2.0	3.0	1.0	35.1	51.3	D	D
9	Archibald (NS) / E. Inland Empire Blvd (EW)	TS	2.0	3.0	1.0	2.0	3.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	30.1	39.5	C	D
10	Archibald (NS) / I-10 Freeway Ramps (EW)	TS	2.0	4.0	0.0	2.0	3.0	1.0	0.0	2.0	2.0	0.0	2.0	2.0	34.5	31.1	C	C
11	Project Access Driveway 1 (NS) / Acacia Street (EW)	CSS	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	8.9	8.9	A	A
12	Project Access Driveway 2 (NS) / Acacia Street (EW)	CSS	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.0	0.5	0.0	0.0	0.0	8.5	8.6	A	A
13	Project Access Driveway 3 (NS) / 7th Street (EW)	CSS	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.0	0.5	0.5	8.4	9.1	A	A
14	Project Access Driveway 4 (NS) / 7th Street (EW)	CSS	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.0	0.5	0.5	8.4	9.0	A	A
15	Project Access Driveway 5 (NS) / 7th Street (EW)	CSS	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.0	0.5	0.5	8.4	8.9	A	A
16	Project Access Driveway 6 (NS) / 7th Street (EW)	CSS	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	A	A

1 When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.
L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

2 Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

3 TS= Traffic Signal CSS = Cross Street Stop

4 Mitigation includes modification of traffic signal phasing.

The Project will be required, as a condition of approval, to complete any remaining half-section street improvements for Acacia Street, Archibald Avenue and 7th Street, adjacent to the Project site. In addition, the Project will also be required, as a condition of approval, to pay the adopted transportation development fee prior to issuance of building permit. Payment of this fee is a standard condition and is not considered unique mitigation under CEQA.

With the required Project frontage improvements, fair share contributions, payment of development impact fees and implementation of **Mitigation Measures MM-TR-1** through **MM-TR-4**, Project impacts would be forecast to be reduced to less than significant.

Long Range Year (2040) Without Project Conditions LOS

Intersection Levels of Service for the Long Range Year (2040) Without Project Conditions are shown in **Table 17-10, *Intersection Analysis for Long Range Year (2040) Without Project Conditions***. All HCM calculations for the Long Range Year are based on the existing intersection geometrics with the exception of the Archibald Avenue / Foothill Boulevard study intersection which assumes addition of dedicated right-turn lanes at all approaches for long-range conditions per the General Plan as directed by the City.

As shown on **Table 17-10**, for Long Range Year (2040) Without Project Conditions, all study area intersections are projected to operate at acceptable levels of service during the peak hours with the exception of the following study intersections:

- Archibald Avenue / Foothill Boulevard (PM peak hour only);
- Archibald Avenue / Arrow Route (both AM and PM peak hours);
- Archibald Avenue / 9th Street (AM peak hour only);
- Archibald Avenue / Acacia Street (both AM and PM peak hours); and
- Archibald Avenue / 7th Street (both AM and PM peak hours).

Table 17-10
Intersection Analysis for Long Range Year (2040) Without Project Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Delay[2] (Seconds)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Archibald (NS) / Foothill Blvd (EW)	TS	1.0	2.0	1.0	1.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	41.5	59.6	D	**E**
2	Archibald (NS) / Arrow Route (EW)	TS	1.0	2.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	70.1	81.8	**E**	**F**
3	Archibald (NS) / 9th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	0.0	1.0!	0.0	80.8	38.1	E	D
4	Archibald (NS) / 8th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	20.3	20.7	C	C
5	Archibald (NS) / Acacia Street (EW)	CSS	1.0	1.5	0.5	1.0	1.5	0.5	0.0	1.0!	0.0	0.0	1.0!	0.0	179.4	302.4	**F**	**F**
6	Archibald (NS) / 7th Street (EW)	CSS	1.0	1.5	0.5	1.0	1.5	0.5	0.5	0.5	1.0	0.0	1.0!	0.0	2071.5	1244.7	**F**	**F**
7	Archibald (NS) / 6th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	24.0	52.4	C	D
8	Archibald (NS) / 4th Street (EW)	TS	1.0	1.5	0.5	1.0	2.0	1.0	2.0	1.5	0.5	2.0	3.0	1.0	38.0	52.8	D	D
9	Archibald (NS) / E. Inland Empire Blvd (EW)	TS	2.0	3.0	1.0	2.0	3.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	37.9	52.3	D	D
10	Archibald (NS) / I-10 Freeway Ramps (EW)	TS	2.0	4.0	0.0	2.0	3.0	1.0	0.0	2.0	2.0	0.0	2.0	2.0	47.2	32.0	D	C
11	Project Access Driveway 1 (NS) / Acacia Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	Project Access Driveway 2 (NS) / Acacia Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13	Project Access Driveway 3 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	Project Access Driveway 4 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	Project Access Driveway 5 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	Project Access Driveway 6 (NS) / 7th Street (EW)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.
L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

[2] Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS= Traffic Signal CSS = Cross Street Stop

Long Range Year (2040) With Project Conditions LOS

Intersection Levels of Service for the Long Range Year (2040) With Project are shown in **Table 17-11, *Intersection Analysis for Long Range Year (2040) With Project Conditions***. All HCM calculations for Long Range Year (2040) are based on the existing intersection geometrics with the exception of the Archibald Avenue / Foothill Boulevard study intersection which assumes addition of dedicated right-turn lanes at all approaches for long-range conditions per the General Plan as directed by the City.

As shown on **Table 17-11**, for Long Range Year (2040) With Project Conditions, all study area intersections are projected to operate at acceptable levels of service during the peak hours with the exception of the following study intersections:

- Archibald Avenue / Foothill Boulevard (PM peak hour only);
- Archibald Avenue / Arrow Route (both AM and PM peak hours);
- Archibald Avenue / 9th Street (AM peak hour only);
- Archibald Avenue / Acacia Street (both AM and PM peak hours); and
- Archibald Avenue / 7th Street (both AM and PM peak hours).

Table 17-11
Intersection Analysis for Long Range Year (2040) With Project Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Delay[2] (Seconds)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Archibald (NS) / Foothill Blvd (EW)	TS	1.0	2.0	1.0	1.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	41.9	61.2	D	**E**
2	Archibald (NS) / Arrow Route (EW)	TS	1.0	2.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	74.1	82.5	**E**	**F**
3	Archibald (NS) / 9th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	0.0	1.0!	0.0	84.4	39.2	**F**	D
4	Archibald (NS) / 8th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	21.5	21.6	C	C
5	Archibald (NS) / Acacia Street (EW)	CS S	1.0	1.5	0.5	1.0	1.5	0.5	0.0	1.0!	0.0	0.0	1.0!	0.0	275.8	686.8	**F**	**F**
6	Archibald (NS) / 7th Street (EW)	CS S	1.0	1.5	0.5	1.0	1.5	0.5	0.5	0.5	1.0	0.0	1.0!	0.0	2561.4	4048.1	**F**	**F**
7	Archibald (NS) / 6th Street (EW)	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	25.4	52.6	C	D
8	Archibald (NS) / 4th Street (EW)	TS	1.0	1.5	0.5	1.0	2.0	1.0	2.0	1.5	0.5	2.0	3.0	1.0	40.8	54.7	D	D
9	Archibald (NS) / E. Inland Empire Blvd (EW)	TS	2.0	3.0	1.0	2.0	3.0	1.0	1.0	1.5	0.5	1.0	1.5	0.5	38.1	52.8	D	D
10	Archibald (NS) / I-10 Freeway Ramps (EW)	TS	2.0	4.0	0.0	2.0	3.0	1.0	0.0	2.0	2.0	0.0	2.0	2.0	54.1	32.0	D	C
11	Project Access Driveway 1 (NS) / Acacia Street (EW)	CS S	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	8.9	9.0	A	A
12	Project Access Driveway 2 (NS) / Acacia Street (EW)	CS S	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.0	0.5	0.0	0.0	0.0	8.5	8.6	A	A
13	Project Access Driveway 3 (NS) / 7th Street (EW)	CS S	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.0	0.5	0.5	8.4	9.2	A	A
14	Project Access Driveway 4 (NS) / 7th Street (EW)	CS S	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.0	0.5	0.5	8.4	9.0	A	A
15	Project Access Driveway 5 (NS) / 7th Street (EW)	CS S	0.0	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.0	0.0	0.5	0.5	8.4	8.9	A	A
16	Project Access Driveway 6 (NS) / 7th Street (EW)	CS S	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	A	A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.
L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

[2] Analysis Software: Synchro, Version 10.0. Per the 2010 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS= Traffic Signal CSS = Cross Street Stop

[4] Mitigation includes modification of traffic signal phasing.

