DRAFT

Initial Study and Mitigated Negative Declaration

FIRE STATION 178 PROJECT

June 2021

Lead Agency:

RANCHO CUCAMONGA

10500 Civic Center Drive
Rancho Cucamonga, California 91730

Prepared by:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2861 Pullman Street

Santa Ana, CA 92705

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DRAFT MITIGATED NEGATIVE DECLARATION
FIRE STATION 178 PROJECT

Lead Agency:	City of Rancho Cucamonga
Project Proponent:	Rancho Cucamonga Fire District
Project Location:	The Proposed Project is located within the City of Rancho Cucamonga in southwest San Bernardino County (Figure 1). The project site is located in the Terra Vista neighborhood, along the south side of Town Center Drive, east of Haven Avenue at the intersection Town Center Drive and Terra Vista Parkway (Figure 2). The project site is currently vacant and is approximately 3.67 acres. The proposed fire station would be developed on roughly 2.23 acres while the remaining 1.44 acres is undeveloped with future site improvements. The project site APN is 1077-423-01.

Project Description:

The project involves the construction of a new 12,363 square-foot (SF), two story fire station that would include two drive-through apparatus bays and one back-in apparatus bay, and a separate detached building (roughly 2,016 SF) for storage of a future reserve apparatus. The proposed fire station would be developed on the northern 2.23 acres of the site, while the southern 1.44-acre portion is undeveloped with future site improvements.

Onsite improvements would include the following: hardscape areas comprised of concrete pavers and permeable pavers, 22 total onsite parking for fire fight parking and public parking, site lighting through the property, landscape improvements, four bioretention basins, an apparatus washdown area, and outdoor training/fire fighter drill area (see Figures 3-6). Soil infill and grading would address the current grade difference between the project site and Town Center Drive.

Offsite improvements would include construction of new response driveway apron at Town Center Drive, an additional driveway apron along Terra Vista Parkway to the rear of the fire station building, and a future traffic signal at the intersection of Town Center Drive and Terra Vista Parkway.

Public Review Period: June 28, 2021 through July 17, 2021

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1 Preconstruction Burrowing Owl Surveys: A preconstruction survey for burrowing owls should be completed within the Project site between 14 and 30 days prior to the start of ground-disturbing construction activities. A second survey shall be conducted no more than 24 hours prior to the start of ground-disturbing project activities. Methods and timing of the surveys shall be performed in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012).

If burrowing owls are observed during the preconstruction survey and impacts to the owls or their burrow(s) are unavoidable, coordination with CDFW may need to occur in order to develop a specific mitigation methodology for Project in order to reduce impacts to a level that is less than significant. Mitigation measures for any owls present could include avoidance of the owl burrows during their nesting season and/or passive relocation of burrowing owls.

BIO-2 Preconstruction Survey for Nesting Birds: Any ground disturbance activities shall be conducted during the non-breeding season for birds (approximately September 1 through January 31) wherever feasible. This will avoid violations of the MBTA and California Fish and Game Code §§ 3503, 3503.5 and 3513. If activities with the potential to disrupt nesting birds are scheduled to occur during the bird breeding season (February 1 through August 31), a preconstruction nesting bird survey shall be conducted by a qualified biologist who is experienced in the identification of avian species and conducting nesting bird surveys no more than three (3) days prior to the start of construction activities. The nest surveys shall include the Project site and adjacent areas where Project activities have the potential to cause nest failure. If no nesting birds are observed during the survey, site preparation and construction activities may begin. If nesting birds (including nesting raptors) are found to be present, avoidance or minimization measures shall be undertaken to avoid potential Project-related impacts. Avoidance or minimization measures may include establishment of an avoidance buffer until nesting has been completed as determined through periodic and non-invasive nest monitoring conducted by a qualified biologist. The width of the no-disturbance buffer around the nest will be determined by the Project biologist based on species and location of the nest. Typically, this is 300 feet from the nest site in all directions for passerines (500 feet is typically recommended by CDFW for raptors), until the juveniles have fledged and there has been no evidence of a second attempt at nesting. The monitoring biologist will monitor the nest(s) during construction and document any findings

Cultural Resources

CUL-1: Unanticipated Discoveries. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 100-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. The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) and Gabrieleno Band of Mission Indians-Kizh Nation shall be contacted, as detailed within **TCR-1** and **TCR-2,** 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.

- 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 **TCR-1**. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

- 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.

Geology and Soils

GEO-1: The Project Applicant shall implement the *Conclusions and Recommendations* and *Construction Considerations* as listed in the final site-specific geotechnical report (*Geotechnical Exploration City of Rancho Cucamonga Fire Station No. 178, Assessor Parcel Number 1077-422-58, South of Town Center Drive West of Terra Vista Parkway, Rancho Cucamonga, California*.

GEO-2: Unanticipated Discovery – Paleontological Resource. If paleontological resources (i.e., fossil remains) are discovered during excavation activities, the contractor will notify the City and cease excavation within 100 feet of the find until a qualified paleontological professional can provide an evaluation of the site. The qualified paleontological professional will evaluate the significance of the find and recommend appropriate measures for the disposition of the site (e.g. fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

Noise

NOI-1: The Project improvement and building plans will include the following requirements for construction activities:

- In order to reduce construction noise, during the site preparation, grading, building construction and paving phases, a temporary noise barrier or enclosure shall be positioned between Project construction and the commercial land use to the west in a manner that breaks the line of sight between the construction equipment and that land use. The temporary noise barrier shall have a sound transmission class (STC) of 35 or greater in accordance with American Society for Testing and Materials Test Method E90, or at least 2 pounds per square foot to ensure adequate transmission loss characteristics. The temporary noise barrier should consist of a solid plywood fence at least 7/16-inch and/or flexible sound curtains, such as an 18-ounce tarp or a 2-inch-thick fiberglass blanket, attached to chain link fencing. The length, height, and location of noise control barrier walls shall be adequate to assure proper acoustical performance. All noise control barrier walls shall be designed to preclude structural failure due to such factors as winds, shear, shallow soil failure, earthquakes, and erosion.

- Construction contracts must specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state-required noise attenuation devices.

- A sign, legible at a distance of 50 feet, shall be posted at the Project construction site providing a contact name and a telephone number where one can inquire about the construction process and register complaints. This sign shall indicate the dates and duration of construction activities. In

conjunction with this required posting, a noise disturbance coordinator will be identified to address construction noise concerns received. The coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the disturbance coordinator shall notify the City within 24 hours of the complaint and determine the cause of the noise complaint (starting too early, malfunctioning muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the City. All signs posted at the construction site shall include the contact name and the telephone number for the noise disturbance coordinator.

- Identification of construction noise reduction methods. These reduction methods may include shutting off idling equipment (5 minutes), installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and using electric air compressors and similar power tools.
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.
- Per Section 17.66.050 of the City's Development Code, construction shall be limited to the hours between 7:00 a.m. and 8:00 p.m., or any time on weekends or holidays.

Tribal Cultural Resources

TCR-1: San Manuel Band of Mission Indians (SMBMI). The SMBMI shall be contacted, as detailed in **CUL-1**, 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.

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.

TCR-2: Gabrieleno Band of Mission Indians-Kizh Nation. Prior to the commencement of any ground disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation – the tribe that consulted on this project pursuant to Assembly Bill 52 (the "Tribe" or the "Consulting Tribe"). A copy of the executed contract shall be submitted to the City of Rancho Cucamonga Planning and Building Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The Tribal monitor will only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Tribe 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 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 all ground-disturbing activities on the Project Site are completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the Project Site have little to no potential for impacting Tribal Cultural Resources. Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are Native American in origin, the Consulting Tribe will retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project Site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the Project Site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). If a non-Native American 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 PRC 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, it shall be offered to a local school or historical society in the area for educational purposes.

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LIST OF FIGURES

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CO Plan	Federal Attainment Plan for Carbon Monoxide
CRHR	California Register of Historic Places
CVWD	Cucamonga Valley Water District
CWA	Clean Water Act
DTSC	Department of Toxic Substances Control
EIC	Eastern Information Center
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GHG	Greenhouse Gas
LST	Localized Significance Threshold
MBTA	Migratory Bird Treaty Act

MLD	Most Likely Descendent
MMT	Million Metric Tons
MND	Mitigated Negative Declaration
MSHCP	Multiple Species Habitat Conservation Plan
$MTCO_2e$	metric tons of carbon dioxide equivalent
NAHC	Native American Heritage Commission
ND	Negative Declaration
NPDES	National Pollutant Discharge Elimination System
N_2O	nitrous oxide
NO_x	nitrogen oxides
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OHV	Off-Highway Vehicle
OPR	California Office of Planning and Research
$PM_{2.5}$	Particulate Matter Less than 2.5 Microns in Diameter
PM_{10}	Particulate Matter Less than 10 Microns in Diameter
RCPG	Regional Comprehensive Plan and Guide
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
USACE	United States Army Corps of Engineers
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SIP	State Implementation Plan
SP	Service Population
SoCAB	South Coast Air Basin
SR	State Route
SRA	Sensitive Receptor Area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
VHFHSZ	Very High Fire Hazard Severity Zone
WQMP	Water Quality Management Plan

SECTION 1.0 BACKGROUND

1.1 Summary

Project Title:	Fire Station 178 Project
Lead Agency Name and Address:	City of Rancho Cucamonga 10500 Civic Center Drive Rancho Cucamonga, California 91730
Contact Person:	David F. Eoff IV, Senior Planner (909) 774-4312 david.eoff@CityofRC.us
Project Location:	The Proposed Project is located within the City of Rancho Cucamonga in southwest San Bernardino County (Figure 1). The project site is located in the Terra Vista neighborhood, along the south side of Town Center Drive, east of Haven Avenue at the intersection Town Center Drive and Terra Vista Parkway (Figure 2). The project site is currently vacant and is roughly 3.67 acres.
General Plan Designation:	Community Commercial (CC)
Zoning:	Community Commercial (CC)

1.2 Introduction

The City of Rancho Cucamonga is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the Fire Station 178 Project. This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 *et seq.*) and State CEQA Guidelines (14 CCR 15000 *et seq.*). CEQA requires that all state and local government agencies consider the environmental consequences of Projects over which they have discretionary authority before acting on those Projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate for a Project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

1.3 Surrounding Land Uses/Environmental Setting

The Proposed Project is located within the Terra Vista Community of the City of Rancho Cucamonga in southwest San Bernardino County (Figure 1). The project site APN is 1077-423-01. The site is located along the south side of Town Center Drive, east of Haven Avenue at the intersection Town Center Drive and Terra Vista Parkway (Figure 2).

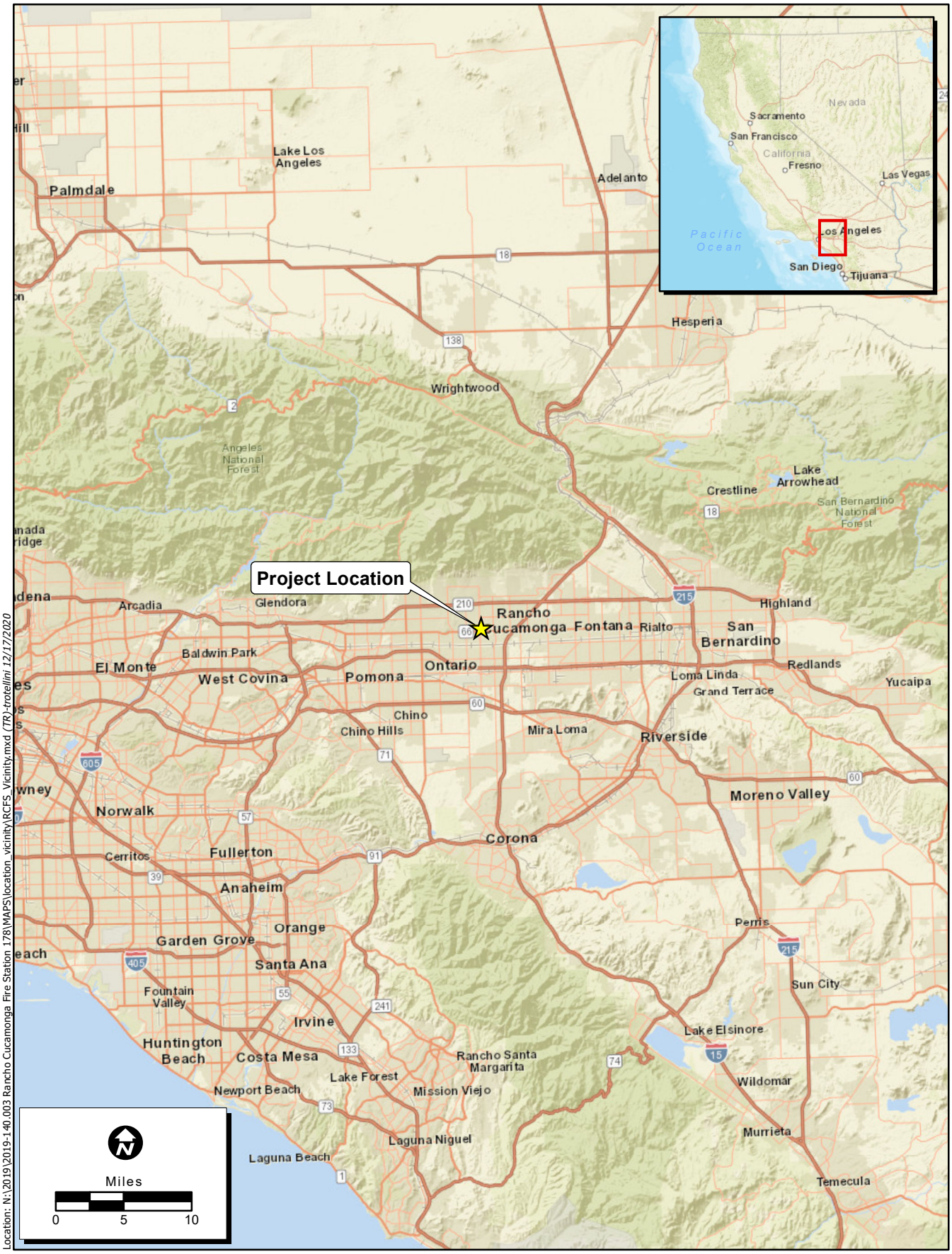
The 3.67-acre property is vacant with landscaped parkways along the eastern and northern boundaries, two electrical transformer boxes and a fire hydrant at the southwest corner, four parking lot lights along the southern boundary, and small piles of soil near the southeast corner of the site. The property was rough graded in the past as part of the Terra Vista Community Plan but remained undeveloped since the 1990's.

The proposed fire station would be developed on roughly 2.23 acres while the remaining 1.44 acres is undeveloped for future site improvements. According to the Rancho Cucamonga General Plan (2010) the site has a land use designation of Community Commercial (CC) and is also zoned Community Commercial (CC). The surrounding area comprises a variety of retail commercial uses as part of the Terra Vista Town Center. The land use designations surrounding the Project site consist of Medium High Density Residential, Office, Neighborhood Commercial, and Community Commercial.

Surrounding Zoning and Land Use Designations

	Land Use Designation	Zoning Designation	Existing Land Use
Project Site	Community Commercial	Community Commercial	Vacant Lot
North	Medium High Density Residential Neighborhood Commercial Office	Office Park	Commercial Offices, Multi-Family Residential
East	Community Commercial	Community Commercial	Commercial Center
South	Community Commercial	Community Commercial	Commercial Center
West	Community Commercial	Community Commercial	Commercial Center

Source: City of Rancho Cucamonga 2010a



Location: N:\2019\2019-140.003 Rancho Cucamonga Fire Station 178\MAPS\location_vicinity\RCFS_Vicinity.mxd *(TR)-trotellini 12/17/2020*

Map Date: 12/17/2020

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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Figure 1. Regional Location

2019-140.003 Rancho Cucamonga Fire Station 178

Location: N:\2019\2019-140.003 Rancho Cucamonga Fire Station 178\MAPS\location_vicinity\RCFS_Location.mxd (TR)-trotellini 12/17/2020

Map Date: 12/17/2020

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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Figure 2. Project Location

2019-140.003 Rancho Cucamonga Fire Station 178

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SECTION 2.0 PROJECT DESCRIPTION

2.1 Project Characteristics

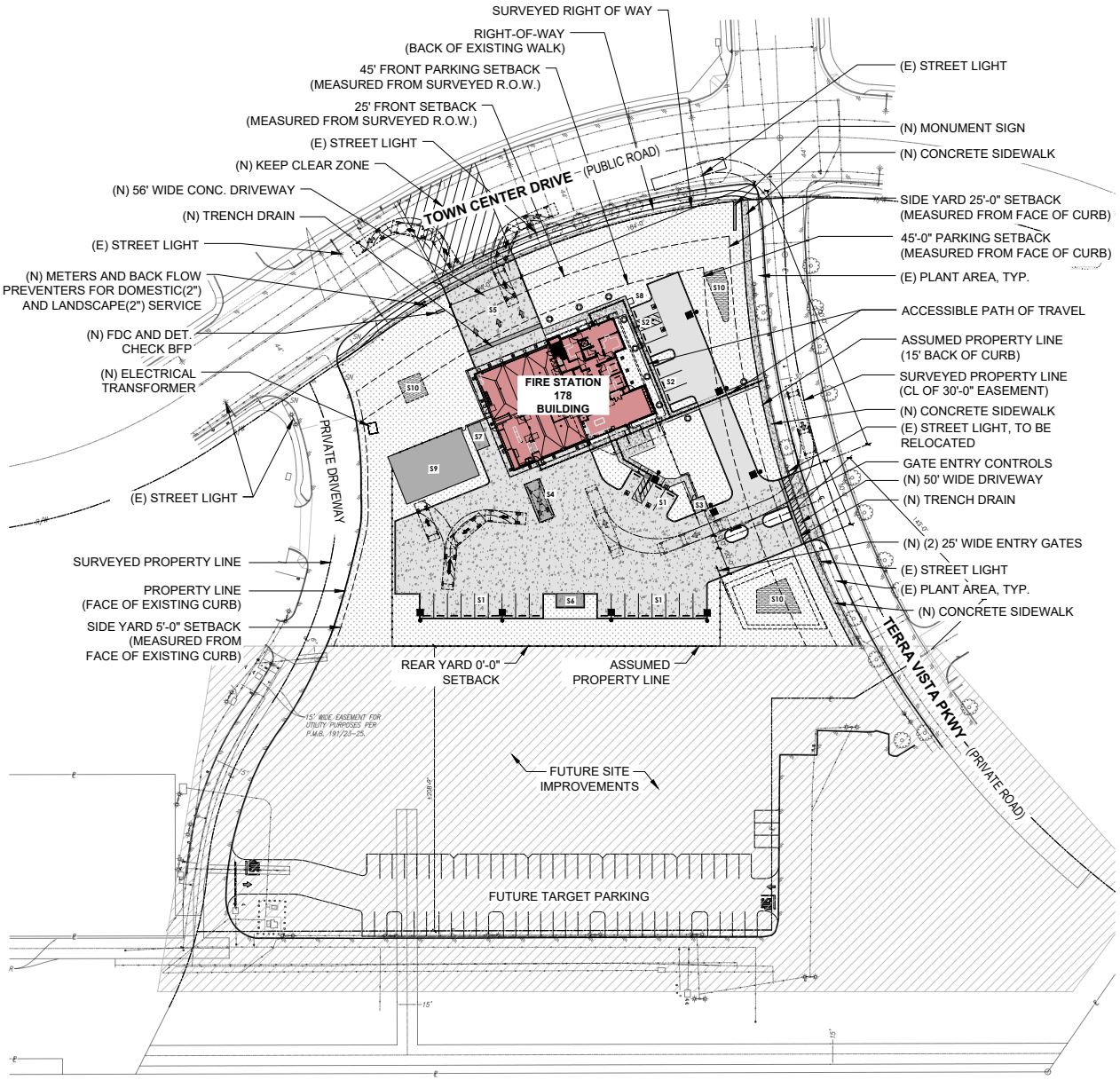
The project involves the construction of a new 12,363 square-foot (SF), two story fire station that would include two drive-through apparatus bays and one back-in apparatus bay, and a separate detached building (roughly 2,016 SF) for storage of a future reserve apparatus. The proposed fire station would be developed on the northern 2.23 acres of the site, while the southern 1.44-acre portion is undeveloped with future site improvements. The station would operate with three staff on duty, 24 hours per day, 365 days per year.

Onsite improvements would include the following: hardscape areas comprised of concrete pavers and permeable pavers, 22 total onsite parking for fire fight parking and public parking, site lighting through the property, landscape improvements, three bioretention basins, an apparatus washdown area, and outdoor training/fire fighter drill area (see Figures 3-6). In the future, the Project would also include solar panels on the roof of the facility. Soil infill and grading would address the current grade difference between the project site and Town Center Drive. Approximately 9,000 cubic yards (CY) of soils have been stockpiled on the south portion of the site and would be used to raise the base elevation of the site.

Offsite improvements would include construction of new response driveway apron at Town Center Drive, an additional driveway apron along Terra Vista Parkway, and a future traffic signal at the intersection of Town Center Drive and Terra Vista Parkway.

2.2 Project Timing

Construction is anticipated to begin in the first quarter of 2022 with a duration of approximately 16 months. The opening date is anticipated to occur in the fourth quarter of 2023.