Based on the agency-established thresholds of significance, the above listed study intersections are forecast to be significantly impacted for Long Range Year (2040) With Project Conditions.

Additional mitigation is required beyond the improvements discussed in the Opening Year (2019) Project conditions to the following intersections:

- Archibald Avenue and Foothill Boulevard; and
- Archibald Avenue and Arrow Route.

With the incorporation of **MM-TR-5** and **MM-TR-6**, Project impacts to these intersections will be reduced to a less than significant level.

MM-TR-5 **Intersection 1 – Archibald Ave / Foothill Blvd: The Project Applicant shall make a fair share contribution to implement the following:**

- **Implement right-turn overlap phasing at the eastbound Foothill Boulevard approach.**

- **Implement right-turn overlap phasing at the westbound Foothill Boulevard approach.**

MM-TR-6 **Intersection 2 – Archibald Ave / Arrow Route: The Project Applicant shall make a fair share contribution to implement the following:**

- **Restripe the northbound Archibald Avenue approach from one left-turn lane, two through lanes and one defacto right turn lane to consist of one left-turn lane, two through lanes and one dedicated right-turn lane.**

- **Implement right-turn overlap phasing at the northbound Archibald Avenue approach.**

- **Implement right-turn overlap phasing at the eastbound Arrow Route approach.**

No additional mitigation is required beyond the improvements discussed in the Opening Year (2019) Project conditions to the following intersections:

- Archibald Avenue / 9th Street (AM peak hour only);
- Archibald Avenue / Acacia Street (both AM and PM peak hours);
- Archibald Avenue and Arrow Route; and
- Archibald Avenue / 7th Street (both AM and PM peak hours).

Lastly, the Project will be required to participate in the funding (on a fair share basis) to the following intersections:

- Archibald Avenue and Foothill Boulevard; and
- Archibald Avenue and Arrow Route.

This is reflected in **Table 17-12, *Project Fair-Share Intersection Contribution (Long Range Year 2040)***, and is included in **Mitigation Measure MM-TR-7.**

Table 17-12
Project Fair-Share Intersection Contribution (Long Range Year 2040)

	Intersection	Existing Traffic		Project Long Range Year (2040) With Project Traffic		Growth in Traffic		Project Traffic		Project % of Long Range Year (2040) With Project Growth in Traffic		Estimated Cost of Mitigation	Project Share of Estimated Cost	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		AM	PM
1	Archibald (NS) / Foothill Blvd (EW)	3,773	4,382	4,716	5,343	943	961	42	38	4.5%	4.0%	$40,000	$1,782	$1,582
2	Archibald (NS) / Arrow Route (EW)	3,923	4,312	4,685	5,115	762	803	75	67	9.8%	8.3%	$40,000	$3,937	$3,337

MM-TR-7 **Prior to issuance of certificate of occupancy, the Project applicant shall participate in the funding (on a fair share basis, as shown in Table 17-10 of the Initial Study) to the following intersections for the Long Range Year (2040) Condition:**

- **Archibald Avenue and Foothill Boulevard; and**
- **Archibald Avenue and Arrow Route.**

With the incorporation of **MM-TR-7**, Project impacts to these intersections will be reduced to a less than significant level.

As shown on **Figure 17-2, *Omnitrans Routes***, the following bus routes serve the Project site:

- Bus Route 66 (Foothill Boulevard);
- Bus Route 85 (Arrow Highway);
- Bus Route 61 (Inland Empire Boulevard); and
- Bus Route 290 (I-10 Freeway).

The City's Bicycle Plan is shown on **Figure 17-3, *Bicycle Plan***. The following bicycle facilities are located near the Project site:

- Archibald Avenue – Class II (Bike Lane)
- Foothill Boulevard – Class II (Bike Lane)
- Arrow Highway – Class II (Bike Lane)
- 6th Street – Class II (Bike Lane)

The Project will also be served by sidewalks.

Therefore, the Project would not conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Project impacts would be forecast to be reduced to a less than significant level.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			**X**	

In the fall of 2013, Senate Bill 743 (SB 743) was passed by the legislature and signed into law by the governor. For some parts of California (and eventually the entire state), this legislation will change the way that transportation studies are conducted for environmental documents. In the areas where SB 743 is implemented, delay-based metrics such as roadway capacity and level of service will no longer be the performance measures used for the determination of the transportation impacts of projects in studies conducted under CEQA. Instead, new performance measures such as Vehicle Miles Traveled (VMT) will be used.

During the preparation of the traffic impact study, guidelines for the implementation of SB 743 were not yet incorporated into CEQA. Therefore, the *TIS* followed current practice regarding state and local guidance as of the date of preparation. In December 2018, CEQA Guidelines were updated to include a threshold for evaluating traffic impacts using the VMT methodology. This new methodology is required to be used statewide for projects beginning in or after July 2020 unless the lead agency adopts the VMT thresholds earlier. As such, and because the City of Rancho Cucamonga, as the lead agency has not yet adopted VMT thresholds, the analysis for this Project utilizes the LOS methodology.

Notwithstanding, for purposes of full disclosure, it is estimated that the Project would generate approximately 4,069,972 annual VMT per capita, based on the California Emissions Estimator Model (CalEEMod) v2016.3.2.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	

The Project site and surrounding properties are within the GI Zone. To the north, south, and west are smaller parcels housing freestanding, one-story structures. The parcel to the east is larger, also with a freestanding, one-story structure. Surrounding structures are industrial in nature.

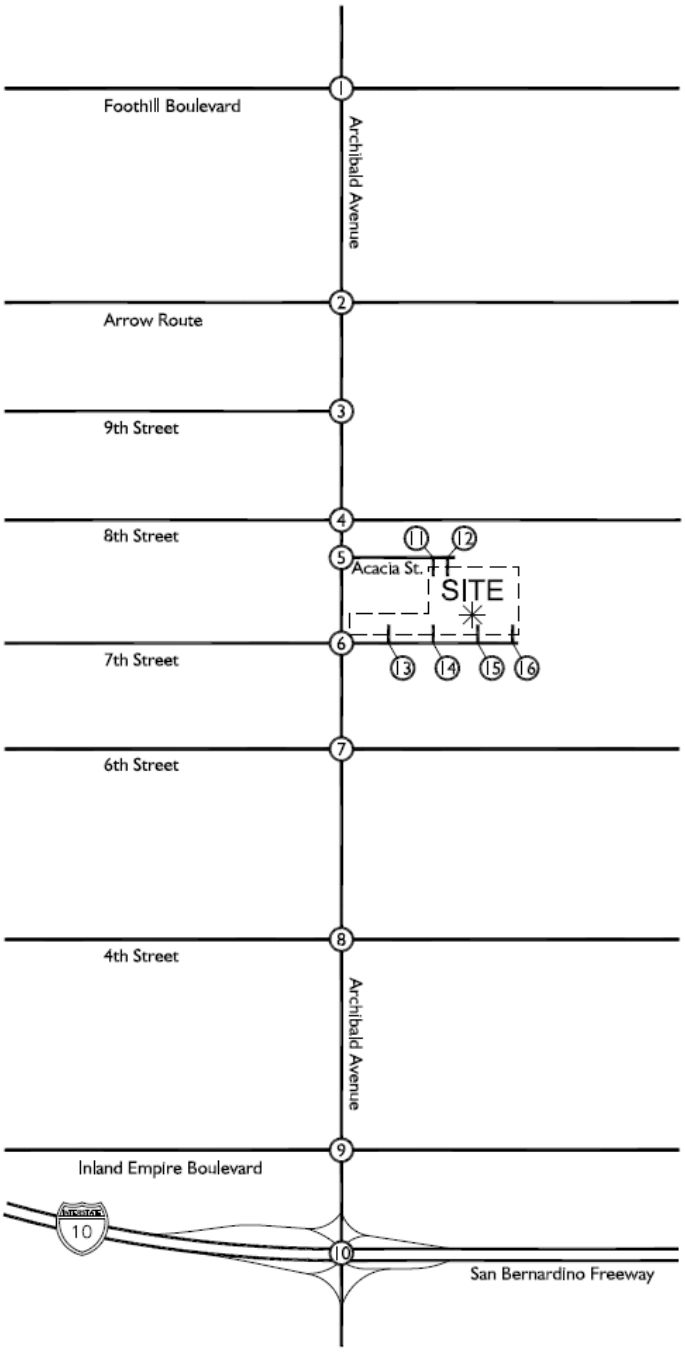
The Project will be required to provide street improvements (curb, gutter, and sidewalk) along the street frontage of the site. The Project design does not include any sharp curves or dangerous intersections or farming uses. The project would, therefore, not create a substantial increase in hazards because of a geometric design feature. Any impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in inadequate emergency access?			**X**	