1 **ARCHITECTURAL SITE PLAN**
1" = 40'

LEGEND:

NEW STRUCTURE & SITE SUPPORT SPACES

- **S1** FIRE DEPARTMENT PARKING (20 SPACES WITH ACCESSIBLE)
- **S2** VISITOR PARKING SPACES (6 SPACES WITH ACCESSIBLE)
- **S3** TRASH ENCLOSURE
- **S4** VEHICLE WASH DOWN AREA
- **S5** CONCRETE FRONT APRON
- **S6** FIRE HYDRANT AREA
- **S7** GENERATOR PAD
- **S8** FLAG POLE
- **S9** FUTURE PRE-ENGINEERED METAL STORAGE BUILDING
- **S10** SITE DRAIN MANAGEMENT AREA

(N) FENCE LINE
PROPERTY LINE
ACCESSIBLE PATH OF TRAVEL TO PUBLIC RIGHT-OF-WAY
FUTURE SITE IMPROVEMENTS
(N) LANDSCAPE AREA
(N) CONCRETE SIDEWALK/PAVEMENT
(N) BIO-RETENTION AREA
(N) ASPHALT PAVING
(N) PARKING LOT LIGHT FIXTURE,TYP.
(N) BOLLARD LIGHT FIXTURE,TYP.

N

SCALE: 1"=40'
0 40 80 120

architect:
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OAKLAND, CA 94612
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consultants:

no.	description	date
	SUBMISSION DATE	11/18/2020
1	DESIGN REVISION #1	02/09/2021

phase:
DESIGN REVIEW PLANNING APPLICATION

CITY OF RANCHO CUCAMONGA

FIRE STATION 178

TOWN CENTER DR., RANCHO CUCAMONGA, CA 91730

drawing title:
ARCHITECTURAL SITE PLAN

project no.:
2811.01

sheet no.:
A-1.2

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PRELIMINARY - NOT FOR CONSTRUCTION

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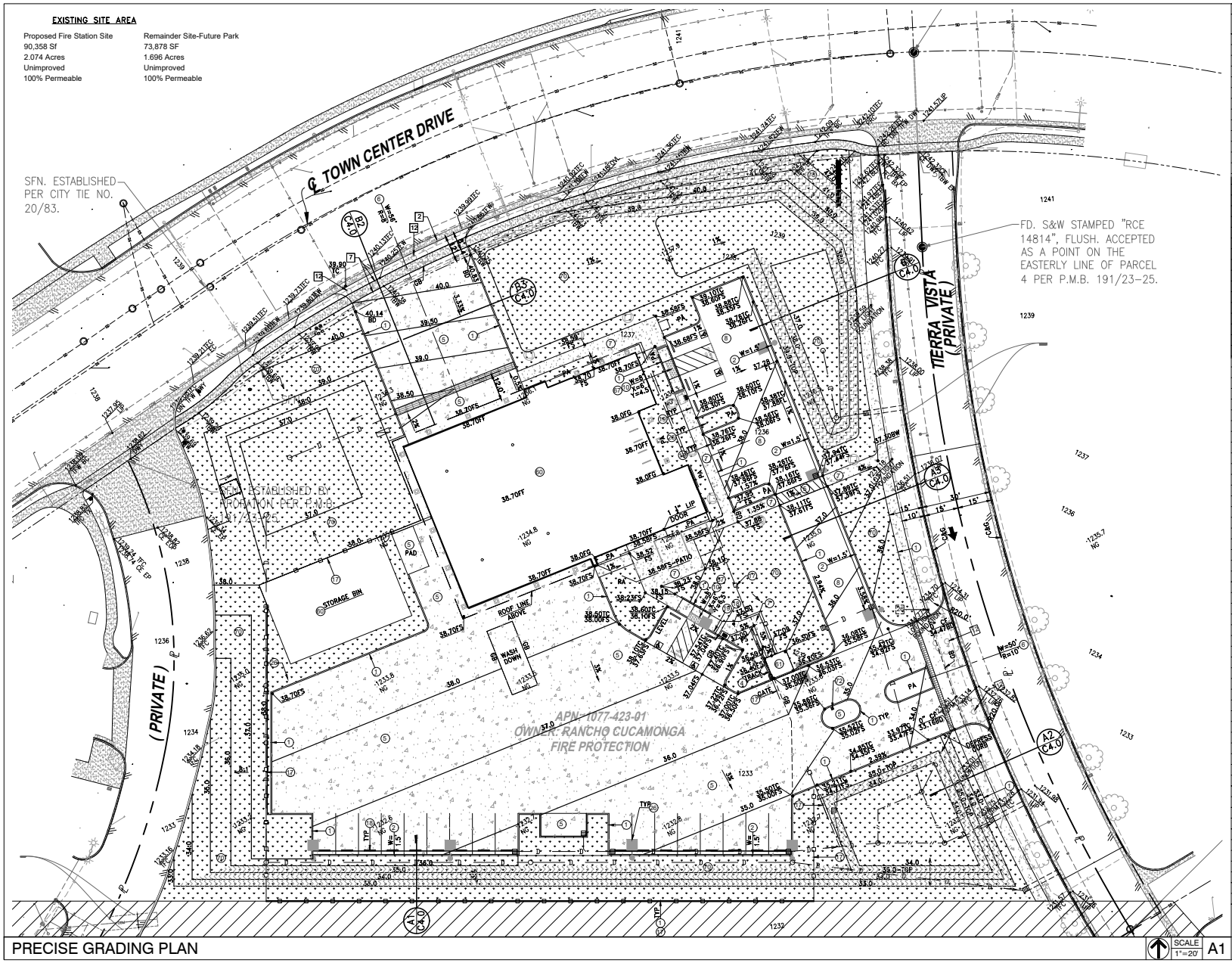
Figure 3. Architectural Site Plan

2019-140.003 Rancho Cucamonga Fire Station 178



CONSTRUCTION SCHEDULE

CONSTRUCT NEW... REMOVE EXIST...
PROTECT EXIST... RELOCATE EXIST...

#	Description	Std.	Detail
1	Curb A1-6	RC	104
2	Curb and Gutter A2-6	RC	104
3	Longitudinal Gutter	RC	108A
4	Concrete Flume	-	-
5	Concrete Paving	-	-
6	Driveway Type C	RC	101
7	Concrete Walk	-	-
8	Asphalt Concrete Paving	-	-
9	Full Depth AC	APWA	113
10	Curb Ramp	APWA	111
11	Concrete Strip	-	-
12	Tree / Tree Well	SEE	LAND.
13	Bollard	CVWD	114
14	Curb Drain	RC	107A
15	Culvert	RC	107B
16	Wall	RC	606
17	Chan Link Fence	RC	607
18	Wheel Bumper	-	-
19	Sign & Post	RC	401
20	SEWER LATERAL	CVWD	201+203
21	VCP Pipe	ASTM	C700
22	PVC Pipe SDR 35	ASTM	D3034
23	Clean out	CVWD	207
24	SManhole	CVWD	213
25	Interceptor	CVWD	209+213
26	Street Light Std & Fdn	SEE	ELEC.
27	Utility Box	SEE	UTIL.
28	Conduit & Wiring	SEE	ELEC.
29	2" Water Sevice Meter	CVWD	103
30	Water Service Box	Water	Co.
31	Copper Pipe	ASTM	B88
32	PVC Pipe DR18	AWMA	C900
33	Ductile Iron Pipe CL52	AWWA	C151
34	Water Valve	CVWD	115+116
35	Maniford Service	CVWD	112
36	Hot Tap	CVWD	123
37	Fire Hydrant	CVWD	113
38	Detector Check BFP	CVWD	110
39	Reduced Pressure BFP	CVWD	111
40	Roof Drain	SEE	PLUM.
41	Splash Block	-	-
42	Trench Drain	-	-
43	-	-	-
44	Manhole	APWA	321
45	Catch Basin	RC	300
46	Drop Inlet	-	-
47	Filter Insert	-	-
48	Subdrain	-	-
49	Trench Drain	-	-
50	Gas Service & Meter	Gas	Co.
51	PE Gas Pipe	SPEC	-
52	Gas Steel Pipe	ASTM	A52
53	Pressure Regulator	SEE	PLUM.
54	Earthquake Valve	SEE	PLUM.
55	Utility Pole	UTIL	Co.
56	Guy Wire	SEE	UTIL.
57	Vent	UTIL	Co.
58	Underground Vault	RC	142
59	Transformer/Switchgear	RC	139
60	Building	SEE	ARCH.
61	Trash Enclosure	SEE	ARCH.
62	Flag Pole Foundation	-	-
63	Column	-	-
64	Accessible Handicap Ramp	SEE	ARCH.
65	Steps	RC	600
66	Guardrail \ Handrail	SEE	ARCH.
67	Detectable Warning	SEE	ARCH.
68	Slurry A.C. Paving	-	-
69	Colored Conc. Area	-	-
70	Grade Only	SEE	SPEC.
71	-	-	-
72	Gate Controller	SEE	ARCH.
73	-	-	-
74	-	-	-
75	Concrete Pavers	SEE	ARCH.
76	-	SEE	ARCH.
77	-	SEE	ARCH.
78	-	-	-
79	-	-	-
80	-	-	-

NOTE:
42 IN LIEU OF 1242 FOR CLARITY

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REGISTERED PROFESSIONAL ENGINEER
No. 37417
Expires 12-31-22
CIVIL
STATE OF CALIFORNIA

no.	description	date
	SUBMISSION DATE	11/18/2020
1	DESIGN REVISION #1	02/09/2021

phase:
DESIGN REVIEW APPLICATION

CITY OF RANCHO CUCAMONGA

FIRE STATION 178

TOWN CENTER DR., RANCHO CUCAMONGA, CA 91730

drawing title:
PRECISE GRADING PLAN

project no.:
2811.01

sheet no.:
C1.0

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PRELIMINARY - NOT FOR CONSTRUCTION

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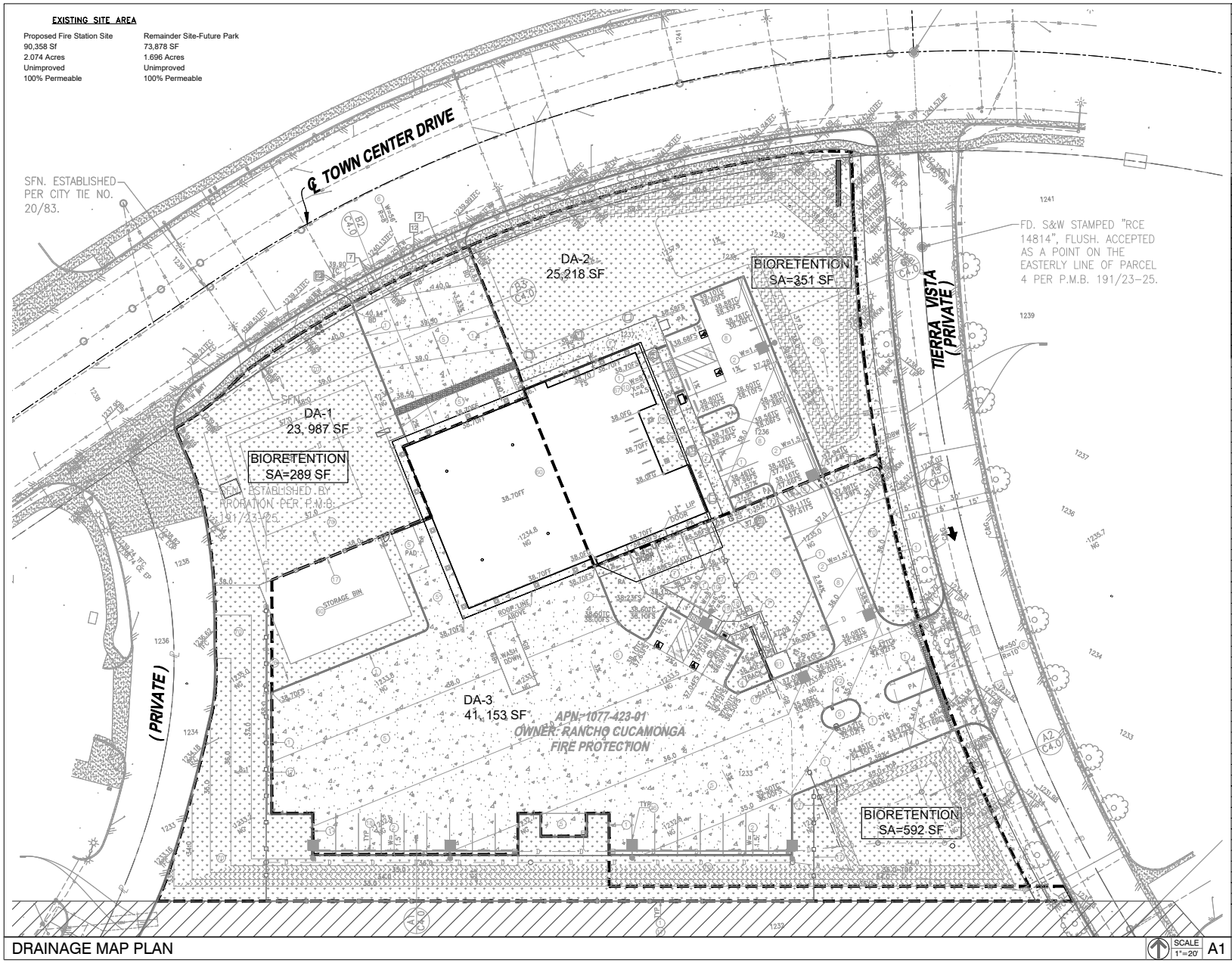
Figure 4. Grading Plan

2019-140.003 Rancho Cucamonga Fire Station 178



CONSTRUCTION SCHEDULE

CONSTRUCT NEW... REMOVE EXIST...
PROTECT EXIST... RELOCATE EXIST...

#	Description	Std.	Detail
1	Curb A1-6	RC	104
2	Curb and Gutter A2-6	RC	104
3	Longitudinal Gutter	RC	106A
4	Concrete Flume	"	"
5	Concrete Paving	"	"
6	Driveway Type C	RC	101
7	Concrete Walk	"	"
8	Asphalt Concrete Paving	"	"
9	Full Depth AC	APWA	113
10	Curb Ramp	APWA	111
11	Concrete Strip	"	"
12	Tree / Tree Well	SEE	LAND.
13	Bollard	CVWD	114
14	Curb Drain	RC	107A
15	Culvert	RC	107B
16	Wall	RC	606
17	Chan Link Fence	RC	607
18	Wheel Bumper	"	"
19	Sign & Post	RC	401
20	SEWER LATERAL	CVWD	201+203
21	VCP Pipe	ASTM	C700
22	PVC Pipe SDR 35	ASTM	D3034
23	Clean out	CVWD	207
24	SManhole	CVWD	213
25	Interceptor	CVWD	209+213
26	Street Light Std & Fdn	SEE	ELEC.
27	Utility Box	SEE	UTIL.
28	Conduit & Wiring	SEE	ELEC.
29	2" Water Sevice Meter	CVWD	103
30	Water Service Box	Water	Co.
31	Copper Pipe	ASTM	B88
32	PVC Pipe DR18	AWMA	C900
33	Ductile Iron Pipe CL52	AWWA	C151
34	Water Valve	CVWD	115+116
35	Maniford Service	CVWD	112
36	Hot Tap	CVWD	123
37	Fire Hydrant	CVWD	113
38	Detector Check BFP	CVWD	110
39	Reduced Pressure BFP	CVWD	111
40	Roof Drain	SEE	PLUM.
41	Splash Block	"	"
42	Trench Drain	"	"
43	-	"	"
44	Manhole	APWA	321
45	Catch Basin	RC	300
46	Drop Inlet	"	"
47	Filter Insert	"	"
48	Subdrain	"	"
49	Trench Drain	"	"
50	Gas Service & Meter	Gas	Co.
51	PE Gas Pipe	SPEC	"
52	Gas Steel Pipe	ASTM	A52
53	Pressure Regulator	SEE	PLUM.
54	Earthquake Valve	SEE	PLUM.
55	Utility Pole	UTIL.	Co.
56	Guy Wire	SEE	UTIL.
57	Vent	UTIL.	Co.
58	Underground Vault	RC	142
59	Transformer/Switchgear	RC	139
60	Building	SEE	ARCH.
61	Trash Enclosure	SEE	ARCH.
62	Flag Pole Foundation	"	"
63	Column	"	"
64	Accessible Handicap Ramp	SEE	ARCH.
65	Steps	RC	600
66	Guardrail \ Handrail	SEE	ARCH.
67	Detectable Warning	SEE	ARCH.
68	Slurry A.C. Paving	"	"
69	Colored Conc. Area	"	"
70	Grade Only	SEE	SPEC.
71	-	"	"
72	Gate Controller	SEE	ARCH.
73	-	"	"
74	-	"	"
75	Concrete Pavers	SEE	ARCH.
76	-	SEE	ARCH.
77	-	SEE	ARCH.
78	-	"	"
79	-	"	"
80	-	"	"

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CITY OF RANCHO CUCAMONGA

FIRE STATION 178

TOWN CENTER DR., RANCHO CUCAMONGA, CA 91730

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PRELIMINARY WQMP DRAINAGE MAP

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2811.01

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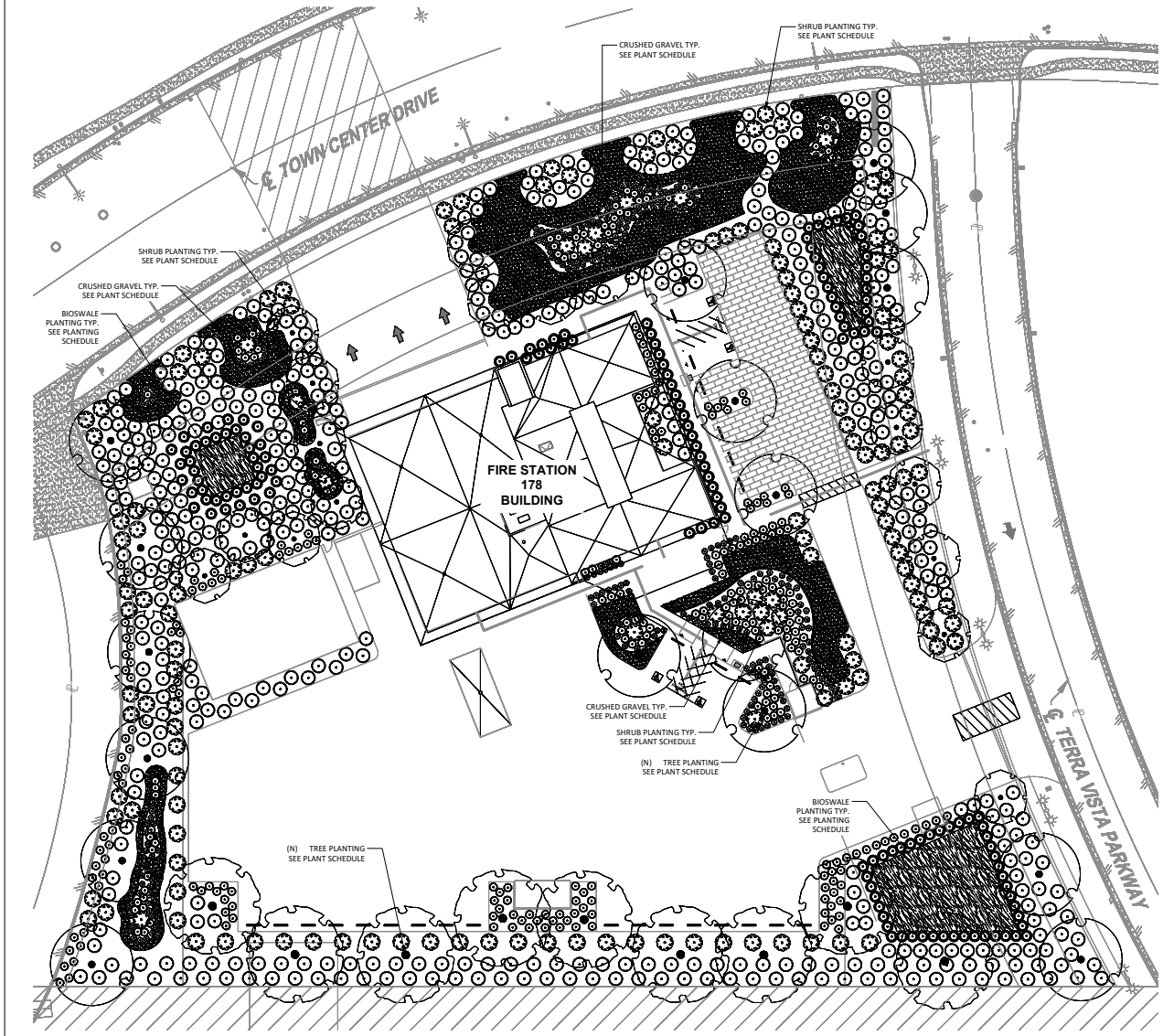
Figure 5. Drainage Plan

2019-140.003 Rancho Cucamonga Fire Station 178



REPRESENTATIVE PLANTING SCHEDULE

TREES	CODE	BOTANICAL NAME	COMMON NAME	CONT	WATER USE	HXW
	CHI LIN	CHILOPSIS LINEARIS	DESERT WILLOW	15 GAL	L	30'X30'
	PAR DES	PARKINSONIA X `DESERT MUSEUM`	DESERT MUSEUM PALO VERDE	15 GAL	L	20'X20'
	QUE CAT	QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	M	50'X40'
GROUNDCOVERS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**WATER USE**	**HXW**
	ACH MIL	ACHILLEA MILLEFOLIUM	COMMON YARROW	1 GAL	L	3'X4'
	BAC PIG	BACCHARIS PILULARIS `PIGEON POINT`	PIGEON POINT COYOTE BRUSH	1 GAL	L	1'X8'
	CIS BRI2	CISTUS X PURPUREUS `BRILLIANCY`	BRILLIANCY ROCK ROSE	1 GAL	L	2'X6'
GRASSES	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**WATER USE**	**HXW**
	MUH REG	MUHLENBERGIA CAPILLARIS `REGAL MIST` TM	MUHLY	1 GAL	L	4'X3'
	MUH RIG	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	L	4'X4'
	PEN ALO	PENNISETUM ALOPECUROIDES	FOUNTAIN GRASS	5 GAL	L	2'X2'
LARGE SHRUBS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**WATER USE**	**HXW**
	PHO WAV	PHORMIUM TENAX `YELLOW WAVE`	NEW ZEALAND FLAX	5 GAL	L	5'X5
MEDIUM SHRUBS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**WATER USE**	**HXW**
	CAL MAL	CALLISTEMON VIMINALIS `BETTER JOHN`	BETTER JOHN BOTTLEBRUSH	1 GAL	L	3'X3'
	DIE VEG	DIETES VEGETA	AFRICAN IRIS	1 GAL	L	3'X3'
	EPI HUM	EPILOBIUM CANUM	CALIFORNIA FUCHSIA	1 GAL	L	4'X4'
	TEU FRU	TEUCRIUM FRUTICANS	BUSH GERMANDER	1 GAL	L	5'X5'
SMALL SHRUBS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**WATER USE**	**HXW**
	BER CRI	BERBERIS THUNBERGII `CRIMSON PYGMY`	CRIMSON PYGMY BARBERRY	5 GAL	M	2'X3'
	HEM YE2	HEMEROCALLIS X `YELLOW`	DAYLILY	1 GAL	M	2'X2'
	LAV OTT	LAVANDULA STOECHAS `OTTO QUAST`	SPANISH LAVENDER	1 GAL	L	2'X3'
SWALE VEGETATION	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**WATER USE**	**HXW**
	MOW FREE	NATIVE BIOSWALE SEED MIX	NATIVE GRASS SEED	SEED	L	
GROUND COVERS	**CODE**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**WATER USE**	**HXW**
	CRSHD GRVL	CRUSHED GRAVEL - TYPE TBD	CRUSHED GRAVEL - TYPE TBD	NA	NA	

* "ALL IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY, INCLUDING STREET TREES, SHALL BE INSTALLED PER THE PUBLIC IMPROVEMENT PLANS." IF THERE IS A DISCREPANCY BETWEEN THE PUBLIC AND PRIVATE PLANS, THE STREET IMPROVEMENT PLANS WILL GOVERN.