Construction of the Project may temporarily affect the operation of the immediate circulation network during the construction phase of the Project. The Project will be required to obtain an encroachment permit prior to commencing any construction within the public right-of-way. This will also include the submittal and approval of a traffic control plan (TCP) which is designed to mitigate any construction circulation impacts. The TCP is a standard condition and is not considered unique mitigation under CEQA. Lastly, any impacts will be short-term and will cease once the construction phase is completed. The Project will be designed to provide access for all emergency vehicles during operations. Therefore, the Project would not result in inadequate emergency access. Any impacts would be less than significant.

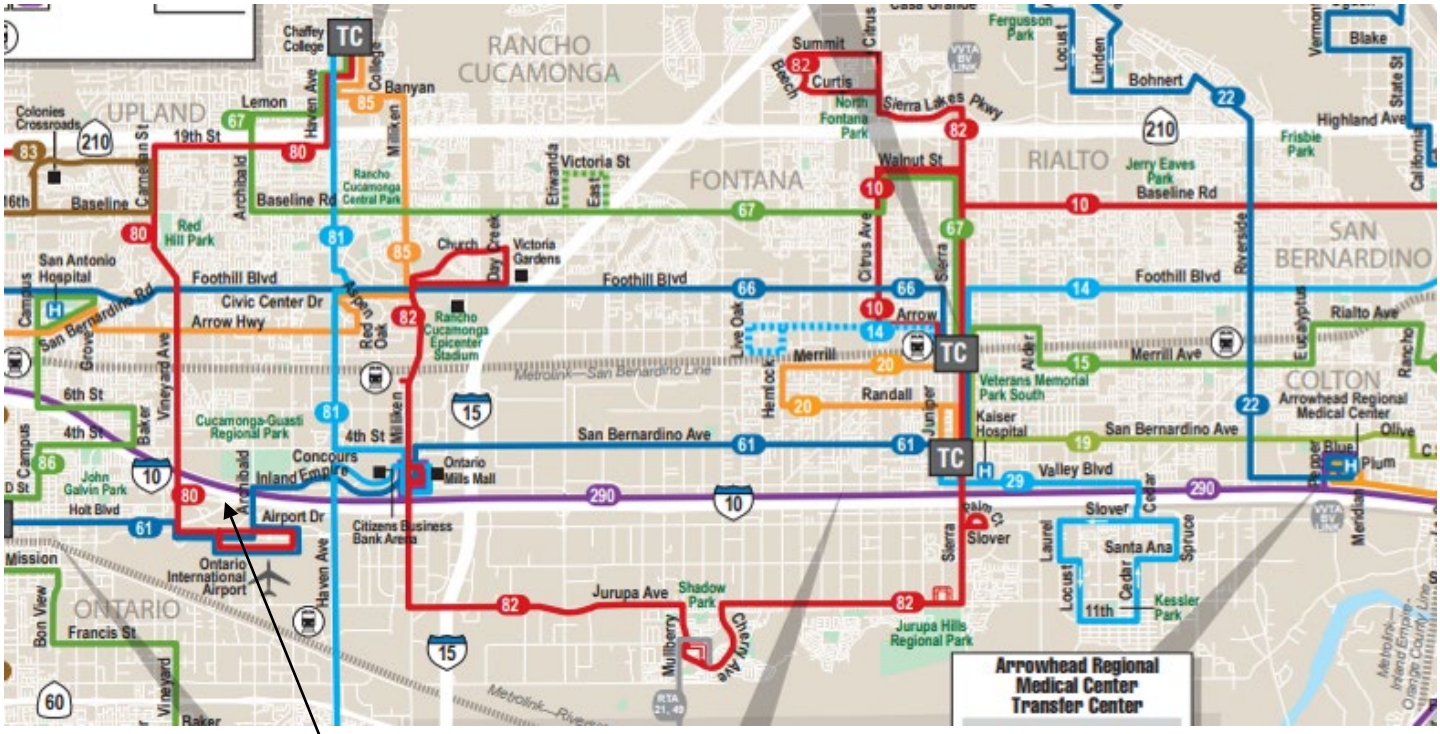
TRANSPORTATION FIGURES

Figure 17-1
Location Map



Legend:
(1) = Study Area Intersection

Figure 17-2
OmniTrans Routes



Source: OmniTrans http://omnitrans.org/schedules/pdf/system-map/Omnitrans%20%20System%20Map%20-%20January%202019.pdf

Approximate site location.