NORTH

20 10 0 20 40

SCALE: 1" = 20'

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phase:

PLANNING APPLICATION

RANCHO CUCAMONGA FIRE

CITY OF RANCHO CUCAMONGA

FIRE STATION 178

TOWN CENTER DR., RANCHO CUCAMONGA, CA 91730

drawing title:

CONCEPTUAL LANDSCAPE PLAN

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Figure 6. Landscape Plan

2019-140.003 Rancho Cucamonga Fire Station 178

2.3 Regulatory Requirements, Permits, and Approvals

The following approvals and regulatory permits would be required for implementation of the Proposed Project:

- Design Review approval from the Design Review Committee and the Planning Commission, including the environmental assessment and approval of the MND.
- Conditional Use Permit

2.4 Consultation With California Native American Tribe(s)

On April 15, 2021 the City of Rancho Cucamonga sent project notification letters to the following California Native American tribes, which had previously submitted general consultation request letters pursuant to 21080.3.1(d) of the Public Resources Code:

- San Gabriel Band of Mission Indians
- San Manuel Band of Mission Indians
- Soboba Band of Luiseno Indians
- Torres Martinez Desert Cahuilla Indians
- Gabrieleno Band of Mission Indians – Kizh Nation
- Morongo Band of Mission Indians

The San Manuel Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation requested consultation. A summary of the consultation process, including the determination of significance of impacts to tribal cultural resources, is provided in Section 4.18 of this Initial Study.

SECTION 3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

Determination

On the basis of this initial evaluation:

I find that the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	☐
I find that although the 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.	☒
I find that the Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	☐
I find that the 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.	☐
I find that although the 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 Project, nothing further is required.	☐

David F. Eoff IV Senior Planner		Date

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SECTION 4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

Regional Setting

Major scenic resources in the City of Rancho Cucamonga include the San Gabriel and San Bernardino Mountains and foothills, vistas of the City from hillside areas, and other views of special vegetation and permanent open space features. These north-south views are particularly prominent along the straight alignments of Archibald, Haven, and Etiwanda Avenues. Views of the mountains are available from most areas in the City and provide a visual backdrop for the Project site and surrounding communities.

Scenic Resources

The California Scenic Highway Program protects and enhances the scenic beauty of California's highways and adjacent corridors. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view (Caltrans 2019). No officially designated state scenic highways are located in or near the City of Rancho Cucamonga (Rancho Cucamonga 2010b). The nearest designated scenic highway is State Route (SR) 138, located in the San Gabriel Mountains approximately 18 miles north of the Project site.

The nearest County-designated scenic route is the Interstate-15 freeway from its junction with the Interstate-215 Freeway in the Cajon Pass, northeast to the Nevada State line. This segment is approximately 6.7 miles northeast of the boundary of the City of Rancho Cucamonga, outside of the City and sphere-of-influence boundaries, and is not visible from the City or the project site (City of Rancho Cucamonga 2010b).

The City's Tree Preservation Ordinance (Chapter 19.08 of the Municipal Code) promotes the preservation of heritage trees as scenic and historical assets of the City. The ordinance establishes regulations for the preservation of heritage trees on private property, including eucalyptus, palm, oak, sycamore, and pine trees. In particular, eucalyptus windrows are considered a unique inheritance, and the City aims to protect selected Blue Gum Eucalyptus windrows and expand the windbreaks through planting new Spotted Gum Eucalyptus windrows along an established grid pattern throughout the City (City of Rancho Cucamonga 2010b).

Visual Character of the Project Site

The project site is located along the south side of Town Center Drive, east of Haven Avenue at the intersection Town Center Drive and Terra Vista Parkway (Figure 2). The 3.67-acre project site is currently vacant and relatively flat. See Figure 7-8 for elevations and aerial 3D renderings of the proposed Project.

4.1.2 Aesthetics (I) Environmental Checklist and Discussion

Except as provided in Public Resources Code Section 21099, 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?	☐	☐	☒	☐

Less than significant.

The proposed project is located on a relatively flat parcel and the development will be primarily visible from Town Center Drive. The Project is located within a fully urbanized area, visually dominated by commercial uses, residential uses, and surface streets. This site is not considered to be within or to comprise a portion of a scenic vista.

Compliance with Municipal Code guidelines and building height regulations would ensure that views of scenic resources, including views of the San Bernardino Mountains to the north, would be preserved. The Project would not obstruct any residential views of the mountains. Limited views of the surrounding hillsides from the Project site are obstructed by existing development and landscaping. The second-story roofline would reach 27 feet. The building also includes a 33-foot roof clerestory and tower that would reach a maximum height of 37 feet (Figure 7a and 7b).

Short-term construction activities could potentially temporarily degrade the existing vacant open space visual character of the site. In all, the project would involve grading activities and construction of a two-story fire station, sidewalks, fencing, storm drainage infrastructure, utility installation, and landscaping. During the construction phase, various equipment, vehicles, building materials, stockpiles, disposal receptacles, and related activities could be potentially visible from several vantage points near the project site. However, construction-related activities would be short-term and temporary in nature. Once completed, all general construction activities would cease, along with any construction-related aesthetic impacts.

Upon completion, the Project site would consist of a new two-story fire station that would include apparatus bays and a separate detached building. The proposed fire station would be developed on roughly 2.23 acres while the remaining 1.44 acres is undeveloped with future site improvements. Onsite improvements would include hardscape areas comprised of concrete pavers and permeable pavers, 22 total onsite parking for fire fight parking and public parking, site lighting, landscape improvements, an apparatus washdown area, outdoor training/fire fighter drill area, and soil infill and grading to address the current grade difference between the project site and Town Center Drive (Figure 3-8). Offsite improvements would include construction of new response driveway apron at Town Center Drive, an additional driveway apron along Terra Vista Parkway, and a future traffic signal at the intersection of Town Center Drive and Terra Vista Parkway. The proposed improvements are compatible with the existing commercial uses. Impacts to scenic vistas would be less than significant.

Except as provided in Public Resources Code Section 21099, 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?	☐	☐	☐	☒

No impact.

The project site is currently vacant and does not contain any trees, rock outcroppings or historical buildings. Landscape plans depict typical existing trees in the adjacent parkways along Town Center Drive and Terra Vista Parkway generally preserved in place (Figure 6). Furthermore, the Project site is not located within a state scenic highway. No impact would occur.

Except as provided in Public Resources Code Section 21099, 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?	☐	☐	☒	☐

Less than significant.

Development of the Project could result in a significant impact if it resulted in substantial degradation of the existing visual character or quality of the site and its surroundings. Degradation of visual character or quality is defined by substantial changes to the existing site appearance through construction of structures such that they are poorly designed or conflict with the site's existing surroundings.

Construction of the proposed Project would result in short-term impacts to the existing visual character and quality of the area. Construction activities would require the use of equipment and storage of materials within the Project site. However, construction activities are temporary and would not result in any permanent visual impact.

The Project is in an urbanized area adjacent to commercial uses to the north, south, east and west. The addition of the Project would provide a modern architectural element that would not conflict with the applicable zoning and established commercial character of the surrounding Town Center development. With specified design features included, the fire station development would have less than significant impacts on the visual character of the site and the surroundings.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Less than significant.

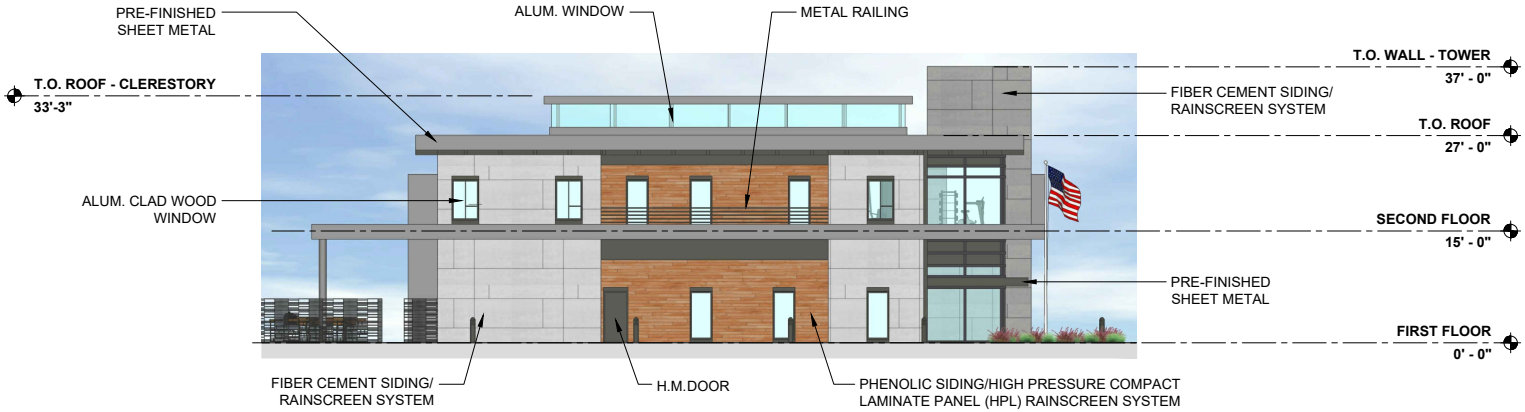
Excessive or inappropriately directed lighting can adversely impact night-time views by reducing the ability to see the night sky and stars. Glare can be caused from unshielded or misdirected lighting sources. Reflective surfaces (i.e., polished metal) can also cause glare. Impacts associated with glare range from simple nuisance to potentially dangerous situations (i.e., if glare is directed into the eyes of motorists). Sources of daytime glare are typically concentrated in commercial areas and are often associated with retail uses. Glare results from development and associated parking areas that contain reflective materials such as hi-efficiency window glass, highly polished surfaces, and expanses of pavement.

There are lighting sources adjacent to this site, including free-standing streetlights, light fixtures on buildings, and pole-mounted lights. The fire station development includes interior lighting and outdoor lighting throughout the property. The project will include exterior wall mount lights, freestanding lights in the rear (south) parking area, and low-level bollards. Freestanding lights would be roughly 15 feet tall and would operate on timer or photocell. Light spillover and glare would be avoided by requiring that light be designed to Project downward and prohibiting the creation of glare on adjacent properties per the requirements of Municipal Code Section 17.58.050.A-D (General Lighting Requirements). Compliance with the Municipal Code standards for lighting and glare during construction and operation of the proposed Project would ensure that lighting and glare impacts would be less than significant.

4.1.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

1 **NORTH ELEVATION**
1/8" = 1'-0"



2 **EAST ELEVATION**
1/8" = 1'-0"

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PLANNING APPLICATION

CITY OF RANCHO CUCAMONGA

FIRE STATION 178

TOWN CENTER DR., RANCHO CUCAMONGA, CA 91730

drawing title:
FIRE STATION BLDG. EXTERIOR ELEVATIONS

project no.:
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sheet no.:
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Figure 7a. Elevations

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2019-140.003 Rancho Cucamonga Fire Station 178

1 SOUTH ELEVATION
1/8" = 1'-0"

2 WEST ELEVATION
1/8" = 1'-0"

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Figure 7b. Elevations

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AERIAL VIEW FROM CORNER OF TOWN CENTER AND TERRA VISTA
(NORTH EAST CORNER OF THE SITE)

AERIAL VIEW FROM SOUTH EAST CORNER OF THE SITE

AERIAL VIEW FROM SOUTH WEST CORNER OF THE SITE

AERIAL VIEW FROM NORTH EAST CORNER OF THE SITE

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TOWN CENTER DR., RANCHO CUCAMONGA, CA 91730

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4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

"Forest land" as defined by Public Resources Code Section 12220(g) is "…land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

"Timberland" as defined by Public Resources Code Section 4526 means "…land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis."

"Timberland zoned Timberland Production" is defined by Public Resources Code Section 51104(g) as "..an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision h."

Although the entire City of Rancho Cucamonga was once an agricultural area, few large areas remain in active production today. Much of the City is characterized by industrial, residential, and commercial land uses. Farmland in eastern Rancho Cucamonga is concentrated in Etiwanda; these farmland areas were designated by the Department of Conservation due to their local historical importance. However, most of the Etiwanda area is planned for development, and is not intended to be retained as farmland (City of Rancho Cucamonga 2010a).

The proposed Project would be located in a developed commercial area which does not contain any agricultural uses or areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Project site is located on Urban and Built-up Land and is not under a Williamson Act Contract (CDC 2017). Therefore, there are no local policies for agricultural resources that apply to the project site.

4.2.2 Agriculture and Forestry Resources (II) Environmental Checklist and Discussion

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?	☐	☐	☐	☒

No impact.

The Project would be located in a fully developed, urbanized area that does not contain agriculture or forest uses. The Important Farmland in California (2014) prepared by the Department of Conservation identifies the Project site as Urban and Built-Up Land and does not identify the Project site as being Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, there would be no conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to a non-agricultural use as a result of construction of the proposed Project. No impact 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?	☐	☐	☐	☒

No impact.

The project site is currently designated for open space and does not contain any agricultural land. According to the California Department of Conservation (CDC) the site is designated Urban and Built-Up Land (CDC 2017). Therefore, the Proposed Project would not result in a conflict with an agricultural zoning designation, such as a Williamson Act contract. No impact 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 by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

No impact.

The project site is currently developed and is not zoned for forest land, timberland, or timberland production. There is no forestland or timber in the vicinity, nor are there any parcels zoned for forestland or timberland. No impact 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?	☐	☐	☐	☒

No impact.

As discussed above, the project site is currently developed and does not contain forestland or timberland, thus it would not convert forest land to non-forest use. No impact 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?	☐	☐	☐	☒

No impact.

The project site and the surrounding properties are not currently used for agriculture. As discussed above, the Proposed Project would not result in the conversion of forest land to non-forest use. No impact would occur.

4.2.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.3 Air Quality

4.3.1 Environmental Setting

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the South Coast Air Basin (SoCAB), which encompasses the Project site, pursuant to the regulatory authority of the South Coast Air Quality Management District (SCAQMD).

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that reduce the potential for high levels of regional and local air pollutants. The following section describes the pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project area.

South Coast Air Basin

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The Project site lies in the SoCAB, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter (SCAQMD 1993).

Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The nearest sensitive receptors to the Project site are residences to the north, located on Terra Vista Parkway and approximately 545 feet distant.

Methodology

The impact analysis provided below is based on the California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance (ECORP 2021a; Appendix A). The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make impact determinations. According to the SCAQMD, an air quality impact is considered significant if the proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects such as that proposed, as shown below in Table 4.3-1.

Table 4.3-1. SCAQMD Regional Significance Thresholds – Pounds per Day

Air Pollutant	Construction Activities	Operations
Reactive Organic Gas	75	55
Carbon Monoxide	550	550
Nitrogen Oxide	100	55
Sulfur Oxide	150	150
Coarse Particulate Matter	150	150
Fine Particulate Matter	55	55

Source: SCAQMD 1993 ($PM_{2.5}$ threshold adopted June 1, 2007)

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulatively considerable.

Localized Significance Thresholds

In addition to regional significance thresholds, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (offsite mobile source emissions are not included in the LST analysis protocol). LSTs represent the maximum emissions that can be generated at a site without expecting to cause or substantially contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the specific source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb five acres or less on a single day. The proposed Project is located within SCAQMD SRA 32 (Northwest San Bernardino Valley). Table 4.3-2 shows the LSTs for a one-acre, two-acre, and five-acre project site in SRA 32 with sensitive receptors located within 100 meters of the Project site. As previously described, the nearest sensitive receptors are existing residences located approximately 545 feet (166 meters) distant.

Table 4.3-2. Local Significance Thresholds at or within 100 Meters of a Sensitive Receptor

Project Size	Pollutant (pounds per day Construction/Operations)			
	NO_2	CO	PM_{10}	$PM_{2.5}$
1 Acre	211 / 211	2,423 / 2,423	44 / 11	12 / 3
2 Acres	263 / 263	3,218 / 3,218	34 / 9	14 / 4
5 Acres	378 / 378	5,188 / 5,188	80 / 20	21 / 5

Source: SCAQMD 2009

4.3.2 Air Quality (III) Environmental Checklist and Discussion

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?	☐	☐	☒	☐

Less than significant.

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must

integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the Project site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 AQMP. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, SCAG, and the USEPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The Project is subject to the SCAQMD's AQMP.

According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning two main criteria must be addressed.

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?

As shown in Tables 4.3-3, 4.3-4, and 4.3-5 below, the proposed Project would result in emissions that would be below the SCAQMD regional and localized thresholds during both construction and operations. Therefore, the proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

b) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

As shown in Tables 4.3-3 and 4.3-5, the proposed Project would be below the SCAQMD regional thresholds for construction and operations. Since the Project would result in less than significant regional emission impacts, it would not delay the timely attainment of air quality standards or AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining Project consistency focuses on whether or not the proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP?

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in Rancho Cucamonga. Specifically, SCAG's *Growth Management* Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's *2016 RTP/SCS* provides socioeconomic forecast projections of regional population growth. The Rancho Cucamonga General Plan is referenced by SCAG in order to assist forecasting future growth in the City.

The Project site has a General Plan designation of *Community Commercial* (CC). Land designated as *CC* allows for the development of service-oriented businesses that serve the entire community. The Project is proposing the construction of a 12,363 SF fire station and associated features that would serve and protect the local community. This land use is allowed under the CC designation. Therefore, the Project is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the 2016 RTP/SCS and RCPG.

b) Would the project implement all feasible air quality mitigation measures?

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, and 1113. SCAQMD Rule 402 prohibits the discharge, from any source whatsoever, in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible PM are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD Rule 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. As such, the proposed Project meets this consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed Project is consistent with the land use designation and development density presented in the City's General Plan and therefore, would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. The proposed Project would not result in a long-term impact on the region's ability to meet state and federal air quality standards. The proposed Project's long-term influence would also be consistent with the goals and policies of the SCAQMD's 2016 AQMP.

Therefore, 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?	☐	☐	☒	☐

Less than significant.

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

A portion of the proposed Project's air quality impacts are attributable to construction activities. The majority of the long-term air quality impacts will be due to the operation of motor vehicles traveling to and from the site. For purposes of impact assessment, air quality impacts have been separated into construction impacts and operational impacts.

Construction Emission Impacts

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the proposed Project: operation of the construction vehicles (i.e., graders, scrapers, haul trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM

emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. Construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities.

Construction-generated emissions associated the proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Appendix A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Predicted maximum daily construction-generated emissions for the proposed Project are summarized in Table 4.3-3. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Table 4.3-3. Construction-Related Emissions

Construction Year	Maximum Pollutants (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction in the Year 2021	4.11	28.66	29.30	0.04	3.58	2.18
SCAQMD Potentially Significant Impact Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2. Refer to Appendix A for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Building construction, paving, and painting are assumed to occur in overlapping phases. Emissions were taken from summer or winter, whichever is greater. Building construction, paving and painting are assumed to occur simultaneously. Construction–generated emissions were calculated to account for construction activities occurring in the year 2021. However, the actual construction of the Project site would be dictated by market forces. As such, this analysis accounts for minor modifications as Project plans evolve from conceptual planning to final mapping. If construction starts at a later date, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover.

As shown in Table 4.3-3, emissions generated during Project construction would not exceed the SCAQMD's regional thresholds of significance. Therefore, criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard, and no health effects from Project criteria pollutants would occur.