Figure 17-3
Bicycle Plan

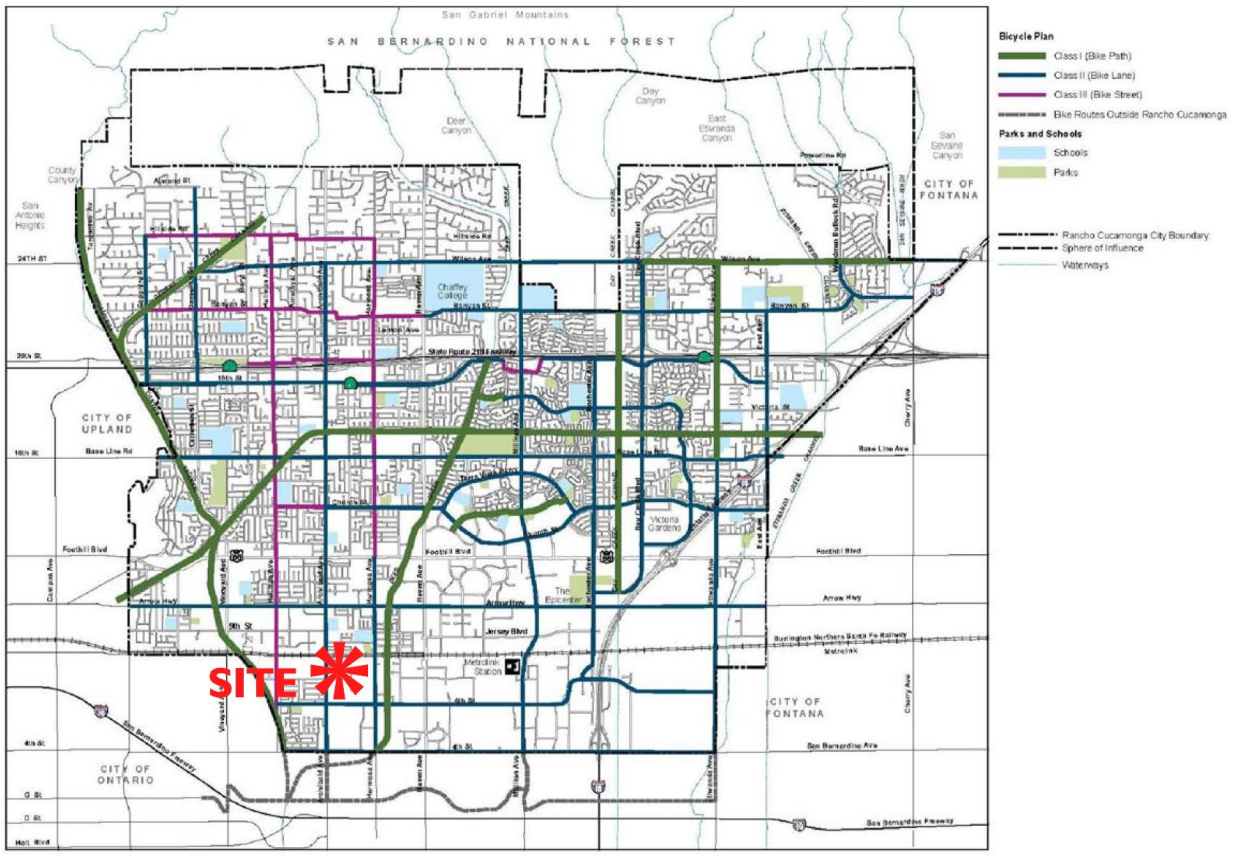


Figure 17-4
Trip Distribution

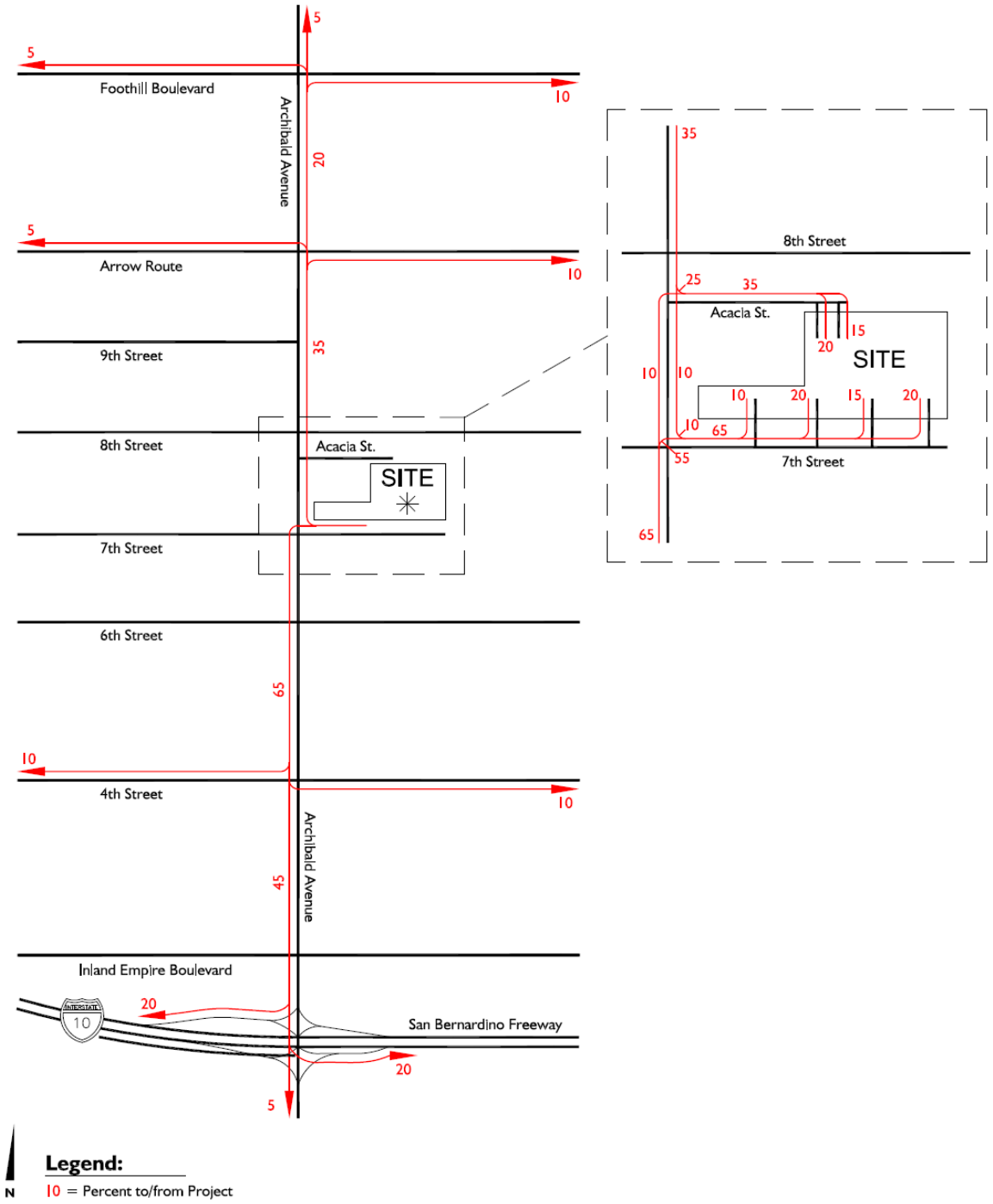
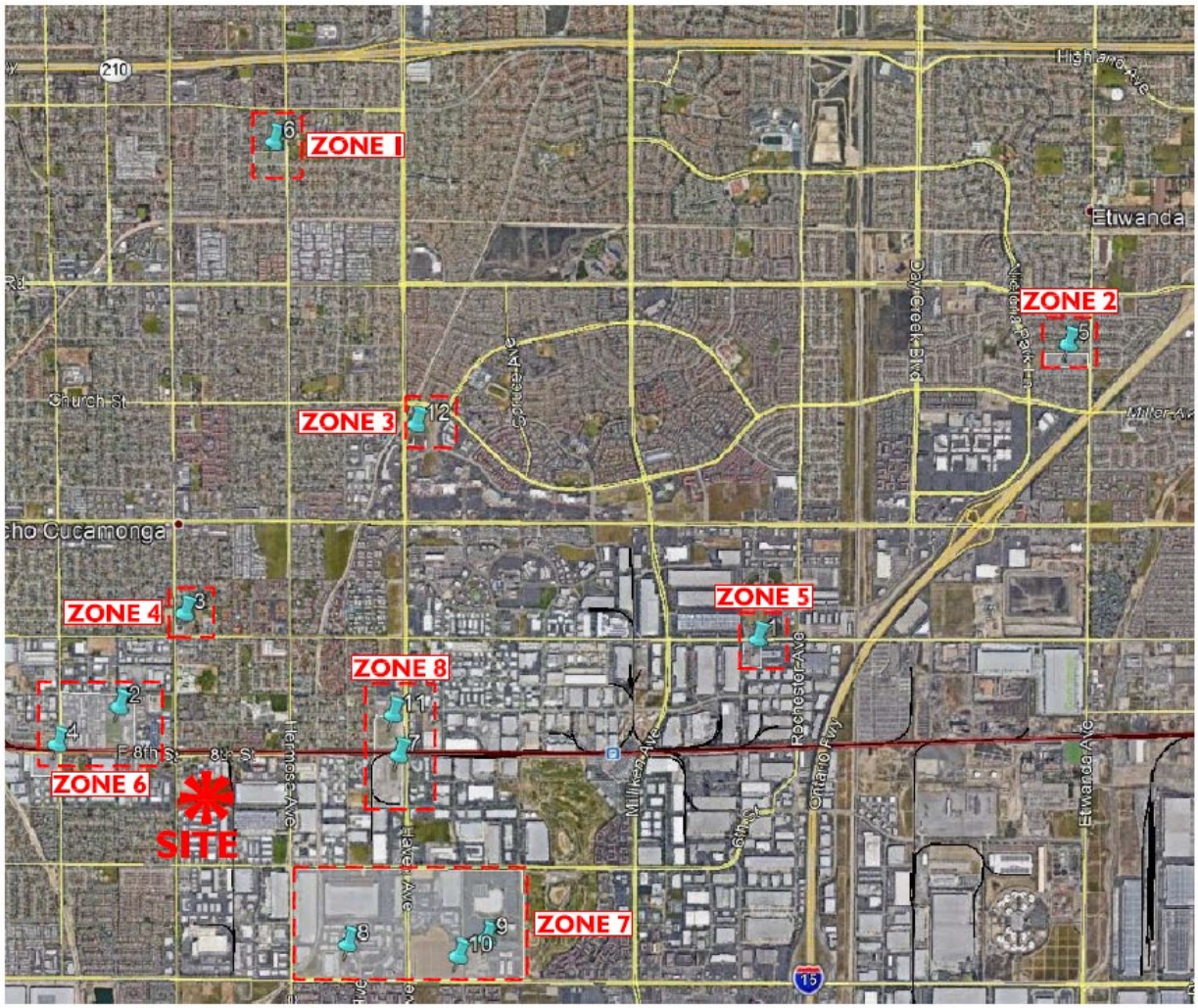


Figure 17-5
Cumulative Projects Location Map



Zone 1:
(6) = SUBTT20080

Zone 2:
(5) = DRC2018-00023

Zone 3:
(12) = DRC2018-00257

Zone 4:
(3) = DRC2015-00682

Zone 5:
(1) = DRC2017-00141

Zone 6:
(2) = DRC2016-00695
(4) = DRC2018-00119

Zone 7:
(8) = DRC2018-00326
(9) = DRC2016-00670
(10) = DRC2017-00402

Zone 8:
(7) = DRC2017-00448
(11) = DRC2017-00654

Legend:
(1) = Cumulative Project

N

18. TRIBAL CULTURAL RESOURCES.

Source(s): *Phase I Cultural Resources Assessment of the 13.23 Scheu Business Center Project Site (APN 209-211-024) Located Immediately Northeast of the Intersection of Archibald Avenue and 7th Street, City of Rancho Cucamonga, San Bernardino County*, prepared by Archaeological Associates, dated January, 2019 (*Cultural Assessment*, **Appendix D1**); and *Assembly Bill 52 (AB 52) Formal Notification*, prepared by City of Rancho Cucamonga, June 11, 2019 (*City AB52 Letters,* **Appendix D3**).