Localized Construction Significance Analysis

As previously stated, nearest sensitive receptors to the Project site are residences to the north, located on Terra Vista Parkway approximately 545 feet distant. In order to identify localized, air toxic-related impacts

to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008a]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific level proposed projects.

For this Project, the appropriate SRA for the localized significance thresholds is the Northwest San Bernardino Valley, SRA 32. LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. As previously described, the SCAQMD has produced lookup tables for projects that disturb one, two and five acres. The Project site is approximately 3.67 acres; however, the fire station would be developed on roughly 2.23 acres while the remaining 1.44 acres is undeveloped, for future improvements. Thus, the LST threshold value for a two-acre site was employed from the LST lookup tables.

LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The nearest sensitive receptors to the Project site are the residences located approximately 545 feet (166 meters) distant. Therefore, LSTs for receptors located at 100 meters were utilized in this analysis. The SCAQMD's methodology clearly states that "offsite mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "onsite" emissions outputs were considered. Table 4 presents the results of localized emissions. The LSTs reflect a maximum disturbance of the entire Project site daily during site preparation activities and grading activities at 100 meters or less from sensitive receptors.

Table 4.3-4. Construction-Related Emissions (Localized Significance Analysis)

Activity	Pollutant (pounds per day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Project Site Preparation	18.28	10.74	2.29	0.81
Project Site Grading	20.21	9.76	7.46	4.21
Building Construction, Paving & Painting	12.57	14.08	0.79	0.65
SCAQMD Localized Significance Threshold (2.0 acre of disturbance)	*263*	*3,218*	*34*	*14*
Exceed SCAQMD Localized Threshold?	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2. Refer to Appendix A for Model Data Outputs.
Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Building construction, paving, and painting are assumed to occur in overlapping phases.

Table 4.3-4 shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection

from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: *Further-Reduced Health Risk*. Thus, the fact that onsite Project construction emissions would be generated at rates below the LSTs for NO_x, CO, PM_{10}, and $PM_{2.5}$ demonstrates that the Project would not adversely impact vicinity receptors.

Operational Emission Impacts

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM_{10}, $PM_{2.5}$, CO, and SO_2 as well as O_3 precursors such as ROG and NO_X. Project-generated increases in emissions would be predominantly associated with motor vehicle use. Long-term operational emissions attributable to the project are identified in Table 4.3-5 and compared to the regional operational significance thresholds promulgated by the SCAQMD.

Table 4.3-5. Operational-Related Emissions (Regional Significance Analysis)

Construction Year	Maximum Pollutants (tons per year)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Source	0.32	0.00	0.00	0.00	0.00	0.00
Energy Use	0.00	0.01	0.01	0.00	0.00	0.00
Mobile Source	0.07	0.42	0.77	0.00	0.23	0.06
Total	**0.39**	**0.43**	**0.78**	**0.00**	**0.23**	**0.06**
SCAQMD Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2. Refer to Appendix A for Model Data Outputs.
Notes: Operational emissions taken from the season (summer or winter) with the highest output and account for 45 daily vehicle trips (which includes 18 staff, 22 visitors and 5 emergency response events).

As indicated in Table 4.3-5, Project operational-generated emissions would not exceed SCAQMD significance thresholds.

As previously identified, the San Bernardino County portion of the SoCAB is listed as a nonattainment area for federal O_3 and PM_{10} standards and is also a nonattainment area for the state standards for O_3, PM_{10}, and $PM_{2.5}$. O_3 is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely affect the human respiratory system. As shown in Table 4.3-5, the proposed Project would result in increased emissions of the O_3 precursor pollutants ROG and NO_x, PM_{10}, and $PM_{2.5}$, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SCAQMD is contained in the SCAQMD 2016 AQMP. The AQMP provides control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive

programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SCAQMD are designed to meet the objectives of the AQMP and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SCAQMD for purposes of reducing air pollution and its deleterious health effects.

Localized Operational Significance Analysis

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operations of a project only if the project includes stationary sources or attracts substantial amounts of heavy-duty trucks that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed Project does not include such uses. Therefore, in the case of the proposed Project, the operational LST protocol is not applied.

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?	☐	☐	☒	☐

Less than significant.

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors are existing residences located approximately 545 feet distant.

Construction Generated Air Contaminants

Construction-related activities would result in temporary, short-term proposed Project-generated emissions of diesel particulate matter (DPM), ROG, NOx, CO, and PM_{10} from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The portion of the SoCAB which encompasses the Project area is designated as a nonattainment area for federal O_3 and fine particulate matter ($PM_{2.5}$) standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$, and PM_{10} standards (CARB 2019). Thus, existing O_3 and $PM_{2.5}$ levels in the SoCAB are at unhealthy levels during certain periods. However, as shown in Table 4.3-3 and Table 4.3-4, the Project would not exceed the SCAQMD regional or localized significance thresholds for emissions.

The health effects associated with O_3 are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O_3 precursor emissions (ROG or NOx) in excess of the SCAQMD thresholds, the Project is not anticipated to substantially contribute to regional O_3 concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SCAQMD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM_{10} and $PM_{2.5}$) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions of exhaust $PM_{2.5}$, considered a surrogate for DPM, would be 1.41 pounds/day (see Appendix A). ($PM_{2.5}$ exhaust is considered a surrogate for DPM because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., $PM_{2.5}$). Most $PM_{2.5}$ derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) As with O_3 and NOx, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the SCAQMD's thresholds. Additionally, the Project would be required to comply with SCAQMD Rule 403 described above, which limits the amount of fugitive dust generated during construction. Accordingly, the Project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects for these pollutants.

Furthermore, the Project has been evaluated against the SCAQMD's LSTs for construction. As previously stated, LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative and can be used to assist lead agencies in analyzing localized impacts associated with Project-specific level of proposed projects. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: *Further-Reduced Health Risk*. As shown in Table 4.3-4, the emissions of pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Thus, the fact that onsite Project construction emissions would be generated at rates below the LSTs for NO_x, CO, PM_{10}, and $PM_{2.5}$ demonstrates that the Project would not adversely impact nearby sensitive receptors.

In summary, the Project would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants.

Operational Air Contaminants

Operation of the proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract mobile sources that spend long periods queuing and idling at the site. Thus, by its very nature, the Project would not be a source of TAC concentrations during proposed Project operations.

Carbon Monoxide Hot Spots

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the SCAQMD's *1992 Federal Attainment Plan for Carbon Monoxide* in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992).

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. For example, the Bay Area Air Quality Management District (BAAQMD), the air pollution control officer for the San Francisco Bay Area, concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

The Project is anticipated to generate an average of 45 daily trips. Thus, the proposed Project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day (or 44,000 vehicles per day) and there is no likelihood of the Project traffic exceeding CO values. 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 other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Less than significant.

Project Construction

During construction, the proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area.

Project Operations

According to the SCAQMD, land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed Project does not include any uses identified by the SCAQMD as being associated with odors. Impacts would be less than significant.

4.3.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.4 Biological Resources

4.4.1 Environmental Setting

ECORP Consulting, Inc. prepared a Biological Technical Report in January 2021 for the proposed Project (ECORP 2021b; Appendix B). The report literature review, database search, and biological reconnaissance survey of the project site in October 2020 (ECORP 2020b; Appendix B). Prior to conducting the biological reconnaissance survey, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Data Base (CNDDB; CDFW 2020a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2020) to determine the special-status plant and wildlife species that have been documented in the vicinity of the Project site. ECORP searched CNDDB and CNPSEI records within the Project site boundaries as depicted on USGS 7.5-minute Guasti topographic quadrangle, plus the surrounding eight topographic quadrangles, including Corona North, Cucamonga Peak, Devore, Fontana, Mt. Baldy, Ontario, Prado Dam, and Riverside West. The CNDDB and CNPSEI contain records of reported occurrences of federally or state-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), and/or other special-status species or habitat that may occur within or in the vicinity of the Project. The biological reconnaissance survey was

conducted to identify potential constraints to Project development and ensure compliance with state and federal regulations regarding listed, protected, and sensitive species. Representative site photographs are presented in Appendix B.

Vegetation Communities

Plant species observed on the Project site were generally characteristic of disturbed and urban areas. The only native plant species observed on the Project site included annual bur-sage and telegraph weed. Nonnative plant species observed on the Project site included short podded mustard, Russian thistle, redstem filaree, and foxtail chess (*Bromus madritensis*). Nonnative and ornamental species identified in surrounding landscaped areas included eucalyptus trees (*Eucalyptus spp.*), kurrajong trees (*Brachychiton populneus*), Indian hawthorn (*Rhaphiolepsis indica*), and Mexican fan palm (*Washingtonia robusta*). Additionally, western sycamore (*Platanus racemosa*), a native species, was also observed in landscaped areas immediately east of the Project site.

Wildlife

The Project site provides habitat only for species adapted to urban environments and associated disturbances. Ten bird species were observed during the reconnaissance visit: Cedar waxwing (*Bombycilla cedrorum),* Anna's hummingbird *(Calypte anna*), lesser goldfinch (*Carduelis psaltria*), American crow *(*Corvus brachyrhynchos), common raven (*Corvus corax*), yellow-rumped warbler (*Dendroica coronata*), house finch (*Haemorhous mexicanus*), Eurasian collared-dove (*Streptopelia decaocto*), Cassin's kingbird (*Tyrannus vociferans*), mourning dove (*Zenaida macroura*). No amphibian, reptile, or mammal species were observed during the survey. Multiple small mammal burrows were also observed on the site, primarily in the eastern central portion. Due to the urban setting of the Project site, nearby construction activity, and the disturbed nature of the site, the Project site represented little to no habitat for most wildlife species.

Potential Waters of the U.S.

Although a formal aquatic resources delineation was not conducted, no jurisdictional drainages, stream courses, and/or other water features were identified on the Project site during the survey. No hydric soils or riparian vegetation were observed within the Project site boundaries.

Special-Status Plants

The literature search documented 54 special-status plant species (of those, 5 are federally and/or state listed). Because the Project site consists entirely of disturbed or developed land covers, all special-status plant species were presumed absent due to lack of suitable habitat. Additionally, with various habitat types occurring within the nine-quadrangle search, including Chino Hills State Park, the Santa Ana River, and the San Gabriel Mountain Range, species appeared in the literature review results that had no potential to occur on or near the Project site. A complete list of the 54 special-status plant species, with details regarding blooming periods, habitat requirements, and potential for occurrence designations, is included as Appendix B.

Special-Status Wildlife

The literature search documented 50 special-status wildlife species in the vicinity of the Project site, 16 of which are federally and/or state-listed. Due to the disturbed nature of the site and the surrounding vicinity, the lack of suitable habitat, and/or the lack of recent documented occurrences in the area all but one species were presumed absent from the Project site. A complete list of the 50 special-status wildlife species, with details regarding habitat requirements and potential for occurrence designations, is included as Appendix B. Burrowing owl (*Athene cunicularia*), the only species found to have moderate potential to occur on the Project site, was not detected or observed during the reconnaissance survey.

Raptors and Migratory Birds

Potential nesting habitat for migratory birds and raptors protected by the MBTA and California Fish and Game Code was present on and adjacent to the Project site in the ornamental trees and shrubs. Raptors typically breed between January and August, and songbirds and other passerines generally nest between March and August.

Wildlife Movement Corridors

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor is varied, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges, for example. In general, a corridor is described as a linear habitat, embedded in a dissimilar matrix, which connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. Naturally, the nature of corridor use and wildlife movement patterns varies greatly among species.

The Project site was assessed for its ability to function as a wildlife corridor. The Project site is very disturbed and surrounded by development and isolated from large, contiguous blocks of native habitat. Additionally, the lack of vegetative cover and the urban nature of the Project site would likely deter wildlife from moving through the area. Therefore, the Project site would not be considered a linkage or corridor between conserved natural habitat areas.

4.4.2 Biological Resources (IV) Environmental Checklist and Discussion

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?	☐	☒	☐	☐

Less than significant with mitigation incorporated.

The Project site, consisting wholly of disturbed and/or developed land, was devoid of native vegetation communities. The literature review and database searches identified 54 special-status plant species that have been documented near the Project site but, due to the current lack of suitable habitat for special-status plant species on Project site, all of the special-status plant species identified in the literature review were presumed absent from the Project site. The development of the Project site will not contribute to the overall decline of any of the special-status plant species identified in the literature review and database searches. No significant impacts to special-status plant species are anticipated to result from the development of this Project.

Of the 50 special-status wildlife species identified in the literature search, 49 were presumed absent from the site due to lack of habitat. The remaining species, burrowing owl, was found to have a moderate potential to occur on the site. Although there is a lack of high-quality suitable habitat on the Project site, small and deteriorated small mammal burrows (with no sign present) was observed in the center of the eastern portion of the Project and a recently documented occurrence of burrowing owl was recorded 0.25 mile northeast from the site in 2004 (CDFW 2020a). The frequent mechanical disturbances on the site and proximity to urban development likely preclude burrowing owl from occurring on or adjacent to the site. However, due to the migratory and highly mobile nature of burrowing owls and the presence of small mammal burrows on the Project site, it is possible for this species to occur prior to the start of Project activities. If this species was present, impacts in the form of loss of low-quality habitat, entombment of individuals occupying burrow(s), injury or mortality, nest failure/abandonment, and altered behavior due to construction noise and ground vibrations may occur. Any impact to burrowing owl would be considered significant under CEQA. Implementation of Mitigation Measure **BIO-1**, preconstruction burrowing owl survey, would reduce these impacts to a less than significant level.

The trees on and immediately adjacent to the Project site could provide nesting habitat for nesting birds and raptors protected by the MBTA and California Fish and Game Code. If construction of the proposed Project occurs during the bird breeding season (typically February 1 through August 31), ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of habitat on the Project site, and indirectly through increased noise, vibrations, and

increased human activity. Impacts to nesting birds would be less than significant with the implementation of Mitigation Measure **BIO-2**.

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 U.S. Fish and Wildlife Service?	☐	☐	☐	☒

No impact.

The Project site consists of disturbed land that supports mostly nonnative and ornamental species. The Project site does not contain any riparian habitat or other sensitive natural communities that would need to be preserved. No impacts to sensitive natural communities are anticipated to result from the development of this Project.

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?	☐	☐	☐	☒

No impact.

No potential drainage was identified during the literature review, no evidence of jurisdictional drainages, streams, and/or other water features were identified during the site visit. The development of the Project site would not be expected to result in impacts to state or federally protected wetlands or Waters of the United States.

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?	☐	☐	☐	☒

No impact.

The Project site is located within and adjacent to areas containing existing disturbances (e.g., paved roads and commercial developments). The Project site is heavily disturbed and/or developed and contains very little vegetative cover that would facilitate wildlife movement. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project site. No impacts to these resources are expected to occur during the development of the Project site.

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?	☐	☐	☐	☒

No impact.

The City's Tree Preservation Ordinance in the Municipal Code (Chapter 17.80 Tree Preservation) purpose is to protect trees, considered to be a community resource, from indiscriminate cutting or removal. Provisions within Chapter 17.80 are specifically intended to protect and expand the eucalyptus windrows. Heritage Trees, as defined in Municipal Code Section 17.16.080, are also protected and require a permit prior to removal. All construction and grading activities would comply with City Municipal Code 17.16.080 and obtain a tree removal permit prior to the removal of any existing trees. No impact would occur and no mitigation is required.

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?	☐	☐	☐	☒

No impact.

The Project site is not located within an area covered by a habitat conservation plan or a natural community conservation plan. No impact would occur.

4.4.3 Mitigation Measures

BIO-1 Preconstruction Burrowing Owl Surveys: A preconstruction survey for burrowing owls should be completed within the Project site between 14 and 30 days prior to the start of ground-disturbing construction activities. A second survey shall be conducted no more than 24 hours prior to the start of ground-disturbing project activities. Methods and timing of the surveys shall be performed in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012). If burrowing owls are observed during the preconstruction survey and impacts to the owls or their burrow(s) are unavoidable, coordination with CDFW may need to occur in order to develop a specific mitigation methodology for Project in order to reduce impacts to a level that is less than significant. Mitigation measures for any owls present could include avoidance of the owl burrows during their nesting season and/or passive relocation of burrowing owls.

BIO-2 Preconstruction Survey for Nesting Birds: Any ground disturbance activities shall be conducted during the non-breeding season for birds (approximately September 1 through January 31) wherever feasible. This will avoid violations of the MBTA and California Fish and Game Code §§ 3503, 3503.5 and 3513. If activities with the potential to disrupt nesting birds are scheduled to occur during the bird breeding season (February 1 through August 31), a preconstruction nesting bird survey shall be conducted by a qualified biologist who is experienced in the identification of avian species and conducting nesting bird surveys no more than three (3) days prior to the start of construction activities. The nest surveys shall include the Project site and adjacent areas where Project activities have the potential to cause nest failure. If no nesting birds are observed during the survey, site preparation and construction activities may begin. If nesting birds (including nesting raptors) are found to be present, avoidance or minimization measures shall be undertaken to avoid potential Project-related impacts. Avoidance or minimization measures may include establishment of an avoidance buffer until nesting has been completed as determined through periodic and non-invasive nest monitoring conducted by a qualified biologist. The width of the no-disturbance buffer around the nest will be determined by the Project biologist based on species and location of the nest. Typically, this is 300 feet from the nest site in all directions

for passerines (500 feet is typically recommended by CDFW for raptors), until the juveniles have fledged and there has been no evidence of a second attempt at nesting. The monitoring biologist will monitor the nest(s) during construction and document any findings.

4.5 Cultural Resources

4.5.1 Environmental Setting

A Cultural Resources Inventory Report was prepared by ECORP Consulting, Inc. (Appendix C) for the Proposed Project to determine if cultural resources were present in or adjacent to the Project area and assess the sensitivity of the Project area for undiscovered or buried cultural resources. The cultural context of the Project area including regional and local prehistory, ethnography, and regional and Project area histories can be found in the report in Appendix C.

A survey of the proposed Project Area was conducted on December 18, 2020 to identify potentially eligible cultural resources (archaeological sites and historic-period buildings, structures, and objects) that could be affected by the Project. A records search of the CHRIS was requested by ECORP on January 7, 2021, from the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. However, due to Covid-19 closures and delays in data, records search results from a previous City-wide study conducted in 2020 by ECORP, were used for this study.

In addition to the records search, ECORP contacted the California Native American Heritage Commission (NAHC) on January 7, 2021, to request a search of the Sacred Lands File for the Project Area (Attachment A of Appendix C). This search will determine whether or not Sacred Lands have been recorded by California Native American tribes within the Project Area, because the Sacred Lands File is populated by members of the Native American community who have knowledge about the locations of tribal resources. To date the results of the Sacred Lands File records search, as conducted by NAHC staff, have not been received by ECORP. These results will be forwarded to the Lead Agency when they are received. If any additional comments are received after the submission of this report, they will be forwarded to the Lead Agency for further consideration and appropriate action. Correspondence between the NAHC and ECORP is included in Attachment A of Appendix C.

4.5.2 Cultural Resources (V) Environmental Checklist and Discussion

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?	☐	☐	☐	☒

No impact.

Twelve previous cultural resource investigations have been conducted within one mile of the property, covering approximately 20 percent of the total area surrounding the property within the record search radius (Table 4.5-1). The previous studies were conducted between 2000 and 2012.

Table 4.5-1. Previous Cultural Studies In or Within One Mile of the Project Area

Report Number	Author(s)	Report Title	Year
SB-06812	White, Laura, White Robert, and Van Horn, David	A Cultural Resources Assessment of the 1.13 acre China House Loat as Shown on TPM 18806, Located at 9591 San Bernardino Road, City of Rancho Cucamonga, San Bernardino County	2007
SB-03581	Phillipe Lapin	Cultural Resource Assessment For Pbw Facility Cm 226-01, County Of San Bernardino, Ca. 5pp	2000
SB-03589	De Barros, Philip and Kenneth Swift	Cultural Resource Survey And Evaluation Of The De Ambrogio Vineyard Including The De Ambrogio House And Vineyard Structures At 10329 Foothill Blvd, Rancho Cucamonga, San Bernardino County, Ca. 69pp	2001
SB-04156	Curt Duke	Cultural Resource Assessment: Cingular Wireless Facility No. Cm226-03, San Bernardino County, Ca. 5pp	2002
SB-04163	Michael Dice	Phase I Archaeological Survey & Visual Impact Assessment Results For Bechtel/At&T Telecommunications Facility 95100301d (Sce Rancho), 10127 Baseline Rd, Rancho Cucamonga, San Bernardino County, Ca. 6pp	2002
SB-04138	Bai Tang	Identification & Evaluation Of Historic Properties: Fourth St Recycled Water Pipeline In And Near The Cities Of Ontario & Rancho Cucamonga, San Bernardino County, Ca. 29pp	2002
SB-05499	Stephen R. Hammond and David Bricker	Historic Resources Compliance Report for the Relinquishment of State Route 66, City of Rancho Cucamonga, San Bernardino County, California.	2003
SB-04147	Laura S. White and Robert S.	A Cultural Resource Assessment Of A 1.68 Acre Parcel Located At The Sw Corner Of Baseline Rd & Hermosa Ave, City Of Rancho Cucamonga, San Bernardino County, Ca. 19pp	2003
SB-04667	Frederick W. Lange	Cultural Resources Assessment, Rancho Apartments, City Of Rancho Cucamonga, San Bernardino County, California	2006
SB-06909	Robert Wodarski	Records Search and Field Reconnaissance Pahse for the Proposed AT&T Wireless Telecommunications Site LA8071 (Edwards Theater) located at 7986 Haven Ave, Rancho Cucamonga, CA 91730	2011
SB-07187	Jeanette McKenna	A Phase I Cultural Resources Investigation for the Proposed Walmart Development on Foothill Boulevard, Rancho Cucamonga, San Bernardino County, California	2012
SB-06813	--	--	--

The results of the records search indicate that none of the Project Area has been previously surveyed for cultural resources. Therefore, a pedestrian survey of the Project Area was warranted.