SUBSTANTIATION:

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 Cultural Native American tribe, and that is:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a.i) Listed or eligible for listing in the California Register of Historical resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)		**X**		

As defined in Public Resources Code 21074 and applying the criteria located in Public Resources Code Section 5024.1(c), the Project site has not been identified as a "Historic Resource" per the standards of Rancho Cucamonga Municipal Code Section 2.24 (Historic Preservation). The results of the records search and field study were negative for the presence of prehistoric and historic resources within the Project area. Therefore, no further work in conjunction with prehistoric or historic resources is warranted or recommended including monitoring of earth disturbing activities connected with future develop.

The City received responses concerning the Project from both the Gabrieleno Band of Mission Indians – Kizh Nation (GBMI-KN) and the San Manuel Band of Mission Indians (SMBMI) Cultural Resources Departments. Based on the responses to consultation with these Tribes, **Mitigation Measures MM-TCR-1** and **MM-TCR-2**, shall be implemented.

There is the potential for presence of subsurface tribal cultural resources on the site, and they could be affected by Project-related, ground-disturbing activities associated with grading and construction at the Project site (depending on the depth of excavation activities). It is possible that subsurface disturbance may uncover undiscovered tribal cultural resources at the site. Impacts to tribal cultural resources are potentially significant.

To provide the GBMI-KN with the ability to protect and preserve their tribal cultural resources, and to reduce potential impacts to such resources (if encountered), mitigation is required. With implementation of **Mitigation Measure MM-TCR-1** (which is based on input the City received from the GBMI-KN during the consultation efforts), impacts related to tribal cultural resources would be reduced to a level of less than significant.

Additionally, to provide the SMBMI with the ability to protect and preserve their tribal cultural resources and to reduce potential impacts to such resources (if encountered), mitigation is required. With implementation of **Mitigation Measure MM-TCR-2** (which is based on input the City received from the SMBMI during the consultation efforts), impacts related to tribal cultural resources would be reduced to a level of less than significant.

MM-TCR-1 **The Project applicant shall retain and compensate for the services of a qualified professional tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation (Kizh Nation) Tribal Government and is listed under the Native American Heritage Commission's tribal contact list for the area of the Project site. The tribal monitor/consultant shall only be present onsite during the construction phases that involve ground-disturbing activities, which are defined by the Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the Project area. The tribal monitor/consultant will complete daily monitoring logs that provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The onsite monitoring shall cease when the project site grading and excavation activities are completed, or when the tribal representatives and monitor/consultant have indicated that the site has a low potential for impacting tribal cultural resources. Proof of the Project applicant's retention of the tribal monitor/consultant shall be provided to the City of Rancho Cucamonga Planning Department prior to the issuance of permits for construction phases that involve ground-disturbing activities.**

In addition, the Project applicant shall follow/implement the following measures during the Project's construction phases that involve ground-disturbing activities:

- **Retain a Native American Monitor/Consultant: The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the Project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the Project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site**

grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

- **Unanticipated Discovery of Tribal Cultural and Archaeological Resources: Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by Project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the Project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources, and Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.**

- **Unanticipated Discovery of Human Remains and Associated Funerary Objects: Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or**

she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

- **Resource Assessment & Continuation of Work Protocol: Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).**

- **Kizh-Gabrieleno Procedures for burials and funerary remains: If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.**

    - ***Treatment Measures:*** **Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the Project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the Project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated**

carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.

Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

- ***Professional Standards:*** **Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.**

MM-TCR-2 **The City of Rancho Cucamonga shall follow/implement the following measures during the Project's construction phases that involve ground-disturbing activities:**

1. **In the event that cultural resources are discovered during Project activities, all work in the immediate vicinity of the find**

(within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the Project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within item #4, below, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

2. **If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within item #4, below. The archaeologist shall monitor the remainder of the Project and implement the Plan accordingly.**

3. **If human remains or funerary objects are encountered during any activities associated with the Project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the Project.**

4. **The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in item #1, above, of any pre-contact cultural resources discovered during Project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the Project, should SMBMI elect to place a monitor on-site.**

5. **Any and all archaeological/cultural documents created as a part of the Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead**

Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the Project.

No other responses from the Native American community for implementation of mitigation measures were received.

With the implementation of **Mitigation Measures MM-TCR-1** and **MM-TCR-2**, the Project would not cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k). Impacts would be reduced to a less than significant level.

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 Cultural Native American tribe, and that is:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a.ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		**X**		

In conformance with CEQA Guidelines Section 15064.5, a *Cultural Resources Assessment* was performed on the Project site. The results of the records search and field study were negative for the presence of prehistoric and historic resources within the Project area. Therefore, no further work in conjunction with prehistoric or historic resources is warranted or recommended including monitoring of earth disturbing activities connected with future develop. No mitigation was required. As discussed in Section 5.d of this Initial Study, Health and Safety Code 7050.5, CEQA 15064.5(e), and Public Resources Code 5097.98 mandate the process to be followed in the unlikely event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

As required by Assembly Bill 52 (AB 52), the City submitted notifications to the Morongo Band of Mission Indians, the Gabrieleno Band of Mission Indians – Kizh Nation, Soboba Band of Luiseno Indians, the San Manual Band of Mission Indians, the San Gabriel Band of Mission Indians, and the Torres Martinez Desert Cahuilla Indians following a completeness determination for Design Review DRC2018-00529 and DRC2018-00530. The notices were mailed on June 11, 2019 and provided for a 30-day comment period ending on July 11, 2019. Responses were received from three (3) tribes: the Morongo Band of Mission

Indians, the San Manuel Band of Mission Indians (SMBMI), and the Gabrieleno Band of Mission Indians – Kizh Nation (GBMI-KN).

The Morongo Band of Mission Indians had no comments on the Project. The SMBMI did not request consultation but did request that specific mitigation measures be incorporated into the Initial Study. The GBMI-KN requested consultation and also provided specific mitigation measures be incorporated into the Initial Study. All correspondence relating to AB52 is provided as a part of the Initial Study Technical Appendices (**Appendix D3**). Applicable mitigation measures (**Mitigation Measures MM-TCR-1** and **MM-TCR-2**, are a result of the mitigation measures received by both Tribes and are included above in Section 18.a.

Gabrieleno Band of Mission Indians – Kizh Nation History of the Project Area

The City received an email from the GBMI-KN acknowledging that face to face consultation was not possible at this time and provided historical information on the Project site to also be included in this Initial Study; the history is provided below.

"The Scheu Distribution Center_1938 map indicates the project location within the Village of Cucamonga, which is the namesake of the current city of Rancho Cucamonga. All of our mainland villages (sans our island villages) overlapped each other to help facilitate the movement of tribal cultural resources throughout the landscape and also to our sister tribes outside of our traditional ancestral territory. Village use areas were usually shared between village areas and were commonly used by two or more adjoining villages depending on the type, quantity, quality, and availability of natural resources in the area. This village was a large and prominent village because of its location connected to the major trade corridor that would lead to the Mojave Desert, today called the cajon pass. Therefore, human activity was pronounced within these use areas due to the combined use by multiple villages and therefore TCR's may be present in the soil layers from the thousands of years of human activity within that landscape.