The records search also determined that nine previously recorded resources are located within one mile of the Project Area (Table 4.5-2). No previously recorded resources are located within the Project Area. The nine resources in the one-mile records search radius consist of roads, residential homes, buildings, a ranch, and a market.

Table 4.5-2. Previously Recorded Cultural Resources Within One Mile of the Project Area

Site Number CA-SBR-	Primary Number P-36-	Recorder and Year	Age/ Period	Site Description
--	016487	Merril (1987)	Historic	W.J. Kincaid House
--	016457	--	--	--
--	012367	Tanya R. Sorrell (2006)	Historic	Building
--	010289	DeBarros (2001)	Historic	De Ambrogio House
--	016462	Merrill (1987)	Historic	Delarsen/Mitchell House
--	015497	Josh Smallwood (2014)	Historic	Base Line Road
--	016442	L. Merrill (1987)	Historic	Minor House
--	016439	L. Merrill (1987)	Historic	Santolucito Italian American Market
--	016440	Clement W. Meighan (1975)	Historic	Milliken Ranch

No previously recorded cultural resources were identified in the Project Area based the review of available CHRIS information. No pre-contact or historic-period cultural resources were identified within the Project Area as a result of the field survey. Based on these findings, the proposed Project would not disturb any known Historical Resources as defined under CEQA (Appendix C). No ground disturbance should occur until the lead agencies concur with this finding.

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?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated.

Archaeological resources are defined as the physical remains of past human activities and can be either prehistorical or historical in origin. Archaeological sites are locations that contain evidence of human activity. In general, an archaeological site is defined by a significant accumulation, or presence, of one or more of the following: food remains, waste from the manufacturing of tools, concentrations or alignments of stones, modification of rock surfaces, unusual discoloration or accumulation of soil, or human skeletal remains.

The topsoil within the Project has been heavily disturbed from vegetation removal and machine grading over time; continual disturbance by grading leaves little potential for the presence of intact resources within the surface or near surface of the Project Area. However, surface sediments within the Project Area consist of Pleistocene/Holocene alluvium (Appendix C). Although no pre-contact resources have been previously identified within the Project Area or in the vicinity, alluvial sediments are considered to hold

potential for subsurface cultural resources because they were deposited concurrently with human occupation of the region and thus, the potential for subsurface resources is considered low to moderate (Appendix C).

Although the archaeological sensitivity is low to moderate, there is still a potential for ground-disturbing activities to expose previously unrecorded cultural resources. CEQA requires the lead agency to address any unanticipated cultural resources discoveries during project construction. Therefore, implementation of Mitigation Measure **CUL-1** would reduce potential adverse impacts to less than significant.

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 dedicated cemeteries?	☐	☒	☐	☐

Less Than Significant with Mitigation Incorporated.

No human remains or dedicated cemeteries were identified during the records search and field survey completed for the Proposed Project. However, the possibility exists that human remains could be uncovered during construction of the Proposed Project. Implementation of mitigation measures **CUL-1** would ensure that impacts to human remains are less than significant.

4.5.3 Mitigation Measures

CUL-1: Unanticipated Discoveries. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 100-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. The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) and Gabrieleno Band of Mission Indians-Kizh Nation shall be contacted, as detailed within **TCR-1** and **TCR-2**, 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.

- 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 **TCR-1**. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.
- 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.

4.6 Energy

4.6.1 Environmental Setting

Introduction

Energy consumption is analyzed in this Initial Study due to the potential direct and indirect environmental impacts associated with the Project (Appendix D). Such impacts include the depletion of nonrenewable resources (oil, natural gas, coal, etc.) and emissions of pollutants during the construction and operational phases. The impact analysis focuses on the four sources of energy that are relevant to the proposed Project: electricity, natural gas, the equipment-fuel necessary for Project construction, and the automotive fuel necessary for Project operations.

Electricity/ Natural Gas Services

The Rancho Cucamonga Municipal Utility (RCMU) provides economic and reliable electricity to over 1,200 metered businesses and residents in a selected area within the Southeastern proximity of the City of Rancho Cucamonga. The Southern California Gas Company provides natural gas services to the Project area. Southern California Gas services approximately 21.6 million customers, spanning roughly 20,000 square miles of California. RCMU and Southern California Gas would extend electric and natural gas service to the Project in accordance with rules and policies for extension of service.

Energy Consumption

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g. of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption associated with all non-residential uses in San Bernardino County from 2015 to 2019 is shown in Table 4.6-1. As indicated, the demand has remained constant since 2015.

Table 4.6-1. Non-Residential Electricity Consumption in San Bernardino County 2015-2019

Year	Electricity Consumption (kilowatt hours)
2019	9,932,883,836
2018	10,218,204,987
2017	10,126,534,255
2016	9,991,048,834
2015	9,810,564,235

Source: CEC 2019

The natural gas consumption associated with all non-residential uses in San Bernardino County from 2015 to 2019 is shown in Table 4.6-2. As indicated, the demand has increased since 2015.

Table 4.6-2. Non-Residential Natural Gas Consumption in San Bernardino County 2015-2019	
Year	**Natural Gas Consumption (therms)**
2019	272,238,232
2018	268,588,761
2017	257,879,077
2016	259,752,692
2015	245,499,027

Source: CEC 2019

Automotive fuel consumption in San Bernardino County from 2016 to 2020 is shown in Table 4.6-3. Fuel consumption has decreased between 2016 and 2020.

Table 4.6-3. Automotive Fuel Consumption in San Bernardino County 2016-2020	
Year	**Total Fuel Consumption (gallons)**
2020	1,201,691,049
2019	1,217,246,722
2018	1,235,583,427
2017	1,250,905,259
2016	1,266,302,939

Source: CARB 2017

4.6.2 Energy (VI) Environmental Checklist and Discussion

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?	☐	☐	☒	☐

Less than significant.

The impact analysis focuses on the four sources of energy that are relevant to the proposed Project: electricity, natural gas, the equipment-fuel necessary for Project construction, and the automotive fuel necessary for Project operations. Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed land use project. For the purpose of this analysis, the amount of electricity and natural gas estimated to be consumed by the Project is quantified and compared to that consumed by all non-

residential land uses in San Bernardino County. Similarly, the amount of fuel necessary for Project construction and operations is calculated and compared to that consumed in San Bernardino County.

The analysis of electricity gas usage is based on CalEEMod modeling conducted by ECORP Consulting (see Emissions Assessment), which quantifies energy use for Project operations. The amount of operational automotive fuel use was estimated using the CARB's EMFAC2017 computer program, which provides projections for typical daily fuel usage in San Bernardino County. The amount of total construction-related fuel use was estimated using ratios provided in the Climate Registry's General Reporting Protocol for the Voluntary Reporting Program, Version 2.1. Energy consumption associated with the proposed Project is summarized in Table 4.6-4.

Table 4.6-4. Proposed Project Energy and Fuel Consumption

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Electricity Consumption[1]	125,533 kilowatt-hours	0.001 percent
Natural Gas[1]	470 therms	0.017 percent
Automotive Fuel Consumption		
Project Construction 2021[2]	46,897 gallons	0.003 percent
Project Operations[3]	6,032 gallons	0.0005 percent

Source: [1]CalEEMod; [2]Climate Registry 2016; [3]EMFAC2017 (CARB 2017)
Notes: The Project increases in electricity and natural gas consumption are compared with all of the non-residential buildings in San Bernardino County in 2019, the latest data available. The Project increases in automotive fuel consumption are compared with the countywide fuel consumption in 2020, the most recent full year of data.

Operations of the proposed Project would include electricity and natural gas usage from lighting, space and water heating, and landscape maintenance activities. As shown in Table 4.6-4, the annual electricity consumption due to operations would be 125,533 kilowatt-hours resulting in an approximate 0.001 percent increase in the typical annual electricity consumption attributable to all non-residential uses in San Bernardino County. However, this is potentially a conservative estimate as Project plans tentatively include installation of rooftop solar panels not factored into energy consumption estimates.

In September 2018 Governor Jerry Brown Signed EO B-55-18, which established a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Carbon neutrality refers to achieving a net zero CO_2 emissions. This can be achieved by reducing or eliminating carbon emissions, balancing carbon emissions with carbon removal, or a combination of the two. This goal is in addition to existing statewide targets for GHG emission reduction. Governor's Executive Order B-55-18 requires CARB to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." Furthermore, the Project's increase in natural gas usage of 0.017 percent across all non-residential uses in the County would also be negligible. For these reasons, the Project would not result in the inefficient, wasteful, or unnecessary consumption of building energy.

Fuel necessary for Project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the Project site. The fuel expenditure necessary to construct the physical building and infrastructure would be temporary, lasting only as long as

Project construction. As further indicated in Table 4.6-4, the Project's gasoline fuel consumption during the one-time construction period is estimated to be 46,897 gallons of fuel. This would increase the annual countywide gasoline fuel use in the county by 0.003 percent. As such, Project construction would have a nominal effect on local and regional energy supplies. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would judiciously use fuel supplies to minimize costs due to waste and subsequently maximize profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during Project construction. For these reasons, it is expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

Per information provided in the Project site plan, the Project is estimated to generate approximately 45 daily trips. As indicated in Table 4.6-4, this would estimate to a consumption of approximately 6,032 gallons of automotive fuel per year, which would increase the annual countywide automotive fuel consumption by 0.0005 percent. The amount of operational fuel use was estimated using CARB's EMFAC2017 computer program, which provides projections for typical daily fuel usage in San Bernardino County. This analysis conservatively assumes that all of the automobile trips projected to arrive at the Project during operations would be new to San Bernardino County. Further, a conservative approach was taken for vehicle trip estimation to ensure potential impacts due to operational gasoline usage were adequately accounted. Fuel consumption associated with vehicle trips generated by the Project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

For these reasons, this impact 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 or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Less than significant.

The Project would be designed in a manner that is consistent with relevant energy conservation plans and designed to encourage development that results in the efficient use of energy resources. The Project will be built to the Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations (Title 24). Title 24 was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years; the 2013 standards became effective July 1, 2014. The 2016 Title 24 updates went into effect on January 1, 2017. The 2019 Energy Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential

buildings. The 2019 update to the Energy Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The 2019 Energy Standards are a major step toward meeting Zero Net Energy. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments. Additionally, in January 2010, the State of California adopted the California Green Building Standards Code (CalGreen) that establishes mandatory green building standards for all buildings in California. The code was subsequently updated in 2013. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. Furthermore, the Project would also be consistent with the City's General Plan, specifically Policy LU-3.4 which strives to promote development that is sustainable in its use of land and limits impacts on natural resources, energy, air and water.

For these reasons, this impact would be less than significant.

4.6.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.7 Geology and Soils

4.7.1 Environmental Setting

A site-specific geotechnical investigation was conducted by Leighton Consulting, Inc. in November 2020 (Appendix E). The purpose of the investigation was to evaluate geologic hazards and geotechnical conditions of the site and provide geotechnical recommendations for design of the proposed fire station development.

Regional Seismicity and Fault Zones

An "active fault," according to California Department of Conservation, Division of Mines and Geology, is a fault that has indicated surface displacement within the last 11,000 years. A fault that has not shown geologic evidence of surface displacement in the last 11,000 years is considered "inactive."

A major earthquake (7.0 magnitude) on the Cucamonga Fault, located approximately five miles north of the project site, is assumed to be the worst-case earthquake scenario for the City. Ground displacements of up to 9 feet could occur along the fault, intense ground shaking could last more than 30 seconds, and losses could be extensive (City of Rancho Cucamonga 2010a). The Red Hill – Etiwanda Avenue Fault is considered capable of ground shaking at an intensity that presents unacceptable risks to proposed structures. This fault is located approximately one mile north of the project site.

Soils

The property slopes down toward the south, from an elevation of 1,245 above mean sea level (AMSL) to the northern end down to 1,231 feet AMSL at the southern end (2.7% slope to the south) generally toward the Santa Ana River at distance to the south. According to the National Resources Conservation Service

Web Soil Survey website (NRCS 2020), soil on the project site consists of Tujunga loamy sand, 0 to 5 percent slopes. The Rancho Cucamonga General Plan EIR describes these soils as consisting of brown loamy sand and pale-brown coarse sand. These soils are about 60 inches thick, somewhat excessively drained, and found on nearly level to moderately sloping alluvial fans. Tujunga soils are slightly acidic and highly permeable so runoff on these soils is slow to very slow. Hazards from water erosion are slight and hazards from wind erosion are moderate to high on bare soils. Tujunga soils have a low shrink-swell potential and are considered non-plastic (City of Rancho Cucamonga 2010b).

According to the geotechnical report, undocumented artificial fill was encountered at a depth of approximately 3 feet below grade and the fill is estimated to a have a thickness of 5 feet at that boring location. Significant fill thicknesses were not identified in any of the other exploratory borings performed onsite. Sampled fill was predominantly silty sand (SM). Native alluvial fan deposits were encountered at the surface and below undocumented fill, to the depths explored (51.5 feet), typically graded from primarily silty sands (SM) to sand with silt and gravel (SPSM). Sampled soils were primarily medium dense to very dense, coarse and well-graded (Leighton Consulting 2020).

4.7.2 Geology and Soils (VII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☒	☐	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐

Less than significant with mitigation incorporated.

i) According to the City's General Plan, the nearest Alquist-Priolo Earthquake Fault Zone is the Red Hill – Etiwanda Avenue Fault, located approximately one mile north of the project site (City of Rancho Cucamonga 2010a). In the event of an earthquake, strong ground shaking would occur. However, future construction of structures would be required to comply with

current building codes and design standards which would reduce the risk of loss, injury, or death resulting from strong ground-shaking. Design of the Proposed Project would follow the recommendations of a registered civil, structural engineer and/or engineering geologist and at a minimum meet current building standards and codes including those associated with protection from anticipated seismic events. The site-specific geotechnical report provides a series of recommendations related to seismic design parameters (Leighton Consulting 2020; Appendix E). With implementation of Mitigation Measure **GEO-1**, impacts would be less than significant.

ii) As discussed above, in the event of an earthquake strong ground shaking is expected to occur on the project site. The Proposed Project would not expose people or structures to strong seismic ground shaking greater than what currently exists. Design and construction would comply with current building codes and standards which would reduce the risk of loss, injury, or death resulting from strong ground shaking. With implementation of Mitigation Measure **GEO-1**, impacts would be less than significant.

iii) Liquefaction is a phenomenon in which water-saturated granular soil loses shear strength during strong ground shaking produced by earthquakes. The loss of soil strength occurs when cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include the loss of bearing strength beneath structures, possibly causing foundation failure and/or significant settlements.

According to the Rancho Cucamonga General Plan, groundwater is generally 350 feet or more below the ground surface. The project site is not located in a zone of potential liquefaction (City of Rancho Cucamonga 2010a). Based on the absence of shallow groundwater and the dense nature of the sands onsite, liquefaction is unlikely to occur at the site (Leighton Consulting 2020). For these reasons, the Proposed Project is not anticipated to have adverse effects that could result in risk of loss, injury, or death due to liquefaction that may occur during a seismic event. Impacts would be less than significant.

iv) Landslides refer to a wide variety of processes that result in the perceptible downward and outward movement of soil, rock, and vegetation under gravitational influence. Common names for landslide types include slump, rockslide, debris slide, lateral spreading, debris avalanche, earth flow, and soil creep. Landslides may be triggered by both natural- and human-induced changes in the environment resulting in slope instability.

The project site and surrounding terrain are relatively flat and no hillsides exist in the immediate vicinity. According to the Rancho Cucamonga General Plan Geologic Hazard Map, the project site does not lie in a region susceptible to landslides (City of Rancho Cucamonga 2013a). The potential for

seismically induced landslide activity is considered negligible for this site due to the lack of significant slopes (Leighton Consulting 2020). As such, no impact 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?	☐	☐	☒	☐

Less than significant.

The Proposed Project would require ground-disturbing activities, such as grading, that could potentially result in soil erosion or loss of topsoil. These exposed soils could potentially cause erosion impacts during windy conditions and from construction vehicles traveling through the project site. Heavy rains could cause the exposed soils to run off into public rights-of-way and/or storm drainage systems.

The proposed Project would disturb greater than 1 acre of land, and therefore would be required to obtain coverage under the Construction General Permit, either through a waiver or through preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP identifies all potential pollutants and their sources, including erosion, sediments, and constructions materials and must include a list of Best Management Practices (BMPs) to reduce the discharge of construction-related stormwater pollutants. A SWPPP must include a detailed description of controls to reduce pollutants and outline maintenance and inspection procedures. A SWPPP also defines proper building material staging and storage areas, paint and concrete washout areas, describes proper equipment/vehicle fueling and maintenance practices, measures to control equipment/vehicle washing and allowable non-stormwater discharges, and includes a spill prevention and response plan.

Approximately 9,000 CY of soils have been stockpiled on the south portion of the site and would be used to raise the base elevation of the site. The Proposed Project's grading plan and SWPPP would also ensure that the proposed earthwork and storm water structures are designed to avoid soil erosion. Typical sediment and erosion BMPs include protecting storm drain inlets, establishing and maintaining construction exits and perimeter controls to avoid tracking sediment off-site onto adjacent roadways. 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) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

Less than significant.

As discussed in the responses to questions a) i) through iv) of this section, hazards associated with liquefaction, lateral spread, and landslides are not expected (Leighton Consulting 2020; Appendix E). Compliance with City procedures for plan check, permit issuance, and construction inspection ensure

would ensure that the Proposed Project is appropriately designed to minimize potential hazards related to soil instability. 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) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐

Less than significant with mitigation incorporated.

According to the National Resources Conservation Service Web Soil Survey website (NRCS 2020), soil on the project site consists of Tujunga loamy sand, 0 to 5 percent slopes. The Rancho Cucamonga General Plan EIR describes these soils as consisting of brown loamy sand and pale-brown coarse sand. These soils are about 60 inches thick, somewhat excessively drained, and found on nearly level to moderately sloping alluvial fans. Tujunga soils are slightly acidic and highly permeable so runoff on these soils is slow to very slow. Hazards from water erosion are slight and hazards from wind erosion are moderate to high on bare soils. Tujunga soils have a low shrink-swell potential (City of Rancho Cucamonga 2010b). However, volume change of excavated on-site fill soils, upon re-compaction, is expected to vary significantly with material type (e.g. undocumented fill, alluvium, etc.), oversized cobble and boulder content, location and compaction effort (Leighton Consulting 2020). With implementation of Mitigation Measure **GEO-1,** impacts would be reduced to 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?	☐	☐	☐	☒

No impact.

The Project does not propose construction of septic tanks. No impact 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?	☐	☒	☐	☐

Less than significant with mitigation incorporated.

A paleontological records search was completed by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County on January 8, 2020 (Appendix C). The records search indicated that no fossil localities lie directly within the project area, but there are fossil localities from the same sedimentary deposits that occur in surrounding areas, either at the surface or at depth.

Table 4.7-1. Paleontological Resources

Locality Number	Location	Formation	Taxa	Depth
LACM VP 7811	W of Orchard Park, Chino Valley	Unknown formation (eolian, tan silt; Pleistocene)	Whip snake (*Masticophis*)	9-11 feet bgs
LACM VP 1728	W of intersection of English Rd & Peyton Dr, Chino	Unknown (light brown shale with interbeds of very coarse brown sand; Pleistocene)	Horse (*Equus*), camel (*Camelops*)	15-20 ft bgs
LACM VP 7268, 7271	Sundance Condominiums, S of Los Serranos Golf Course	Unknown (Pleistocene)	Unspecified vertebrates	Unknown
LACM VP 1207	Hill on east side of sewage disposal plant; 1 mile N-NW of Corona	Unknown formation (Pleistocene)	Cow family (Bovidae)	Unknown

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

Although no paleontological resources are known to exist on the site, there is a possibility that paleontological resources exist at sub-surface levels on the project site and may be uncovered during grading and excavation activities. Implementation of mitigation measure **GEO-2** would ensure that if any such resources are found during construction of the Proposed Project, they would be handled according to the proper regulations and any potential impacts would be reduced to less than significant levels.

4.8 Greenhouse Gas Emissions

4.8.1 Environmental Setting

Greenhouse Gas (GHG) emissions are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and chlorofluorocarbons, creates a blanket around the earth

that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps over 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

The local air quality agency regulating the SoCAB is the SCAQMD, the regional air pollution control officer for the basin. To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff convened a GHG CEQA Significance Threshold Working Group. The Working Group was formed to assist the SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the Basin, various utilities such as sanitation and power companies throughout the Basin, industry groups, and environmental and professional organizations. On October 8, 2008, the SCAQMD released the Draft AQMD Staff CEQA GHG Significance Thresholds. On September 28, 2010, the SCAQMD recommended an interim screening level numeric, bright-line threshold of 3,000 metric tons of CO_2e annually and an efficiency-based threshold of 4.8 metric tons of CO_2e per service population (Project employees + patrons + residents) per year in 2020 and 3.0 metric tons of CO_2e per service population per year in 2035. These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. The working group was formed to assist the SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the state Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the basin, industry groups, and environmental and professional organizations. The numeric bright line and efficiency-based thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provide guidance to CEQA practitioners and lead agencies with regard to determining whether GHG emissions from a proposed project are significant.