The Scheu Distribution Center_1901 and Scheu Distribution Center_1897 maps show the project's close proximity to a major railroad corridor that existed in this location. All railroads were placed on top of our Tribe's traditional trade routes because when the first railroad planners came out west, the topography was too varied to place the rail lines just anyplace, so they chose the paths of least resistance that already existed which were our traditional trade routes that were flattened by human travel over thousands of years of use. Therefore, railroad corridors help to identify the specific geographic area of our ancient trade routes. This project is within this travel/trade corridor. The Scheu Distribution Center_1938 map shows these same trade routes around the project area. Trade routes were heavily used by our Tribe for movement of trade items, visiting of family, going to ceremony, accessing recreation areas, and accessing foraging areas. Within and around these routes contained seasonal or permanent ramadas or trade depots, seasonal and permanent habitation areas, and often still contain isolated burials and cremations from folks who died along the trail. These isolated burials are not associated with a village community burial site or ceremonial burial site, rather the location is simply where the person died and

was buried where they died. Therefore, isolated burials are more concentrated and likely to occur in proximity to our trade routes, especially the major trade routes. Trade routes are considered "cultural landscapes", as stated in section 21074. (a) because the landscapes will house the objects, therefore, both cultural landscapes and cultural objects are protected under AB52 as a tribal cultural resource.

The Scheu Distribution Center hydrography map indicates the hydrography or waterways that exist around the project area most notably the closest being two perennial watercourses named today as Cucamonga Creek to the west and Deer Creek to the east. All water sources were used by our Tribe for life sustenance. Along these watercourses and water bodies occurred seasonal or permanent hamlets, seasonal or permanent trade depots, ceremonial and religious prayer sites, and burials and cremation sites of our ancestors. These activities occurred around water, both inland and coastal, because these water areas create unique habitats and riparian corridors that provide an abundance of food and medicine resources along with aesthetically peaceful areas with running water, shade trees, and shelter. The project location is also at the crossroads of a trade route and two main waterways which creates a land area that was heavily used because it was the bottleneck area for crossing over the waterways. Crossings over waterways did not just occur anywhere, therefore, the locations of the crossings were significant for human travel and use. Permanent waterways (which these two creeks contained water for most or all of the year) were also high attractants for human activity and the banks and shores of these waterways have a higher than average potential for encountering Tribal Cultural Resources of artifacts and human remains during ground disturbing activities. Waterways are a "cultural landscape", as stated in section 21074. (a) and are protected under AB52 as a tribal cultural resource.

Due to the project site being located within and around a sacred village (cucamonga), surrounded by sacred water courses (Cucamonga Creek and Deer Creek), and major traditional trade routes, there is a high potential to impact Tribal Cultural Resources still present within the soil from the thousands of years of prehistoric activities that occurred within and around these Tribal Cultural landscapes. Therefore, in lieu of an in-person consultation, we are providing document information from our tribal archives and a written explanation of our concerns for impacts to tribal cultural resources (TCR's) and how the project may impact TCR's due to the project's location and the proposed ground disturbing activities for your use in the project's IS/MND."

With the implementation of **Mitigation Measures MM-TCR-1** and **MM-TCR-2**, the Project would not cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is 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. Impacts would be reduced to a less than significant level.

19. UTILITIES AND SERVICE SYSTEMS.

Source(s): Project Application Materials (**Appendix J**); *Preliminary Drainage Study, Scheu Industrial Park,* prepared by Encompass Associates, Inc., March 22, 2018 (*Drainage Study*, **Appendix F**); *Scheu Business Center Air Quality and Greenhouse Gas Analysis,* prepared by RK Engineering Group, Inc., 4-23-2019 (*AQ/GHG Analysis*, **Appendix B**); *Cucamonga Valley Water District, 2015 Urban Water Management Plan,* prepared by Civiltec Engineering, Inc., June 2016*; City General Plan, Chapter 7, Public Facilities and Infrastructure*; and *City General Plan EIR, Section 4.17, Utilities and Service Systems.*

SUBSTANTIATION:

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, ~~or~~ wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			**X**	

Water

Potable domestic water supply to the Project is provided by the Cucamonga Valley Water District (CVWD). There is an existing 18" water line in 7th Street, which will provide fire, domestic and landscape services for Parcels/Buildings 1, 2 & 4 and, a 6" water line in Acacia Street which will provide domestic and landscape service for Parcel/Building 3 and is currently servicing the site. Fire service for Parcel/Building 3 may be directly off the existing 6" Acacia Street line or may be looped on site to connect the 7th Street and Acacia Street lines if direct flow is inadequate.

CVWD is a special district created as a separate entity from the City, and with the sole purpose of providing high-quality, safe, and reliable water services. In addition to the City of Rancho Cucamonga, the CVWD serves portions of the cities of Upland, Ontario, and Fontana, and some unincorporated areas of San Bernardino County. In total, CVWD has approximately 49,600 water connections and serves a population of approximately 186,000 within a 47 square-mile area.

CVWD's water distribution system is comprised of approximately 690 miles of distribution mains, 22 pump stations, and 39 pressure-reducing valve stations. The CVWD has 34 water storage facilities that vary in size from 13 to 16 million gallons, with a combined design storage capacity of 89.6 million gallons. Seven storage facilities are located in the higher elevations above 2,267 feet.

The CVWD continues to refine and improve its water system maintenance and operation procedures to ensure reliability. Its maintenance practices help reduce water loss from

leaks in the distribution system, which contributes to the amount of available potable water in the City.

According to Table 16, of the *AQ/GHG Analysis*, the Project will use a total of 61,065,263 gallons of water per year (187.40 acre feet per year). This equates to 0.28% of the 67,500 acre feet of water available from CVWD. Consistent with the City's General Plan Land Use designation of LI, the existing CVWD water service infrastructure, inclusive of the distribution system and treatment facilities, is capable of serving the Project; construction or expansion of existing facilities is not necessary to serve the Project.

Wastewater

The Project is served by the CVWD sewer system, which has wastewater treated by the IEUA at the RP-1 and RP-4 treatment plants. Both the RP-1 and RP-4 have sufficient additional capacity to serve the build-out of the City of Rancho Cucamonga pursuant to the Land Use designations set forth in the current General Plan, inclusive of the Project site.

The existing CVWD wastewater service infrastructure, inclusive of the distribution system and treatment facilities, is capable of serving the Project; construction or expansion of existing facilities is not necessary to serve the Project. There is an existing 8" sewer line in 7th Street currently terminating approximately 200' east of Archibald Avenue, which can be extended east and on site to service all 4 parcels/buildings within the Project.

Connections to local water and sewer mains will involve temporary and less than significant construction impacts that will occur in conjunction with other on-site improvements. No additional improvements are needed to either sewer lines or treatment facilities to serve the Project. Standard water and sewer connection fees will address any incremental impacts of the Project. The applicant will pay water system capacity charges and water meter charges to CVWD for domestic and landscape irrigation use; and sewer system capital capacity charges and sewer connection fees to the City and IEUA, based on Industrial User Equivalent Dwelling Unit formula and water meter sizes. These fees are projected to total approximately $1.00 per sq. ft. of building. Payment of these fees are standard conditions and are not considered unique mitigation under CEQA.

Storm Water Drainage

A site specific preliminary drainage study (*Drainage Study*, **Appendix F**) has been prepared to determine the drainage facility requirements for the Project site identified as being located south of Acacia Street, west of industrial businesses, north of 7th Street, and east of Archibald Avenue, in the City of Rancho Cucamonga, County of San Bernardino, California.

The Project site will consist of 4 warehouse buildings, with an approximate area of 16 acres. Proposed drainage is overland and by sheet flow generally in a southwesterly direction. The Project site is not subject to off-site runoff.

The Project site is tributary to an existing storm drain in Archibald Avenue. A storm drain in 7th Street will be constructed to collect runoff from multiple on-site subareas.

Project site runoff and the extension of the storm drain in 7th Street have been designed to convey flows from a 100-year storm event.

Pursuant to the City's Municipal Code Section 19.20.230 all construction projects shall apply Best Management Practices (BMPs) to be contained in the Project applicant's submitted Stormwater Pollution Prevention Plan (SWPPP). The Project will also be required to submit a Water Quality Management Plan (WQMP) identifying post-construction BMPs. These are standard conditions and are not considered unique mitigation under CEQA.

Therefore, the 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 effects.

Impacts would be less than significant with implementation of existing regulations and BMP's.

Based on the above, development of the Project site would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or, the construction or relocation of which could cause significant environmental effects.

Electric Power

There is no electricity connection currently serving the Project site in its vacant and undeveloped condition. The electrical service provider for the Project site and the greater City is Southern California Edison (SCE). Overhead electrical service lines are currently in place adjacent to the Project site along the east side of Archibald Avenue.