City of Rancho Cucamonga Sustainable Community Action Plan

The Sustainable Community Action Plan (2017) summarizes the direction and future goals for sustainability in Rancho Cucamonga. The goals and policies identified in the Plan are geared towards improving sustainability in Rancho Cucamonga in a manner that provides environmental, economic and health benefits to the community. As part of the Sustainable Community Action Plan Rancho Cucamonga set a goal to reduce greenhouse gas emissions 15 percent below 2008 levels by 2020. In total, existing actions, state programs, and the goals and policies in this Plan will reduce GHG emissions in Rancho Cucamonga by an estimated 16.9 percent by 2020. As the City looks to future GHG reductions goals, Rancho Cucamonga will look to align greenhouse gas reduction goals with State targets for 2030 and

beyond. The implementation of the Plan will provide a focused roadmap for advancing environmental sustainability and reducing greenhouse gas reductions.

4.8.2 Greenhouse Gas Emissions (VIII) Environmental Checklist and Discussion

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?	☐	☐	☒	☐

Less than significant.

A potent source of GHG emissions associated with the proposed Project would be combustion of fossil fuels during construction activities. The construction phase of the proposed Project is temporary but would result in GHG emissions from the use of heavy construction equipment and construction-related vehicle trips.

Construction-related activities that would generate GHGs include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 4.8-1 illustrates the specific construction generated GHG emissions that would result from construction of the Project.

Table 4.8-1. Construction-Related Greenhouse Gas Emissions

Emission Source	CO_2e (Metric Tons/ Year)
Construction in the Year 2021	475

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

As shown in Table 4.8-1, Project construction would result in the generation of approximately 475 metric tons of CO_2e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. The calculated construction emissions are amortized over 30 years and added to the annual average operational emissions consistent with SCAQMD recommendations.

Operational-Generated Greenhouse Gas Emissions

Operation of the Project would result in GHG emissions predominantly associated with the use of motor vehicles traveling to and from the site. Long-term operational emissions attributable to the Project are identified in Table 4.8-2 and compared to SCAQMD's numeric bright-line threshold of 3,000 metric tons of CO_2e annually.

Table 4.8-2. Operational-Related GHG Emissions	
Emissions Source	**CO_2e (Metric Tons/ Year)**
Construction Emissions (amortized over the 30-year life of the Project)	16
Area Source Emissions	0
Energy Source Emissions	43
Mobile Source Emissions	49
Solid Waste Emissions	7
Water Emissions	21
Total Emissions	**136**
SCAQMDs Potentially Significant Impact Threshold	*3,000*
Exceed Significance Threshold?	**No**

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.
Notes: Emissions account 45 daily vehicle trips which includes 18 staff, 22 visitors and 5 emergency response events.

As shown in Table 4.8-2, Project operations would result in an increase of approximately 136 metric tons of CO_2e annually and would not exceed SCAQMD's significance threshold of 3,000 metric tons annually. This threshold was developed to ensure at least 90 percent of new GHG emissions would be reviewed and assessed for mitigation, thereby contributing to the statewide GHG emissions reduction goals for the year 2020 promulgated under AB 32 and the post-2020 reduction goals promulgated under SB 32. Thus, both cumulatively and individually, projects that generate less than 3,000 metric tons CO_2e per year have a negligible contribution to overall emissions.

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 an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

No impact.

The Rancho Cucamonga Sustainable Community Action Plan (2017) is a strategic planning document that identifies sources of GHG emissions within the City's boundaries, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic policies and actions to reduce emissions from the energy, transportation, land use, water use, and waste sectors. The GHG-reduction strategies in the Plan build on inventory results and key opportunities prioritized by City staff and members of the public. The Sustainable Community Action Plan strategies consist of strategies that identify the steps the City will take to support reductions in GHG emissions. The City will achieve these reductions in GHG emissions through a mix of voluntary programs and new strategic standards. All

standards presented in the Sustainable Community Action Plan respond to the needs of development though achieving more efficient use of resources.

Both the existing and the projected GHG inventories in the Sustainable Community Action Plan were derived based on the land use designations and associated densities defined in the City 2010 General Plan. The proposed Project is consistent with the land use designation and development density presented in the 2010 General Plan. As previously stated, the Project site is designated by the City's General Plan as CC and allows for the development of service-oriented businesses that serve the entire community. Since the Project is consistent with the General Plan it is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan. As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by the City to develop the Sustainable Community Action Plan.

While the Sustainable Community Action Plan does not contain specific requirements for new developments like that proposed by the Project, all development in Rancho Cucamonga, including the Project, is required to adhere to all City-adopted policy provisions, including those contained in the adopted Sustainable Community Action Plan. The City ensures all feasible GHG-reducing strategies of the Sustainable Community Action Plan are incorporated into projects and their permits through development review and applications of conditions of approval as applicable.

The proposed Project would not conflict with an adopted plan, policy, or regulation pertaining to GHGs.

4.8.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.8.4 Mitigation Measures

GEO-1: The Project Applicant shall implement the *Conclusions and Recommendations* and *Construction Considerations* as listed in the final site-specific geotechnical report (*Geotechnical Exploration City of Rancho Cucamonga Fire Station No. 178, Assessor Parcel Number 1077-422-58, South of Town Center Drive West of Terra Vista Parkway, Rancho Cucamonga, California*.

GEO-2: Unanticipated Discovery – Paleontological Resource. If paleontological resources (i.e., fossil remains) are discovered during excavation activities, the contractor will notify the City and cease excavation within 100 feet of the find until a qualified paleontological professional can provide an evaluation of the site. The qualified paleontological professional will evaluate the significance of the find and recommend appropriate measures for the disposition of the site (e.g. fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

4.9 Hazards and Hazardous Materials

LSA Associates, Inc. (LSA) prepared a Phase 1 Environmental Site Assessment (ESA) for the proposed Project in 2016 (LSA 2016; Appendix F). The purpose of the Phase 1 ESA is to identify recognized environmental conditions in connection with the property. The report also included a review of historical aerial photographs and historical contamination characterization studies to determine previous usage, storage, and/or disposal of hazardous materials at the site.

Recognized Environmental Condition (REC). REC refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

Controlled Recognized Environmental Condition (CREC). CREC refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

Historical Recognized Environmental Conditions (HREC). HREC refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

4.9.1 Hazards and Hazardous Materials (IX) Environmental Checklist and Discussion

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?	☐	☐	☒	☐

Less than significant.

According to the site-specific Phase 1 ESA, no recognized environmental conditions currently exist relative to the property. Based on available information, LSA concludes that there is a very low probability for the site to contain any RECs, CRECs, HRECs, or conditions that would threaten public health or safety. There were no indications of wells or underground or above-ground storage tanks on the property. A review of government agency databases indicates: 1) the site is not referenced as using, generating, storing, or disposing of hazardous materials; 2) no underground storage tanks have been permitted for the site; and 3) no unauthorized releases of petroleum hydrocarbons have been reported for the site. There were several offsite facilities listed in the governmental databases as being associated with hazardous materials (e.g. gas station, pharmacy), but there is no indication that any of these facilities would contribute to hazardous conditions on the subject property (LSA 2016; Appendix F).

The construction phase of the Proposed Project may include the transport, storage, and short-term use of petroleum-based fuels, lubricants, pesticides, and other similar materials. These activities would be short-term and one-time events and would be subject to federal, state, and local health and safety requirements. The transport of hazardous materials by truck is regulated by federal safety standards under the jurisdiction of the U.S. Department of Transportation. Additionally, the implementation of BMPs stipulating proper storage of hazardous materials and vehicle refueling would be implemented during construction as part of the SWPPP. All transport, handling, use, and disposal of substances such as petroleum products, paints, and solvents related to the operation and maintenance of the Proposed Project would comply with all Federal, State, and local laws regulating management and use of hazardous materials. Long-term operation of the Proposed Project would involve very little transport, storage, use, or disposal of hazardous material. A less than significant impact related to the use or transport of hazardous materials is expected to occur.

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?	☐	☐	☒	☐

Less than significant.

On-site storage and/or use of large quantities of hazardous materials capable of affecting soil and groundwater are not proposed. However, during construction some hazardous materials, such as diesel fuel and herbicides, would be used. A SWPPP, listing BMPs to prevent construction pollutants and products from violating any water quality standard or waste discharge requirements would be prepared for the Proposed Project. The potential risk associated with accidental discharge during use and storage of equipment-related hazardous materials would be low since the handling of such materials would be addressed through the implementation of BMPs. With the implementation of BMPs, the Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous material. 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?	☐	☐	☐	☒

No impact.

The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The nearest school to the project site is Ruth Musser Middle School, located approximately 0.32-mile northwest of the site. No impact would occur.

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?	☐	☐	☐	☒

No impact.

As discussed above, the site-specific Phase 1 ESA indicates that no recognized environmental conditions currently exist relative to the property. Based on available information, the report concludes that there is a very low probability for the site to contain any RECs, CRECs, HRECs, or conditions that would threaten public health or safety (LSA 2016; Appendix F). A search of the Department of Toxic Substances Control's (DTSC) Hazardous Waste and Substances Site List (Cortese List) and EnviroStor online database and the State Water Resources Control Board (SWRCB) GeoTracker online database was conducted for the Proposed Project area (DTSC 2020a and 2020b; SWRCB 2020). The searches revealed no known hazardous materials on the project site or immediate vicinity. No impact would occur.

	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 for people residing or working in the project area?	☐	☐	☒	☐

Less than significant.

The project site is located approximately 3.65 miles northeast of the Ontario International Airport. According to the Ontario Airport Land Use Compatibility Plan, the site is within the boundaries of the airport Influence Area and the Federal Aviation Administration (FAA) Height Notification Surface zone. The proposed Project site is infill and surrounded by development including commercial centers, residential, roads, and streetlights. The Project would construct a fire station and would not result in a safety hazard for people residing or working in the project area. A less than significant impact 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?	☐	☐	☐	☒

No impact.

The Proposed Project would not substantially impair any adopted emergency response plans. The City produced a Ready RC Guide which provides essential tips on what to do before, during and after a disaster. The guide focuses primarily on fire, flood, earthquake, and wind disasters. This comprehensive booklet includes emergency kit checklists, evacuation route maps, shelter information and more (City of Rancho Cucamonga 2017).

The proposed fire station would expand emergency services for the City, and thus would benefit implementation of the Ready RC Guide. Thus, the Project would not substantially interfere with an adopted emergency response plan or emergency evacuation plan. No impact would occur.

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?	☐	☐	☐	☒

No impact.

The proposed fire station would expand emergency services for the City, and thus would benefit implementation of the Ready RC Guide. Furthermore, the site is infill and is surrounded by development. According to CALFIRE, the site not located in a high fire hazard zone (CALFIRE 2008). Thus, the Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. No impact would occur.

4.9.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

Regional Hydrology

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 Cucamonga Basin (City of Rancho Cucamonga 2010b).

The alluvial fans underlying the City were created by several stream systems from the eastern San Gabriel Mountains. These fans and washes represent debris flow events in the recent geologic period. The San Bernardino County Flood Control District maintains debris basins and flood-control facilities in the area to control debris flows and flooding hazards along the canyons, creeks and washes (City of Rancho Cucamonga 2010b).

Site Hydrology and On-Site Drainage

The Project site is currently undeveloped and does not contain any storm drain infrastructure. The property slopes down toward the south, from an elevation of 1,245 above mean sea level (AMSL) to the northern end down to 1,231 feet AMSL at the southern end (2.7% slope to the south). Surface runoff flows to the south, generally toward the Santa Ana River at distance to the south. Infill and grading would address the current grade difference between the project site and Town Center Drive, which runs along the northern project boundary.

4.10.2 Hydrology and Water Quality (X) Environmental Checklist and Discussion

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?	☐	☐	☒	☐

Less than significant.

During construction of the Proposed Project water quality impacts could occur without proper controls. Soils loosened during grading, spills of fluids or fuels from vehicles and equipment or miscellaneous construction materials and debris, if mobilized and transported offsite in overland flow, could degrade water quality. Because the area of ground disturbance affected by construction of the Proposed Project would exceed one acre, the Proposed Project would be subject to the requirements of the statewide NPDES stormwater permit for construction activity (Order 98-08 DWQ). The proponent of the Proposed Project would implement a SWPPP listing BMPs to prevent construction pollutants and products from violating any water quality standards or waste discharge requirements.

During operations the Proposed Project would implement a Water Quality Management Plan (WQMP). The WQMP details the Proposed Project's stormwater management system to address post-construction runoff quality and quantity. The Proposed Project's stormwater management system includes a bioretention basin at the northwest corner of the site, and three more basins along the eastern portion of the site (Figure 5. Drainage Plan). Stormwater runoff from the proposed development would be directed to the proposed bioretention basins. Impacts to surface or ground water quality during project operation would be 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?	☐	☐	☒	☐

Less than significant.

The Proposed Project would include both pervious (water quality basins, and landscape areas) and impervious (hardscapes, building footprints) surfaces. The Proposed Project would not involve the withdrawal of groundwater. Water supply for the fire station uses would be provided by the Cucamonga Valley Water District. The Proposed Project's stormwater management system includes the use of bioretention basins, which would allow groundwater recharge. Therefore, the proposed Project is not anticipated to substantially affect groundwater recharge. 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) 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 that would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐

iv) impede or redirect flood flows?	☐	☐	☐	☒

Less than significant.

i) The Proposed Project would require grading of the project site which would result in localized changes in discharge patterns, which could result in erosion and/or siltation. Erosion and/or siltation during construction would be minimized by implementation of BMPs included in the Proposed Project's SWPPP. Furthermore, the Proposed Project grading plan and stormwater management system has been designed by a registered civil engineer to meet City development standards and safely collect and convey runoff to on-site basins. A series of design considerations are included in the site-specific geotechnical report, including setbacks from adjacent structures, installation of a robust silt/sediment removal system, and routine maintenance (Leighton Consulting 2020; Appendix E). Impacts would be less than significant.

ii) The Proposed Project's WQMP details the project's strategy to control the velocity and volume of surface runoff originating from the project site. The Proposed Project's WQMP includes the use of bioretention basins, which would accept runoff from the proposed development. The Proposed Project's basins are designed to allow stormwater to infiltrate into the ground reducing the velocity and volume of stormwater that is discharged from the project site. As such, the potential for flooding on- or offsite is reduced. Impacts would be less than significant.

iii) The Proposed Project's stormwater management system was designed by a registered civil engineer to ensure that the system's components are sized to treat the runoff volumes that are anticipated for the post-development condition. The system has also been designed to treat polluted runoff that is typical for commercial developments. As discussed above, design recommendations are included in the site-specific geotechnical report, which would prevent polluted runoff from exceeding the capacity of existing or planned stormwater drainage systems (Leighton Consulting 2020; Appendix E). Impacts would be less than significant.

iv) According to the General Plan EIR Figure 4.9-3 Flood Hazard Zones, the project site is located outside of the 0.2 percent chance of annual flood zone. Runoff from the proposed fire station would be conveyed to the water quality basins throughout the site. Therefore, the Proposed Project would not impede or redirect flood flows. No impact would occur.

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?	☐	☐	☐	☒

No impact.

According to the General Plan EIR Figure 4.9-3 Flood Hazard Zones, the project site is located outside of the 0.2 percent chance of annual flood zone. Additionally, the project site is located approximately 40

miles northeast of the Pacific Ocean and not in the vicinity of a large body of water. Due to the distance to the Pacific Ocean, the project site would not be subject to inundation from seiches or tsunamis. The project site is also located outside of an inundation area (City of Rancho Cucamonga 2010b). No impact 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?	☐	☐	☒	☐

Less than significant.

The project site is located within the Cucamonga Groundwater Basin. According to the Cucamonga Valley Water District (CVWD) 2015 Urban Water Management Plan (UWMP), CVWD predicts that it would have sufficient supply to meet water demands in the foreseeable future. To meet demand, the difference from reduced canyon flows, imported water restrictions and State mandated water reductions during a multi-dry year shall be made up from the district's stored groundwater from the Chino Basin, tier II imported water (if available), replenishment water (if available), and implementation of the water shortage contingency plan (CVWD 2016). The Proposed Project would comply with the Water Shortage Contingency Plan outlined in the UWMP, if implemented. For example, limits may be applied to the number of days, frequency and duration of outdoor watering. It is anticipated that the addition of six a fire station would not exceed the capacity of water supplies of the Cucamonga Basin. Furthermore, the Proposed Project would comply with the NPDES stormwater permit for construction activity (Order 98-08 DWQ), and as such would prepare a SWPPP to prevent groundwater contamination. By complying with all City and regional water conservation policies and regulations, impacts to water quality control and groundwater recharge would be less than significant.

4.10.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.11 Land Use and Planning

4.11.1 Environmental Setting

The project site is located along the south side of Town Center Drive, east of Haven Avenue at the intersection Town Center Drive and Terra Vista Parkway (Figure 2). The 3.67-acre property is vacant with landscaped parkways along the eastern and northern boundaries, two electrical transformer boxes and a fire hydrant at the southwest corner, four parking lot lights along the southern boundary, and small piles of soil near the southeast corner of the site. The property was rough graded in the past as part of the Terra Vista Community Plan but remained undeveloped since the 1990's.

The proposed fire station would be developed on roughly 2.23 acres while the remaining 1.44 acres is undeveloped with future site improvements. According to the Rancho Cucamonga General Plan (2010), the site is zoned and has a land use designation of Community Commercial (CC). The surrounding area comprises a variety of retail commercial uses as part of the Terra Vista Town Center. The land use designations surrounding the Project site consist of Medium High Density Residential, Office, Neighborhood Commercial, and Community Commercial.

The City of Rancho Cucamonga is currently updating the General Plan (PlanRC). This multi-year effort will involve a comprehensive General Plan update; comprehensive zoning code update; focused "area plans" for Foothill Boulevard, Haven Avenue, and Industrial District; Climate Action Plan; and Environmental Impact Report. The update is currently in the Listening and Visioning phase.

Table 4.11-1. Surrounding Zoning and Land Use Designations

	Land Use Designation	Zoning Designation	Existing Land Use
Project Site	Community Commercial	Community Commercial	Vacant Lot
North	Medium High Density Residential Neighborhood Commercial Office	Office Park	Commercial Offices, Multi-Family Residential
East	Community Commercial	Community Commercial	Commercial Center
South	Community Commercial	Community Commercial	Commercial Center
West	Community Commercial	Community Commercial	Commercial Center

Source: City of Rancho Cucamonga 2010a

4.11.2 Land Use and Planning (XI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒

No impact.

The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas.

The Project would take place within a vacant site surrounded by commercial development. While there are residential neighborhoods in the vicinity of the Project site, no separation of uses or disruption of access between land uses around the site would occur as a result of the Project. All development associated with

the Proposed Project would be confined to the project site and would not disrupt or divide the physical arrangement of the established community. Therefore, the Project would not affect any established community. No impact would occur.

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 land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Less than significant.

The Project would take place within a vacant site. For the proposed improvements, all activities will be conducted pursuant to the City's Municipal Code requirements and standards to avoid any conflict with any land use plan, policy, or regulation, resulting in a less than significant impact.

4.11.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.12 Mineral Resources

4.12.1 Environmental Setting

Approximately 2,422 acres of potential aggregate mineral resources are located within the City. The majority of this acreage is planned for Open Space, Conservation, Flood Control/Utility Corridor, or Hillside Residential, which represents a very low-density of development. As of 2009, approximately 437 acres of the sectors in the City have been developed. Consequently, land use conflicts between residential uses and possible aggregate extraction was identified as likely to occur in the City, particularly as residential use increases. The Sphere of Influence currently contains a rock crushing plant located within the Day Creek area, which is the only active aggregate operation in the City. As such, aggregate deposits available for recovery within the City may be limited due to conflicts between urban development, access, and the nature of typical surface mining operations (Rancho Cucamonga 2010a).

4.12.2 Mineral Resources (XII) Environmental Checklist and Discussion

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?	☐	☐	☐	☒

No impact.

According to the General Plan Mineral Land Classification Map, the project site is located in Mineral Resource Zone 2 (MRZ-2). MRZ-2 is defined as areas where geologic data indicate that significant PCC-Grade aggregate resources are present (CGS 2007). However, the Proposed Project consists of a fire station development on 2.23 acres of a 3.67-acre site within a developed Community Commercial district. As such, the site is not available or feasible for mining activities. No impact to mineral resources 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?	☐	☐	☐	☒

No impact.

There are four coalescing alluvial fans in or near the City, comprising a significant local sand and gravel resource. From west to east these alluvial fans are known as the San Antonio, Cucamonga, Deer Creek, and Day Creek fans (City of Rancho Cucamonga 2010a). According to the City's General Plan, the project site is not located in one of these regionally significant aggregate mineral resource areas. As discussed above, the Proposed Project would prepare 2.23 acres of a 3.67-acre site for development of a fire station. No mining activities currently exist on the site and the site is not zoned or available for mining. Therefore, no impact to locally important mineral resources would occur.

4.12.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.13 Noise

4.13.1 Environmental Setting

Existing Noise Environment

The City of Rancho Cucamonga, which encompasses the Project site, is impacted by various noise sources. It is subject to typical urban noise such as noise generated by traffic, heavy machinery, and day-to-day outdoor activities as well as noise generated from the various land uses (i.e., residential, commercial, institutional, and recreational and parks activities) throughout Rancho Cucamonga that generate stationary source noise. Mobile sources of noise, especially cars and trucks, are the most common source of noise in the community. The noise surveys conducted in 2009 for the City's General Plan concluded that the ambient noise environment in Rancho Cucamonga is largely influenced by roadway noise. The Project site is located in the immediate proximity (approximately 400 feet distant) of Haven Avenue. The City's General Plan identifies Haven Avenue, located west of the Project site, as a Principal Travel Corridor. Principal Travel Corridors traverse the City and extend beyond the City limits to connect to freeways and adjacent communities (City of Rancho Cucamonga 2010a). They carry high volumes of traffic that range from 30,000 to 40,000 daily vehicles, with more than 40,000 vehicles in certain locations (City of Rancho Cucamonga 2010a). According to noise measurements conducted by Mestre Greve Associates in 2010 for the General Plan EIR, the walking path on Church Street between Ralph M. Lewis Park and the Jamboree Apartments Complex (Site Number 17) located approximately 0.60 miles from the Project site was identified as experiencing an ambient noise level of 60.7 L_{eq}.