SCE is responsible for providing power supply to the City of Menifee and the greater Riverside County area while complying with county, state, and federal regulations. SCE's power system is one of the nation's largest electric and gas utilities and serves approximately 15 million people in 180 incorporated cities and 15 counties, in a service area of approximately 50,000 square miles in size (SCE 2019). SCE maintains 12,635 miles of transmission lines, 91,375 miles of distribution lines, 1,433,336 electric poles, 720,800 distribution transformers, and 2,959 substation transformers.

In 2017, SCE's power mix consisted of 32 percent renewable resources, including wind, geothermal, biomass, solar, and small hydro, 20 percent natural gas, eight percent large hydroelectric facilities, and six percent nuclear. An estimated 34 percent of SCE's power mix consisted of unspecified sources of power in 2017, which is referred to by SCE as electricity from transactions that are not traceable to specific generation sources.

Operation of the Project would consume electricity for building power, lighting, and water conveyance, among other operational requirements. The Project has been designed to comply with various federal, state and local energy use regulations including Title 24.

Because the Project has been designed to meet all applicable local and state requirements and represents an incremental and relatively nominal increase in area wide electrical

consumption, the Project would not result in potentially significant environmental effects from wasteful, inefficient, or unnecessary consumption of energy.
Adequate commercial electricity supplies are presently available in Southern California to meet the incremental increase in demand attributed to the Project. The Project would not require new or expanded electric power facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be less than significant.

Natural Gas

There is no natural gas connection currently in place serving the Project site in its vacant and undeveloped condition. The natural gas provider for the Project site and the greater City is the Southern California Gas Company (SoCal Gas), also known as The Gas Company.

The Project will be connected to The Gas Company's natural gas distribution system. Connections are available in the vicinity and natural gas service is in place in Archibald Avenue.

Adequate natural gas supplies are available to meet the incremental increase in demand attributed to the Project. The Project will not require new or expanded natural gas facilities, the construction or relocation of which could cause significant environmental effects. Any impacts will be less than significant.

Telecommunications

Telephone service to the Project site and the greater City is provided by Verizon and AT&T. Verizon and AT&T are private companies that provides connection to the communication system on an as needed basis. No expansion of facilities will be necessary to connect the Project to the communication system located adjacent to the Project site. The Project would not require new or expanded telecommunication facilities, the construction or relocation of which could cause significant environmental effects. Any impacts would be less than significant.

Impacts from implementation of the Project are considered incremental and will be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			**X**	

As set forth in Section 19.a, potable domestic water supply to the Project is provided by the CVWD. There is an existing 18" water line in 7th Street, which will provide fire, domestic and landscape services for Parcels/Buildings 1, 2 & 4 and, a 6" water line in Acacia Street which will provide domestic and landscape service for Parcel/Building 3 and is currently servicing the site. Fire service for Parcel/Building 3 may be directly off the existing 6" Acacia Street

line or may be looped on site to connect the 7th Street and Acacia Street lines if direct flow is inadequate.

Imported water is the District's most significant water supply and can range approximately 35-65 percent of the District's water. Sufficient connection capacity exists to meet current and future imported water demands. The District produces groundwater from the two groundwater basins that underlie the District service area: Chino Basin and Cucamonga Basin. In addition to imported water and groundwater, the District has rights to six sources of surface water from the canyons: Cucamonga Canyon, Day/East Canyon, Deer Canyon, Lytle Creek, Smith Canyon Group, and the Golf Course Tunnel. Currently, water is only utilized from three of the six sources: Cucamonga Canyon, Day/East Canyon, and Deer Canyon.

Based on figures set forth in the CVWD 2015 Urban Water Management Plan, CVWD has sufficient water supply to meet current and projected future water demand under normal year, single-dry year, and multiple dry year scenarios, as depicted in **Table 19-1, *Normal Year Supply (AFY)***, **Table 19-2, *Single Dry Year Supply (AFY)***, and **Table 19-3, *Multiple Dry Year Supply (AFY)***.

Table 19-1
Normal Year Supply (AFY)

	2020	2025	2030	2035
Supply	60,500	63,100	65,700	65,700
Demand	60,500	63,100	65,700	65,700
Difference	**0**	**0**	**0**	**0**

Source: CVWD 2015 Urban Water Management Plan

Table 19-2
Single Dry Year Supply (AFY)

	2020	2025	2030	2035
Supply	60,500	63,100	65,700	65,700
Demand	60,500	63,100	65,700	65,700
Difference	**0**	**0**	**0**	**0**

Source: CVWD 2015 Urban Water Management Plan

Table 19-3
Multiple Dry Year Supply (AFY)

Year	Item	2020	2025	2030	2035
1	Supply	60,500	63,100	65,700	65,700
	Demand	60,500	63,100	65,700	65,700
	Difference	**0**	**0**	**0**	**0**
2	Supply	60,500	63,100	65,700	65,700
	Demand	60,500	63,100	65,700	65,700
	Difference	**0**	**0**	**0**	**0**
3	Supply	60,500	63,100	65,700	65,700
	Demand	60,500	63,100	65,700	65,700
	Difference	**0**	**0**	**0**	**0**

Source: CVWD 2015 Urban Water Management Plan

In conclusion, there are sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. Any impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?			**X**	

Please reference the discussion in 19.a. The Project would not result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Impacts would be considered incremental and less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			**X**	

Solid waste collection and transport in the City of Rancho Cucamonga is handled by contracted private firms that haul collected materials to regional landfills and materials recycling facilities.

The City currently has a contract with Burrtec Waste Industries, Inc. (Burrtec) to provide these solid waste services. In July 2001, the County of San Bernardino contracted Burrtec to operate and maintain their solid waste disposal facilities located throughout the County. This includes both active and closed landfills, transfer stations and community collection centers.

Solid waste generated in the City is transferred to Burrtec's West Valley Materials Recovery Facility, located immediately southeast of the City at 13373 Napa Street in Fontana. Solid waste that is not diverted is primarily disposed at Mid-Valley Landfill, a County Class III (i.e., municipal waste) landfill located at 2390 North Alder Avenue in Rialto.

The Project site is located approximately ten (10) miles southwest of the Mid-Valley Landfill.

According to the City's 2010 GPEIR, the Mid-Valley Landfill has a daily permitted capacity of 7,500 tons per day (tons/day), a remaining capacity of 670,000 cubic yards (cy), and an anticipated close date of 2033. According to Table 16 of the *AQ/GHG Analysis*, the Project will generate 297.67 tons of solid waste per year.

Based on the above, development of the Project site as an industrial warehouse business center, consistent with the City's General Plan Land Use designation of LI, would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Impacts would be less than significant.

Would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			**X**	

In order to reduce the amount of solid waste generated in California, the California Integrated Waste Management Board (CIWMB) was created in 1989 to oversee the reporting of solid waste disposal by cities and counties. The CIWMB required that the amount of solid waste sent to landfills be reduced by 50 percent by the year 2000, per Assembly Bill 939 (AB 939).

Rancho Cucamonga implemented a series of programs for recycling materials that significantly decreased the amount of waste the City sent to landfills. In 2000, Rancho Cucamonga was diverting 35 percent of its waste from landfills. By 2006, Rancho Cucamonga diverted 57 percent of its waste from landfills through recycling and re-use.

In 2008, the California State Senate passed Senate Bill 1016 (SB 1016) that builds upon AB 939. Instead of looking at diversion rates for cities and counties, the new law requires jurisdictions to report waste generation factors based on disposal weight, as reported by disposal facilities, and reported population and employment data.

Regarding solid waste regulations, the City has exceeded the 50 percent diversion rate mandated by AB939 with a 57 percent diversion rate. In addition, the City is currently meeting its target per capita disposal rates under SB 1016.

The General Plan Update's Goal PF-7 and Policies PF-7.1 through PF-7.5 state the City's aim to minimize the volume of solid waste that enters regional landfills and encourage recycling.

The City of Rancho Cucamonga has achieved and exceeded the target numbers identified by CIWMB in SB 1016 and continues to improve existing programs, as well as develop and implement new programs to minimize waste generation and increase recycling.

Therefore, with continuing adherence to the requirements of AB 939 and SB 1016 and implementation of the identified goal and related policies in the proposed 2010 General Plan Update, the City would maintain compliance with applicable statutes and regulations related to solid waste.

Based on the above, this Project, as a part of the City of Rancho Cucamonga, would comply with Federal, State, and local management and reduction statutes and regulations regarding solid waste. Impacts would be less than significant.

20. WILDFIRE.

Source(s): *City General Plan EIR*, *Section 4.8 Hazards and Hazardous Materials*; *Geotechnical Investigation – Proposed Industrial/Warehouse Building, NEC Archibald Avenue & Seventh Street*, prepared by Sladden Engineering, April 30, 2013 (*Geo Investigation*, **Appendix E1**); and *Geotechnical Update* (Letter) – *Proposed Industrial/Warehouse Building, NEC Archibald Avenue & Seventh Street*, prepared by Sladden Engineering, September 10, 2018 (*Geo Update*, **Appendix E2**)

SUBSTANTIATION:

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	

Archibald Avenue and 7th Street in an industrial neighborhood approximately 1½ mile north of Interstate 10 in the City of Rancho Cucamonga.

According to the Wildland Fire Background Report prepared for the City's 2010 General Plan Update, wildland fires pose a major risk to mountainous and hillside Southern California communities. A wildfire that consumes hundreds to thousands of acres of vegetated property can overwhelm local emergency response resources. Therefore, planning, preparedness, and education are required to reduce the potential for fire hazards and to limit the devastation caused by fires.

The northern portions of the City of Rancho Cucamonga and its 11-square mile sphere-of-influence (SOI) at the base of the San Bernardino National Forest are susceptible to these wildland hazardous fire conditions given the hilly terrain and dried vegetation.

The Project site and surrounding vicinity in the southern portion of the City is not located in a Fire Hazard Severity Zone.

The Project site is served by the Rancho Cucamonga Fire Protection District (RCFPD). The closest station to the Project site is the San Bernardino Road Fire Station 172, located at 9612 San Bernardino Road, Rancho Cucamonga, CA 91730. This station is located approximately 1¼ mile north of the Project site. Fire Station 172 is staffed with a full-time, 24-hour constant staffing crew of a captain paramedic, engineer, and firefighter paramedic. They respond on a Type I engine and are capable of providing the full range of fire suppression, rescue, and advanced life support services.

A limited potential exists to interfere with an emergency response or evacuation plan during construction. Construction work in the street associated with the Project will be limited to lateral utility connections (i.e., sewer) that will be limited to nominal potential traffic diversion. Control of access will ensure emergency access to the site and Project area during construction through the submittal and approval of a traffic control plan (TCP The TCP is designed to mitigate any construction circulation impacts. The TCP is a

standard condition and is not considered unique mitigation under CEQA. Following construction, emergency access to the Project site and area will remain as was prior to the Project.

All Project elements, including landscaping, will be sited with sufficient clearance from the proposed buildings so as not to interfere with emergency access to and evacuation from the site. The Project is required to comply with the California Fire Code as adopted by the City of Rancho Cucamonga Municipal Code.

The Project would not impair implementation of or physically interfere with an adopted emergency response plan or evacuation plan, because no permanent public street or lane closures are proposed. Any impacts would be considered less than significant.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project?	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				**X**

According to the Wildland Fire Background Report prepared for the City's 2010 General Plan Update, wildland fires pose a major risk to mountainous and hillside Southern California communities. A wildfire that consumes hundreds to thousands of acres of vegetated property can overwhelm local emergency response resources. Therefore, planning, preparedness, and education are required to reduce the potential for fire hazards and to limit the devastation caused by fires.

The northern portions of the City of Rancho Cucamonga and its 11-square mile sphere-of-influence (SOI) at the base of the San Bernardino National Forest are susceptible to these wildland hazardous fire conditions given the hilly terrain and dried vegetation.

The Project site and surrounding vicinity in the southern portion of the City is not located in a Fire Hazard Severity Zone.

The Project site is relatively level with minimal surface gradients. According to the USGS 7.5' Guasti Quadrangle map (1981), the site is at an approximate elevation of 1,095 feet AMSL.

Based on this information, the Project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impacts would occur.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				**X**

According to the Wildland Fire Background Report prepared for the City's 2010 General Plan Update, wildland fires pose a major risk to mountainous and hillside Southern California communities. A wildfire that consumes hundreds to thousands of acres of vegetated property can overwhelm local emergency response resources. Therefore, planning, preparedness, and education are required to reduce the potential for fire hazards and to limit the devastation caused by fires.

The northern portions of the City of Rancho Cucamonga and its 11-square mile sphere-of-influence (SOI) at the base of the San Bernardino National Forest are susceptible to these wildland hazardous fire conditions given the hilly terrain and dried vegetation.

The Project site and surrounding vicinity in the southern portion of the City is not located in a Fire Hazard Severity Zone.

The Project does not include and or require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Any roads and utilities will be installed in accordance with the respective jurisdiction requirements. No impacts would occur.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				**X**

According to the Wildland Fire Background Report prepared for the City's 2010 General Plan Update, wildland fires pose a major risk to mountainous and hillside Southern California communities. A wildfire that consumes hundreds to thousands of acres of vegetated property can overwhelm local emergency response resources. Therefore, planning, preparedness, and education are required to reduce the potential for fire hazards and to limit the devastation caused by fires.

The northern portions of the City of Rancho Cucamonga and its 11-square mile sphere-of-influence (SOI) at the base of the San Bernardino National Forest are susceptible to these wildland hazardous fire conditions given the hilly terrain and dried vegetation.

The Project site and surrounding vicinity in the southern portion of the City is not located in a Fire Hazard Severity Zone.

The Project site is relatively level with minimal surface gradients. According to the USGS 7.5' Guasti Quadrangle map (1981), the site is at an approximate elevation of 1,095 feet AMSL.

Based on this information, the Project would not, expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impacts would occur.

21. MANDATORY FINDINGS OF SIGNIFICANCE.

SUBSTANTIATION:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		**X**		

The Project site is not within an area of sensitive biological resources; therefore, development would not adversely affect rare or endangered species of plants or animals because of the fact that the project is surrounded by urbanized land uses and is consistent with the General Plan Land Use Plan. The contribution of the Project to cumulative biological impacts is not expected to be cumulatively considerable as the Project site is within an urban area, is relatively small, and is isolated from areas of better habitat and is fully developed with an existing service station. No cultural resources are known to exist on the site. No mitigation is required. here is potential for tribal cultural resources and paleontological resources to be discovered during construction; therefore, mitigation measures are included to ensure proper handling and protection.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		**X**		

The 2010 General Plan was adopted along with the certification of a Program Final Environmental Impact Report, Findings of Fact, and a Statement of Overriding Considerations for significant adverse environmental effects of build-out in the City and Sphere-of-Influence. The City made findings that adoption of the General Plan would result in significant adverse effects to Aesthetics, Agriculture and Forest Resources, Air Quality, Climate Change, and Mineral Resources. Mitigation measures were adopted for each of these resources; however, they would not reduce impacts to less-than-significant levels. As

such, the City adopted a Statement of Overriding Considerations balancing the benefits of development under the General Plan Update against the significant unavoidable adverse impacts (CEQA Guidelines Section 15092 and 15096(h)).

As demonstrated in Sections 1 - 20 of this Initial Study, the Project does not have impacts which are individually limited, but cumulatively considerable. Standard conditions, design features and mitigation measures will apply to the Project. Any impacts would be reduced to a less than significant level.

With these findings, no further discussion or evaluation of cumulative impacts is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		**X**		

The Initial Study identifies construction-related emissions of criteria pollutants as having a less than significant impact and includes mitigation measures to reduce emission levels to a less than significant impact on the environment (see 3. Air Quality section above for detailed analysis and mitigation measures). Additionally, impacts resulting from air quality would be short-term and would cease once construction activities were completed. The Initial Study identified potentially significant impacts associated with the exposure of people to increased noise levels during construction. With the incorporation of standard conditions, project design features, and proposed mitigation measures (see 13. Noise section above for detailed analysis and mitigation measures), the Project would not expose people to or generate noise levels in excess of the standards established in the local general plan or noise ordinance, or applicable standards of other agencies and any elevated interior and exterior noise levels associated with the construction of the Project would be reduced to less than significant.

Lastly, as demonstrated in Sections 1 - 20 of this Initial Study, the Project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. Standard conditions, design features and mitigation measures will apply to the Project. Any impacts would be reduced to a less than significant level.

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