Noise-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. The nearest noise-sensitive land uses to the Project site are residences to the north, located on Terra Vista Parkway and approximately 545 feet distant. Additionally, the Transformation Calvary Chapel is located to the northeast of the Project site on Town Center Drive, approximately 557 feet distant.

4.13.2 Noise (XIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐

Less than significant with mitigation incorporated.

As previously described, noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise sensitive and may warrant unique measures for protection from intruding noise. The nearest noise-sensitive land uses to the Project site are residences located On Terra Vista Parkway approximately 545 feet distant and the Transformation Calvary Chapel on Town Center Drive approximately 557 feet distant.

Construction Noise Impacts

Construction noise associated with the proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., site preparation, grading and building construction, paving and architectural coating). Noise generated by construction equipment, including excavators, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive land uses in the vicinity of the construction site.

A previously described in Section 17.66.050 of the City's Development Code, construction activity is exempted provided that 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 when adjacent to a residential land use, school, church or similar type of use. Additionally, construction activity is exempted provided that 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

when adjacent to commercial or industrial use. As previously described, the Project site is surrounded directly by commercial land uses; however, there are residents and religious institutions in the vicinity.

To estimate the worst-case construction noise levels that may occur at the nearby land uses in the Project vicinity, the construction equipment noise levels were calculated using the Roadway Noise Construction Model for the site preparation, grading and building construction, paving and architectural coating phases as experienced at the nearest residential and commercial land uses. The anticipated short-term construction noise levels generated for the necessary equipment is presented in Table 4.12-1. Consistent with FTA recommendations for calculating construction noise, construction noise was measured from the center of the Project site (FTA 2018).

Table 4.12-1. Onsite Construction Average (dBA) Noise Levels by Receptor Distance and Construction Equipment

Equipment	Estimated Exterior Construction Noise Level @ Closest Residence	Construction Noise Standard (dBA L_{eq})	Exceeds Standards?	Estimated Exterior Construction Noise Level @ Closest Commercial Land Use	Construction Noise Standard (dBA L_{eq})	Exceeds Standards?
Site Preparation						
Graders (1)	56	**65**	**No**	69.3	**70**	**No**
Tractors/Loaders/Backhoes (1)	55	**65**	**No**	68.3	**70**	**No**
Scrapers (1)	54.6	**65**	**No**	67.9	**70**	**No**
Combined Site Preparation Equipment	60	**65**	**No**	73.3	**70**	**Yes**
Grading						
Rubber Tired Dozers (1)	52.7	**65**	**No**	66.0	**70**	**No**
Tractors/Loaders/Backhoes (2)	55.0 (each)	**65**	**No**	68.3 (each)	**70**	**No**
Graders (1)	56.0	**65**	**No**	69.3	**70**	**No**
Combined Grading Equipment	60.9	**65**	**No**	74.2	**70**	**Yes**
Building Construction, Paving & Architectural Coating						
Generator Sets (1)	52.6	**65**	**No**	65.9	**70**	**No**
Cranes (1)	47.6	**65**	**No**	60.9	**70**	**No**
Forklifts (2)	54.4 (each)	**65**	**No**	67.7 (each)	**70**	**No**
Tractors/Loaders/Backhoes (2)	55.0 (each)	**65**	**No**	68.3 (each)	**70**	**No**
Welders (3)	45.0 (each)	**65**	**No**	58.3 (each)	**70**	**No**
Cement and Mortar Mixers (1)	49.8	**65**	**No**	63.1	**70**	**No**
Pavers (1)	49.2	**65**		62.5	**70**	**No**
Rollers (2)	48.0 (each)	**65**	**No**	61.3 (each)	**70**	**No**
Paving Equipment (1)	49.2	**65**	**No**	62.5	**70**	**No**
Air Compressors (1)	48.7	**65**	**No**	62.0	**70**	**No**
Combined Building Construction, Paving & Architectural Coating Equipment	63.0	**65**	**No**	76.3	**70**	**Yes**

Source: Construction noise levels were calculated by ECORP Consulting using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Appendix A for Model Data Outputs.

Notes: Construction equipment used during construction derived from CalEEMod 2016.3.2. CalEEMod is designed to calculate air pollutant emissions from construction activity and contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters. Building construction, paving and architectural coating assumed to occur simultaneously. Distance to the nearest residence is approximately 887 feet measured from the center of the Project site and the distance to the nearest commercial land use is approximately 192 feet measured from the center of the Project site.

L_{eq} = The equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

As shown in Table 4.12-1, construction noise generated during all phases of construction would reach maximum noise levels below the 65 dBA construction noise standard for residential land uses. However, each construction phase does have the potential to exceed the 70 dBA construction noise standard established by the City for commercial land uses. Therefore, it is recommended that the implementation of temporary noise barriers be used during Project construction to reduce construction noise below the appropriate construction noise standard. Noise barriers or enclosures can provide a sound reduction of 35 dBA or greater (WEAL 2000). To be effective, a noise enclosure/barrier must physically fit in the available space, must completely break the line of sight between the noise source and the receptors, must be free of degrading holes or gaps, and must not be flanked by nearby reflective surfaces. Noise barriers must be sizable enough to cover the entire noise source and extend lengthwise and vertically as far as feasibly possible to be most effective. The limiting factor for a noise barrier is not the component of noise transmitted through the material, but rather the amount of noise flanking around and over the barrier.

In the case of Project construction, an enclosure/barrier would only be necessary on the western side of the construction site between the area of construction activity and where the closest commercial land use is located. Implementation of mitigation measure **NOI-1** would substantially reduce construction-generated noise levels. As previously described, noise barriers or enclosures such as that required by mitigation measure **NOI-1** can provide a sound reduction 35 dBA or greater (WEAL 2000), which would be a reduction robust enough to maintain construction noise at levels less than 70 dBA at the nearby commercial land uses. Therefore, Project construction activities would not expose persons to and generate noise levels in excess of City standards with implementation of **NOI-1**.

Project construction would result in minimal additional traffic on adjacent roadways over the time period that construction occurs. According to the CalEEMod model (Appendix G), which is used to predict air pollutant emissions associated with Project construction, including those generated by worker commute trips and vendor trips, the maximum number of construction workers and vendors traveling to and from the Project site on a single day would be 48 (44 worker trips and 4 vendor trips). According to the California Department of Transportation (Caltrans) *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013), doubling of traffic on a roadway is required to result in an increase of 3 dB (outside of the laboratory, a 3-dBA change is considered a just-perceivable difference). The Project construction would not result in a doubling of traffic on any roadway, and therefore its contribution to existing traffic noise would not be perceptible.

Operational Noise Impacts

Operational noise sources associated with the proposed Project include mobile and stationary (i.e., sirens, routine firehouse activities, training activity, backup beepers) sources.

Operational Offsite Traffic (Mobile) Noise

Project operation would also result in additional traffic on adjacent roadways, thereby increasing vehicular noise in the Project vicinity. Haven Avenue is the located in the immediate proximity (approximately 400 feet distant) of the Project site. According to the Rancho Cucamonga General Plan Haven Avenue is described as a Principal Travel Corridors and typically accommodates 30,000 to 40,000 vehicles per day.

Church Street, located approximately 955 feet north of the Project site, is classified as a Tertiary Travel Corridor in the City's General Plan and typically accommodates 10,000 to 15,000 vehicles per day. Based off assumptions and Project site plans, the proposed Project is anticipated to result in approximately 45 daily trips. These totals account for staff commutes and five emergency response trips daily. According to the California Department of Transportation (Caltrans) Technical Noise Supplement to the Traffic Noise Analysis Protocol (2013), doubling of traffic on a roadway would result in an increase of 3 dB (a barely perceptible increase). The Projects contribution of 45 trips distributed over several roadways would not result in a doubling of traffic on any single facility, thus the Project's contribution to existing traffic noise would not be perceptible.

Operational Onsite Stationary Noise

Upon completion, the main operational noise associated with the proposed Project would be sirens from emergency vehicles, backup beepers, training activities and routine firehouse activities. A previously stated, Section 17.66.050 of the City's Development Code exempts from the noise standards any mechanical device, apparatus, or equipment used, related to, or connected with emergency machinery, vehicle, work, or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within 30 minutes in any hour of its being activated. As such, the noise produced (sirens) from emergency vehicles (firetrucks and emergency response vehicles) is exempt in the City. Nonetheless, a full discussion of predicted sound levels generated by emergency vehicles has been included for full disclosure purposes. The onsite operational noise as a result of the proposed Project is discussed in terms of non-exempt and exempt noise.

Non-Exempt Onsite Stationary Noise

The main non-exempt stationary noise associated with the proposed Project would be backup beepers caused by the firetrucks entering the back-in bay, firehouse activities and training activities/ fire fighter drills.

Backup beepers, which would be a result of firetrucks entering the back-in bay, have the potential to generate noise levels up to 79.0 dBA at 30 feet (City of San Jose 2014). As previously stated, noise from a stationary or point source attenuates at a rate of approximately 6 dBA per doubling of distance (FHWA 2017). Thus, the backup beeper noise experienced at the nearest residences, located approximately 545 feet away, would be approximately 53.8 dBA. This noise level is under the exterior residential daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise limits presented in Section 17.66.050 of the City's Development Code (see Table 2). It is also noted that the exterior-to-interior reduction of newer residential units is generally 30 dBA or more (HMMS 2006). Thus, the exterior noise level as a result of backup beepers would be less than the interior residential daytime and nighttime noise limits presented in Section 17.66.050 of the City's Development Code.

Routine firehouse actives that have the potential to generate stationary noise on the Project site include personal gear checks and daily fire truck maintenance, which may include washing and cleaning the truck as well as changing/ updating mechanical equipment. Training activities/ fire fighter drills are proposed to be performed in the vicinity of the vehicle washdown area. Activities preformed here include aerial (fire

ladder) drills, hose drills and physical fitness tests. These tasks are usually performed during daytime hours and do not include the use of emergency sirens. A noise study conducted at 10 typical firefighter training activities found an average noise exposure of 78.0 dBA (Root 2013) at approximately 5 feet. As previously stated, according to the General Plan EIR, the ambient noise level near the Project site is approximately 60.7 L_{eq}. Noise from a stationary or point source attenuates at a rate of approximately 6 dBA per doubling of distance (FHWA 2017). Thus, the noise at the nearest residences, located approximately 545 feet away, would be less that that currently experienced in the Project vicinity and would be unnoticed. Additionally, these events would be random and short-lived. They would not substantially change the L_{dn} or CNEL for the Project vicinity as these intermittent activities would not constitute a significant change in the existing noise environment.

Exempt Onsite Stationary Noise

The Project is proposing the construction of a 12,363 SF two story fire station and associated features. Due to the nature of this Project, it would be a source of noise due to emergency activities such as sirens from emergency vehicles. As previously mentioned, per Section 17.66.050 of the City's Development Code, this noise is exempt from noise standards as it is associated with emergencies. Nonetheless, a full discussion of medical emergency-related noise sources has been included for informational purposes.

Emergency Sirens

Residential receptors and other noise-sensitive land uses in the immediate vicinity of the Project would experience periodic exposure to siren noise. The potential adverse effects of noise associated with the use of emergency vehicle sirens on the quality of life of nearby residents is often a concern in development of new fire stations.

Federal regulation limits emergency siren noise at 123 dBA at 10 feet. Factoring an attenuation rate of approximately 6 dBA per doubling of distance from the source equates to a noise level of approximately 103.5 dBA at 100 feet. Since emergency vehicle response is by nature rapid, the duration of exposure to this peak noise level is estimated to last for a maximum of 10 to 20 seconds as emergency vehicles enter and exit the Project site. Thus, receptors would be exposed to very short-duration high noise levels for approximately 10 to 20 seconds for each emergency response event. Further, it is typical practice for emergency vehicles use sirens to break traffic at intersections or warn drivers of the emergency vehicle approach when traffic is congested. It is not unlikely in minor emergency scenarios that a siren is not used. Responses to nighttime emergency calls, when nuisance noise is most noticeable, routinely occur without the use of sirens when possible. It is also noted that the manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer residential units is generally 30 dBA or more (HMMS 2006).

A key focus of analysis with regard to noise is the potential for long-term exposure to higher noise levels (i.e., continuous, involuntary exposure for many hours per day over a long period of time) that may adversely affect human health. As a result of this emphasis, noise standards focus on increases in long-term exposure to ongoing average noise levels rather than infrequent short-duration peak effects. Siren

noise from intermittent emergency vehicle trips sourced from the Project site would not substantially change the L_{dn} or CNEL for the Project vicinity as the intermittent siren use would not constitute a significant change in the existing noise environment. Additionally, per Section 17.66.050of the City's Development Code any mechanical device, apparatus, or equipment used, related to, or connected with emergency machinery, vehicle, work, or warning alarm or bell is exempt from noise standards.

Conclusion

Impacts would be less than significant with incorporation of mitigation measure **NOI-1.**

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Less than significant.

Construction Vibration Impacts

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the proposed Project would be primarily associated with short-term construction-related activities. Construction on the Project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. It is not anticipated that pile drivers would be necessary during Project construction. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with construction equipment are summarized in Table 4.12-2.

Table 4.12-2. Typical Construction Equipment Vibration Levels	
Equipment Type	**Peak Particle Velocity at 25 Feet (inches per second)**
Impact Pile Driver	0.644
Sonic Pile Driver	0.17
Vibratory Roller	0.21
Hoe Ram (Rock Breaker)	0.089
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer/Tractor	0.003

Source: FTA 2018

The City of Rancho Cucamonga does not regulate vibrations associated with construction. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020) recommended standard of 0.2 inch per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings. Consistent with FTA recommendations for calculating construction vibration, construction vibration was measured from the center of the Project site (FTA 2018). The nearest structures to the construction site is the commercial building located directly adjacent to the west.

Based on the representative vibration levels presented for various construction equipment types in Table 4.12-3 and the construction vibration assessment methodology published by the FTA (2018), it is possible to estimate the potential Project construction vibration levels. The FTA provides the following equation:

$$[PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}]$$

Table 4.12-3 presents the expected Project related vibration levels at a distance of 280 feet.

Table 4.12-3. Project Construction Vibration Levels at 280 Feet									
Receiver PPV Levels (in/sec)[1]							**Peak Vibration**	**Threshold**	**Exceed Threshold**
Large Bulldozer	**Pile Driver**	**Drilling**	**Loaded Trucks**	**Rock Breaker**	**Jack-hammer**	**Small Bulldozer**			
0.002	0.004	0.002	0.001	0.002	0.000	0.000	0.004	*0.02*	**No**

[1]Based on the Vibration Source Levels of Construction Equipment included on Table 4 (FTA 2018).

As shown, groundborne vibrations attenuate rapidly from the source due to geometric spreading and material damping. Geometric spreading occurs because the energy is radiated from the source and spreads over an increasingly large distance while material damping is a property of the friction loss which occurs during the passage of a vibration wave. Vibration as a result of construction activities would not exceed 0.2 PPV at the nearest structure. Thus, Project construction would not exceed the recommended threshold.

Operational Vibration Impacts

Project operations would not include the use of any stationary equipment that would result in excessive groundborne vibration levels. Therefore, the Project would result in no groundborne vibration impacts during operations.

Would the Project:	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?	☐	☐	☐	☒

No impact.

The Project site is located approximately 3.54 miles south of the LA/Ontario International Airport, located in the City of Ontario. Although aircraft flight patterns fall within Rancho Cucamonga's boundaries, noise from aircrafts is not a significant issue in the City. As identified in the 2010 General Plan EIR, the City is well outside the 65 dBA CNEL noise contours for the LA/Ontario International Airport. Aircraft noise does not significantly impact the City of Rancho Cucamonga and the proposed Project would not expose people visiting or working on the Project site to excess airport noise levels. No impact would occur.

4.13.3 Mitigation Measures

NOI-1: The Project improvement and building plans will include the following requirements for construction activities:

- In order to reduce construction noise, during the site preparation, grading, building construction and paving phases, a temporary noise barrier or enclosure shall be positioned between Project construction and the commercial land use to the west in a manner that breaks the line of sight between the construction equipment and that land use. The temporary noise barrier shall have a sound transmission class (STC) of 35 or greater in accordance with American Society for Testing and Materials Test Method E90, or at least 2 pounds per square foot to ensure adequate transmission loss characteristics. The temporary noise barrier should consist of a solid plywood fence at least 7/16-inch and/or flexible sound curtains, such as an 18-ounce tarp or a 2-inch-thick

fiberglass blanket, attached to chain link fencing. The length, height, and location of noise control barrier walls shall be adequate to assure proper acoustical performance. All noise control barrier walls shall be designed to preclude structural failure due to such factors as winds, shear, shallow soil failure, earthquakes, and erosion.

- Construction contracts must specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state-required noise attenuation devices.
- A sign, legible at a distance of 50 feet, shall be posted at the Project construction site providing a contact name and a telephone number where one can inquire about the construction process and register complaints. This sign shall indicate the dates and duration of construction activities. In conjunction with this required posting, a noise disturbance coordinator will be identified to address construction noise concerns received. The coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the disturbance coordinator shall notify the City within 24 hours of the complaint and determine the cause of the noise complaint (starting too early, malfunctioning muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the City. All signs posted at the construction site shall include the contact name and the telephone number for the noise disturbance coordinator.
- Identification of construction noise reduction methods. These reduction methods may include shutting off idling equipment (5 minutes), installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and using electric air compressors and similar power tools.
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.
- Per Section 17.66.050 of the City's Development Code, construction shall be limited to the hours between 7:00 a.m. and 8:00 p.m., or any time on weekends or holidays.

4.14 Population and Housing

4.14.1 Environmental Setting

The City of Rancho Cucamonga incorporated in 1977 with a population of approximately 44,600 persons (Rancho Cucamonga 2010b). The population has grown to 179,412 persons in 2019 (City of Rancho Cucamonga 2020d). As Rancho Cucamonga meets State mandates for housing production over the next decade, the city's population may expand by one to two percent per year. The Regional Housing Needs Assessment process required by California law is expected to allocate 10,500 units to Rancho Cucamonga over an eight-year period beginning in 2021. Nearly half this number is required to be affordable to low and very low income households. Meeting this mandate would translate to population growth of approximately 2000 to 4000 residents per year (Rancho Cucamonga 2020d).

4.14.2 Population and Housing (XIV) Environmental Checklist and Discussion

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)?	☐	☐	☒	☐

Less than significant.

The Proposed Project would not result in direct or indirect population growth. With a conditional use permit, the Project would be consistent with the Community Commercial land use designation established under the City's General Plan (City of Rancho Cucamonga 2010a). Because the Proposed Project is consistent with the General Plan, the Proposed Project would not result in new impacts beyond those previously evaluated in the General Plan EIR. 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 people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No impact.

The Project would not necessitate the demolition or relocation of existing housing units. Since no housing or people would be displaced as a result of Project implementation, no impacts are anticipated.

4.14.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.15 Public Services

4.15.1 Environmental Setting

Police Services

Since incorporation of Rancho Cucamonga in 1977, law enforcement services in the City have been provided through a contract with the San Bernardino County Sheriff's Department. The Department is made of two divisions: the Traffic Division, which facilitates the safe and effective movement of traffic; and the Patrol Division, which carries out basic law enforcement services (City of Rancho Cucamonga 2020a).

Fire Services

The Rancho Cucamonga Fire District provides fire protection and emergency medical response services to approximately 50 square miles in and around the City limits. The Fire District maintains seven fire stations throughout the City (City of Rancho Cucamonga 2020b). The Fire District is located at 10500 Civic Center Drive, approximately 2,200 feet south of the Project (City of Rancho Cucamonga 2020b). The Project would add an eighth fire station to the Fire District.

Schools

Primary public education services are provided by the Alta Loma School District, which serves the northwestern section of the City; the Central School District, which serves the west-central portions; the Cucamonga School District, which serves the southern portions; and the Etiwanda School District, which serves the eastern portion of the City and a portion of the City of Fontana. The unincorporated SOI area to the north is served by the Alta Loma School District and Etiwanda School District (Rancho Cucamonga 2010b). The nearest school to the project site is Ruth Musser Middle School, approximately 1,7000 feet to the north.

Parks

The City owns and operates 30 public parks and seven recreational facilities, as well as 130 acres of undeveloped parkland not including undeveloped trail acreage. Private recreational facilities complement the City's parks, trails, and bikeways and include the 128-acre Red Hill Country Club Golf Course and Tennis Center and the 144-acre Empire Lakes Golf Course.

4.15.2 Public Services (XV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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:				
Fire Protection?	☐	☐	☐	☒
Police Protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

Fire Protection

The proposed project includes the construction of Fire Station #178, which would provide increased fire protection, training, staff resources, and additional emergency services within the City. The Fire District provides fire, paramedic, advanced life support/emergency medical services, and emergency to all areas within City limits. In addition, the fire station would provide convenient, quick, and accessible services to support the City in the event of on an emergency. As needed, the expanded fire station would provide support services to other areas of the City and regionally that may require assistance. The project is consistent with the City General Plan and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. No impact would occur.

Police Services

The proposed Project would not require the construction or expansion of police protection facilities beyond those already planned under the General Plan assumptions. The San Bernardino County Sheriff's Department would continue to provide services, as needed, to the project site and would not require additional officers to serve the project site. The new fire station would complement emergency services and response with negligible demand on police services itself. Thus, the proposed development would have no impact related to police protection.

Schools

The proposed development would not include the construction of any residences that will impact or create a demand for educational facilities (elementary, middle, or highs schools) under the jurisdiction of the Alta Loma School District, the Central School District, or the Etiwanda School District. Thus, no impact would occur.

Parks

The proposed development does not include the construction of any residences that would generate a demand for additional park amenities. No impact would occur.

Other Public Facilities

The proposed Project site is infill and surrounded by development including commercial centers, roads, streetlights and other public facilities. The Project would construct a fire station and would not result in a need for public facilities such as libraries, community centers, etc. beyond those already planned under General Plan assumptions. Thus, no impact would occur to other public facilities.

4.15.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.16 Recreation

4.16.1 Environmental Setting

The City of Rancho Cucamonga has approximately 347.6 acres of parkland and recreational facilities. These include 25 neighborhood parks, three community parks, and eight special use facilities. In addition, the City's Multi-Use Regional and Community Trails add approximately 295 acres of land for recreational use. The trails provide a network of interconnecting off-road, urban, and wilderness trails that allow horseback riding, hiking, jogging, running, and walking into open space areas and connect the residential areas to commercial activity centers (City of Rancho Cucamonga 2010b).

4.16.2 Recreation (XVI) Materials Checklist

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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 impact.

The proposed development involves the construction of a fire station which would result in no net increase of the demand for or use of existing neighborhood and recreation parks, or other recreational facilities such that substantial physical deterioration of the facility would be accelerated. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

No impact.

The Project does not include recreational facilities. The proposed development involves the construction of a fire station which would not require construction or expansion of recreational facilities. No impact would occur.

4.16.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.17 Transportation

4.17.1 Environmental Setting

The City of Rancho Cucamonga has convenient access to both local and regional transportation facilities, including freeways, arterial roadways, a commuter rail connection, and convenient proximity to the Ontario International Airport. Three major freeways serve the City: Interstates 10 and 15 and State Route 210. Interstate 10 (I-10) runs just south of the City limits with several interchanges at major arterials. Interstate 15 (I-15) runs along the eastern edge of the City, and State Route 210 (SR-210) runs thorough the northern part of the City. To the east of Rancho Cucamonga lies the City of Fontana, to the south is the City of Ontario, and to the west is the City of Upland (City of Rancho Cucamonga 2020e).

4.17.2 Transportation (XVII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐

Less than significant.

Transit Facilities

Bus transit services are available in the City through fixed-route and demand-response services provided by Omnitrans. There are seven bus routes that run through the City, connecting to the neighboring cities of Fontana, Upland, Ontario, Montclair, and Chino. The routes serve major destinations in the region, such as Chaffey College, the Rancho Cucamonga Metrolink Station, the Fontana Metrolink Station, the Ontario Mills Mall, the LA/Ontario Airport, the Ontario Civic Center, the Pomona TransCenter, the Montclair TransCenter, the Chino Civic Center and Transit Center, and the Rancho Cucamonga Civic Center (City of Rancho Cucamonga 2020e).

Within Rancho Cucamonga, the bus routes run on major roadways, including Haven Avenue, Day Creek Boulevard, Milliken Avenue, Carnelian Street/Vineyard Avenue, Base Line Road, Foothill Boulevard, and Arrow Highway, and segments of Banyan Street, Victoria Park Lane, and 4th Street. The nearest bus route to the project site runs along Haven Avenue, approximately 500 feet west of the project site. A bus stop is located at the intersection of Haven Avenue and Town Center Drive.

Bicycle and Pedestrian Facilities

Bicycle facilities in Rancho Cucamonga consist of bike lanes, routes, trails, and paths, as well as bike parking. On-street bicycle facilities are classified into four categories (Class I – IV) depending on their design and function. The City has an expansive network of Class II bike lanes, which provide a striped lane for one-way travel on a street, and may include a "buffer" zone consisting of a striped portion of roadway between the bicycle lane and the nearest vehicle travel lane. These bike lanes are typically suitable for bicyclists comfortable sharing some space with cars. The nearest bicycle facility to the Project is a Class II bike lane along Haven Avenue, approximately 500 feet west of the project site.

Pedestrian facilities in Rancho Cucamonga consist of sidewalks and crosswalks. Most residential and commercial developments provide sidewalks on public streets and internal circulation. Areas with no existing sidewalks are mainly located in the northwest, southwest, south and eastern portions of the City. A concrete sidewalk is located along the northern portion of the site along Town Center Drive. The Project would construct a concrete sidewalk along the eastern boundary of the site.

Project Impacts

The Proposed Project would generate short-term construction related vehicle trips. However, traffic generated by construction of the Proposed Project would be temporary and would not conflict with the City of Rancho Cucamonga's Circulation Element, including transit, roadway, bicycle and pedestrian facilities. The Proposed Project would develop a new fire station on a vacant lot. Based off assumptions and Project site plans, the proposed Project is anticipated to result in approximately 45 daily trips. These totals account for staff commutes and five emergency response trips daily. As such, the Proposed Project would not generate a substantial increase in traffic, nor would it decrease the performance or safety of existing or planned public facilities. 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 or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒

No impact.

According to the City of Rancho Cucamonga Traffic Impact Analysis Guidelines (2020), projects generating fewer than 250 daily trips are screened out from a formal Vehicle Miles Travelled (VMT) analysis. Projects in this category generally correspond to "typical" development potentials, including development of community institutions such as fire stations (City of Rancho Cucamonga 2020c).

The Project qualifies for project VMT screening under the City of Rancho Cucamonga's adopted VMT Thresholds of Significance for Purposes of Analyzing Transportation Impacts Under CEQA (Resolution No. 2020-056). This presumption is based on the fact that 1) the fire station is a type of locally-serving Community Institution use that would qualify for project type screening; and 2) according to the Plan RC Community Mobility Existing Conditions Report (May 2020), the Project is located within a mapped Transit Priority Area (TPA) that may qualify it for project screening (City of Rancho Cucamonga 2020f). Therefore, no impact would occur.

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)?	☐	☐	☒	☐

Less than significant.

The Project includes construction of new response driveway apron at Town Center Drive, an additional driveway apron along the interior drive aisle of the Terra Vista Shopping center, and a future traffic signal at the intersection of Town Center Drive and Terra Vista Parkway (see Figure 3). The final design of the fire

station shall be reviewed by the City of Rancho Cucamonga to ensure the project's design safety and compatibility with the surrounding uses. No incompatible uses are proposed. For these reasons, the proposed Project would not result in design hazards.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in inadequate emergency access?	☐	☐	☐	☒

No impact.

The project site is currently undeveloped. The Proposed Project would be designed to provide adequate emergency access to serve the Fire Station 178 site. As such, the Proposed Project would have no impact in this area.

4.17.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.18 Tribal Cultural Resources

4.18.1 Regulatory Setting

Assembly Bill 52

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to those California Native American tribes that requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include TCRs, the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Pursuant to AB 52, Section 21073 of the Public Resources Code defines California Native American tribes as "a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004." This includes both federally and non-federally recognized tribes.

Section 21074(a) of the Public Resource Code defines TCRs for the purpose of CEQA as:

1. Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or

b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or

c. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria a and b also meet the definition of a historical resource under CEQA, a TCR may also require additional consideration as a historical resource. TCRs may or may not exhibit archaeological, cultural, or physical indicators.

Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies provide tribes that requested notification an opportunity to consult at the commencement of the CEQA process to identify TCRs. Furthermore, because a significant effect on a TCR is considered a significant impact on the environment under CEQA, consultation is used to develop appropriate avoidance, impact minimization, and mitigation measures.

4.18.2 Summary of AB 52 Consultation

On April 15, 2021 the City of Rancho Cucamonga sent project notification letters to the following California Native American tribes, which had previously submitted general consultation request letters pursuant to 21080.3.1(d) of the Public Resources Code:

- San Gabriel Band of Mission Indians
- San Manuel Band of Mission Indians
- Soboba Band of Luiseno Indians
- Torres Martinez Desert Cahuilla Indians
- Gabrieleno Band of Mission Indians – Kizh Nation
- Morongo Band of Mission Indians

The San Manuel Band of Mission Indians and Gabrieleno Band of Mission Indians – Kizh Nation requested consultation. Ultimately, the San Manuel Band of Mission Indians sent an email to the City on June 8, 2021 with a list of mitigation measures to be included in the Draft IS/MND. The Gabrieleno Band of Mission Indians – Kizh Nation also provided the City with a list of mitigation measures via email on June 15, 2021. The City and tribes have agreed to specific mitigation measures for tribal cultural resources.

4.18.3 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion

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 tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☐	☒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☒	☐	☐

Less than significant with mitigation incorporated.

i-ii) While there are no known TCRs in the project footprint, ground-disturbing activities have the potential to result in the discovery of, or inadvertent damage to, archaeological contexts and human remains, and this possibility cannot be eliminated. Consequently, there is a potential for significant impacts on TCRs. Implementation of Mitigation Measures **TCR-1** and **TCR-2** would reduce the potential impacts to less than significant.

4.18.4 Mitigation Measures

TCR-1: San Manuel Band of Mission Indians (SMBMI). The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in **CUL-1**, 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.

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.

TCR-2: Gabrieleno Band of Mission Indians-Kizh Nation. Prior to the commencement of any ground disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation – the tribe that consulted on this project pursuant to Assembly Bill 52 (the "Tribe" or the "Consulting Tribe"). A copy of the executed contract shall be submitted to the City of Rancho Cucamonga Planning and Building Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The Tribal monitor will only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Tribe 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 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 all ground-disturbing activities on the Project Site are completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the Project Site have little to no potential for impacting Tribal Cultural Resources. Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are Native American in origin, the Consulting Tribe will retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project Site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the Project Site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). If a non-Native American 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 PRC 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, it shall be offered to a local school or historical society in the area for educational purposes.

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

Water Service

Cucamonga Valley Water District (CVWD) provides the City of Rancho Cucamonga, including the project site, with water services. CVWD's service area includes the City of Rancho Cucamonga, portions of the cities of Fontana, Ontario, and Upland and some unincorporated areas of San Bernardino County. The District has a diverse water supply consisting of the Cucamonga Basin and Chino Basin aquifers, four local canyon watersheds, and imported water from the Sacramento-San Joaquin River Delta through the State Water Project. The District's water system consists of 711 miles of distribution lines, 28 groundwater wells, 34 storage reservoirs, three water treatment plants, 48,516 meters of various sizes and the service lines associated with the meters.

According to the CVWD 2018 Water Quality Report, 59 percent of the water delivered to CVWD consumers in 2018 was imported from Northern California via the State Water Project. This water is treated at CVWD's Lloyd W. Michael Water Treatment Plant. 37 percent of the water delivered to CVWD consumers in 2018 was groundwater pumped from the Cucamonga Basin and Chino Basin aquifers. Four percent of the water delivered to CVWD's consumers in 2018 was local canyon and tunnel water including Cucamonga Canyon, Deer Canyon, Day Canyon, East Etiwanda Canyon, and a number of tunnels in the local San Gabriel Mountains. This water is treated at CVWD's Arthur H. Bridge or Lloyd Michael Treatment Plants and then flows into storage reservoirs and then into the distribution system to consumers (CVWD 2018).

Wastewater

Wastewater services for the City of Rancho Cucamonga are also provided by CVWD. CVWD currently operates and maintains approximately 421 miles of wastewater collection system ranging from 8 to 36 inches in diameter. Wastewater that is generated by CVWD's customers is transported through this collection system and sent to Inland Empire Utilities Agency (IEUA) Wastewater Treatment facilities where it is processed into recycled water.

The IEUA operates the wastewater Regional Plant No. 4 located at the intersection of 6th Street and Etiwanda Avenue in Rancho Cucamonga. This wastewater plant has been in operation since 1997 and treats an annual flow of seven million gallons per day, with an ultimate build-out capacity of 28 million gallons per day.

Solid Waste

Burrtec Waste Industries is the single franchised waste hauler for the City of Rancho Cucamonga and is responsible for providing recycling, refuse, and green waste services for residents, commercial and industrial customers. Burrtec Waste Industries is the only business permitted to haul solid waste in the City of Rancho Cucamonga.

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 (MRF), 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. It is permitted for 7,500 tons per day (TPD) maximum with 67,520,000 cubic yards remaining. The landfill has enough projected capacity to serve residents and businesses until approximately 2053 (CalRecycle 2020).

Electricity

The Rancho Cucamonga Municipal Utility (RCMU) provides economic and reliable electricity to over 1,200 metered businesses and residents in a selected area within the Southeastern proximity of the City of Rancho Cucamonga. RCMU would extend electric service to the Project in accordance with rules and policies for extension of service.

Natural Gas

The Southern California Gas Company provides natural gas services to the area and would extend service to the project site at the time contractual arrangements are made in accordance with SoCalGas policies and extension rules on file with the California Public Utilities Commission.

4.19.2 Utilities and Service Systems (XIX) Environmental Checklist and Discussion

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, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

Less than significant.

The proposed Project would be tied into the City's existing water, stormwater, and wastewater infrastructure located along Town Center Drive and Terra Vista Way. Due to the scale of the proposed development it is not anticipated that new utility connections would require the construction or expansion of water or wastewater facilities. Water service would be provided from a City-maintained water main in

Town Center Drive. A new lateral would be required for domestic water, landscape and fire water services Sanitary sewer would be tied to a sewer manhole in Terra Vista Parkway, and a new lateral would be required. The Project would construct stormwater drainage improvements including bioretention basins throughout the site. Runoff from the proposed fire station would be conveyed to the water quality basin and catch basins throughout the site. As such, development of the Proposed Project would not require the construction of new public water, wastewater, storm drainage facilities.

The Project would connect the City's existing electrical, natural gas and telecommunication infrastructure located along Town Center Drive and Terra Vista Way. Additionally, the Project would maintain a back-up generator onsite. The Project would not result in any unusual characteristics that would result in excessive long-term operational energy consumption. Energy consumption associated with the Project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar commercial developments in the region. The Proposed Project is located adjacent to existing streets and existing development of commercial land uses. As such, utilities are available in the immediate project area to serve the project site. All required improvements have been analyzed as part of the Proposed Project in this Initial Study. Overall, the proposed facilities are not expected to require relocation or reconstruction of existing utilities. 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 sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐

Less than significant.

The project site is located within the Cucamonga Groundwater Basin. According to the CVWD 2015 Urban Water Management Plan (UWMP), CVWD predicts its water demands to be 58,900 acre-feet (AF) in 2020 and 61,300 AF in 2025 during normal year conditions. Water supplies during normal years would be 60,500 AF in 2020 and 63,100 AF in 2025. In single dry year and multiple dry year scenarios, water supplies would also be 60,500 AF in 2020 and 63,100 AF in 2025 (CVWD 2016).

In foreseeable multiple dry years, CVWD predicts that it would have sufficient supply to meet water demands. To meet demand, the difference from reduced canyon flows, imported water restrictions and State mandated water reductions during a multi-dry year shall be made up from the district's stored groundwater from the Chino Basin, tier II imported water (if available), replenishment water (if available), and implementation of the water shortage contingency plan (CVWD 2016). The Proposed Project would comply with the Water Shortage Contingency Plan outlined in the UWMP, if implemented. For example, limits may be applied to the number of days, frequency and duration of outdoor watering. It is anticipated that the addition of a fire station would not exceed the capacity of water supplies of CVWD.

The CalEEMod model estimated water demand for the proposed fire station to be 6,712 gallons per day (gpd) of indoor use and 4,110 gpd of outdoor use (see Attachment A of Appendix A). This increase in

water consumption represents a negligible increase in CVWD's annual water demand. The project is consistent with the General Plan land use designation of Community Commercial and does not represent unplanned growth, given that the project site would be developed consistent with its land use and zoning designations. The proposed Project would include direct connection to existing water mains within Town Center Drive and Terra Vista Way, which have sufficient capacity to accommodate the proposed Project. By complying with all City and regional water conservation policies and regulations, impacts on water supplies 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?	☐	☐	☒	☐

Less than significant.

The proposed Project would generate domestic wastewater associated with sinks and toilets to serve the resident staff at the fire station. Wastewater would be treated by CVWD. Planned growth under the General Plan would increase the collection and treatment of wastewater. The project is consistent with the City's General Plan land use designation and does not represent unplanned growth given that the project site would be developed consistent with its land use and zoning designations. A sewer main is located within the Town Center Drive right of way (Figure 5. Grading Plan) and would serve the project site via a new connection. The new sanitary sewer line would be constructed in conformance with City standards, and its construction would not cause significant environmental effects. Therefore, the City and CVWD have sufficient capacity to serve the proposed project. A less than significant impact would occur.

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?	☐	☐	☒	☐

Less than significant.

The Proposed Project is consistent with the land use designation and development density presented in the General Plan. As previously stated, the project site is designated by the City's General Plan as Community Commercial (CC). The Proposed Project proposes the development of a fire station on what is currently 3.67 acres of vacant land and is therefore consistent with the City General Plan designation of CC. As such, the Proposed Project is within the growth contemplated by the General Plan. The addition of a fire station is not anticipated to generate solid waste in excess of State or local standards or in excess of the capacity of local solid waste facilities. Furthermore, the Proposed Project would comply with all 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?	☐	☐	☐	☒

No impact.

Waste generated by the Proposed Project would comply with solid waste statues and regulations. The Proposed Project would be required to comply with all Resource Conservation and Recovery Act (RCRA) Regulations, including Title 40 of the Code of Federal Regulations (CFR), as well as City of Rancho Cucamonga waste reduction programs. Additionally, the Proposed Project would comply with City requirements for receptacles, solid waste collection, and provisions regarding service rates, fees, and charges. The implementation of these programs would reduce the amount of solid waste generated be the Proposed Project and diverted to landfills. No impact to waste management and reduction statutes would occur.

4.19.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.20 Wildfire

4.20.1 Environmental Setting

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of very high fire hazard severity zones within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of potential fuels over a 30 to 50-year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure to buildings. According to the CALFIRE Very High Fire Hazard Severity Zone Map, the project site is not located within a VHFHSZ (CALFIRE 2008).

4.20.2 Wildfire (XX) Environmental Checklist and Discussion

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?	☐	☐	☐	☒

No impact.

The Proposed Project would not substantially impair any adopted emergency response plans. The City produced a Ready RC Guide which provides essential tips on what to do before, during and after a disaster. The guide focuses primarily on fire, flood, earthquake, and wind disasters. This comprehensive booklet includes emergency kit checklists, evacuation route maps, shelter information and more (City of Rancho Cucamonga 2017). The proposed fire station would expand emergency services for the City, and thus would benefit implementation of the Ready RC Guide. Furthermore, the site is not located in a VHFHSZ (CALFIRE 2008). Thus, the Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. No impact 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
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?	☐	☐	☐	☒

No impact.

The project site is located on relatively flat a terrain. The Proposed Project would not substantially alter the slope, wind patterns, or other factors that could exacerbate wildfire risks. Thus, the Proposed Project

would not expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. Furthermore, the site is not located in a VHFHSZ (CALFIRE 2008). No impact 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?	☐	☐	☐	☒

No impact.

The Proposed Project is located within an urbanized area and would require utility connections to serve the proposed fire station. The Project would construct a future reserve apparatus, landscaping, driveways, and other infrastructure. The project site is surrounded by commercial development and would not exacerbate fire risk or impacts to the environment. Furthermore, the site is not located in a VHFHSZ (CALFIRE 2008). As such, no impact 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?	☐	☐	☐	☒

No impact.

The project site is relatively flat and is not likely to cause downstream flooding or landslides. The Project would not substantially alter the drainage patterns of the site, and thus would not expose people or structures to significant risks from runoff or post-fire instability. Furthermore, the site is not located in a VHFHSZ (CALFIRE 2008). No impact would occur.

4.20.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.21 Mandatory Findings of Significance

4.21.1 Mandatory Findings of Significance (XXI) Environmental Checklist and Discussion

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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?	☐	☒	☐	☐

Less than significant with mitigation incorporated.

Impacts to biological resources, cultural resources, geology and soils (paleontological resources), and tribal cultural resources are discussed in the respective sections of this Initial Study. Impacts would be less than significant with Mitigation Measures **BIO-1**, **BIO-2**, **CUL-1**, **GEO-1, GEO-2**, **TCR-1** and **TCR-2.**

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) 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)?	☐	☐	☒	☐

Less than significant.

Impacts from the Proposed Project on transportation, air quality, greenhouse gas emissions and noise are discussed in corresponding sections of this Initial Study. As discussed in their respective sections of this Initial Study document, no significant impacts associated with air quality, greenhouse gas, or traffic have been identified. Direct impacts of Project construction noise would be temporary and less than significant with implementation of Mitigation Measure **NOI-1**. However, Project impacts when considered with identified cumulative projects would not be cumulatively considerable.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Less than significant with mitigation incorporated.

The checklist categories of: Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Cultural, Geology and Soils, Hydrology and Water Quality, Population and Housing, Tribal Cultural, Noise, Transportation, and Wildfire evaluate Project impacts that may have adverse effects on human beings, either directly or indirectly. All of the Project's impacts on human beings, both direct and indirect, that are attributable to the Project were identified and mitigated if necessary. Therefore, the Proposed Project would not either directly or indirectly cause substantial adverse effects on human beings because all potentially adverse direct and indirect impacts of the proposed Project are identified as having no impact, less than significant impact, or less than significant impact with mitigation. Direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this Initial Study.

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SECTION 7.0 LIST OF APPENDICES

Appendix A – Air Quality/Greenhouse Gas Emissions Report

Appendix B – Biological Resources Assessment

Appendix C – Cultural Resources Assessment

Appendix D – Energy Consumption

Appendix E – Geotechnical Investigation

Appendix F – Phase I Environmental Site Assessment

Appendix G – Noise Impact Assessment